Peace River and Withlacoochee River Threats Assessments and Fish Assemblage Monitoring

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ABSTRACT

The Peace River (106 miles) and Withlacoochee River (141 miles) are large blackwater rivers in peninsular Florida. Both watersheds have experienced high levels of habitat degradation due to urbanization, agriculture, industry, mining, and altered flow regimes. The objectives of this project were to: (1) identify and inventory the location and magnitude of habitat degradation within the Peace River and Withlacoochee River, including their navigable tributaries; (2) identify and inventory fish passage impacts at road crossings in the watersheds; (3) develop restoration recommendations at each impacted location; (4) develop, for each basin, a prioritized Basin Restoration Plan for state, federal, and local agencies and private landowners to implement conservation and restoration efforts; and (5) conduct a fish assemblage assessment of the Withlacoochee River evaluating fish population metrics (diversity, species richness, etc.) and general habitat associations.

We identified and assessed the severity of site-specific impairments at locations in the Peace River and Withlacoochee River watersheds, following standardized methods developed by the United States Fish and Wildlife Service and The Watershed Assessment of River Stability and Sediment Supply. Field sampling was conducted to collect the necessary data for scoring the threat of degradation at each impairment site and unpaved road crossing site. We assessed approximately 167.7 river miles in the Peace River Watershed and evaluated 512 impairment sites and 62 unpaved road crossing sites. Results revealed that certain reaches of stream and riparian habitats have been severely degraded, primarily due to ranching, agriculture, and denuded riparian forests. In the Withlacoochee River Watershed, we assessed approximately 131.6 river miles and evaluated 24 impairment sites and 20 unpaved road crossing sites. Overall, the assessed areas within the watershed were stable and riparian buffers were in excellent condition. While we located few impairment sites within the Withlacoochee River Watershed, the dam structures at Lake Rousseau pose the single largest threat to the river system by negatively impacting water quality, aquatic species, sediment transport, and instream habitat.

All road crossings and impairment sites in the navigable reaches and public unpaved road crossings in non-navigable reaches were assessed for fish passage blockage. Fish passage barriers impact aquatic Species of Greatest Conservation Need and other aquatic species from accessing and utilizing historical habitats. We identified 18 fish passage barriers in the Peace River Watershed and 3 fish passage barriers in the Withlacoochee River Watershed.

Restoration recommendations for impairment sites were developed into 3 summarized options based on river geomorphology and the cause of degradation. For unpaved road crossing sites, we included general restoration recommendations that aim to reduce stream impacts including excessive sedimentation, channel alteration, and fish passage blockages. Impairment sites were prioritized for restoration using Geographic Information System heatmaps that were weighted by site abundance, site length, and calculated severity scores. Unpaved road crossing sites were subjectively prioritized into focal areas based on location within subwatersheds, number of sites, and Sediment Risk Index scores. Our Basin Restoration Plan recommends that focal areas take restoration priority, since they are concentrated areas of habitat degradation where multiple sites could be restored concurrently to minimize costs.

Withlacoochee River fish assemblage monitoring events were conducted each spring from 2016 to 2018. These sampling efforts represent the first comprehensive fish surveys following the Florida Fish and Wildlife Conservation Commission's Long Term Monitoring standardized protocol on the navigable portion of the Withlacoochee River. Spring sampling yielded a total of 16,277 fish, comprised of 29 families and 54 species.

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INTRODUCTION

Habitat degradation is the primary factor causing the decline of biodiversity in aquatic ecosystems of the southeastern United States (Warren et al. 2000). Many of the rivers and streams in this region, which contain the highest aquatic biodiversity in North America (Warren and Burr 1994, Lydeard and Mayden 1995), have been impacted by the effects of habitat degradation, alteration, conversion, and loss (Estevez et al. 1991). Sedimentation is one of the main issues causing degradation, loss of habitat complexity, and impairment of river habitat and biological communities (Waters 1995). Sedimentation occurs naturally in rivers and is dependent on bed and bank material, stream morphology, riparian vegetation, valley slope, water supply, and woody debris (Allan 2004). However, sedimentation is exacerbated by anthropogenic drivers including poorly-managed agricultural practices, mining, deforestation, construction, and road crossings (Wood and Armitage 1997, Grayson et al. 1993). Additionally, studies have shown that streambank erosion in unstable rivers can account for up to 80% of the sediment supply (Simon 1989). Stream channel instability and accelerated erosion can have severe biotic impacts on food chains, habitat complexity, spawning and rearing habitats, instream cover, and water temperatures (Wood and Armitage 1997). The initial step in conserving and restoring function and biodiversity of rivers affected by habitat degradation is identifying those areas contributing to habitat degradation throughout the river system.

The Peace River Watershed (2,340 mi²) and Withlacoochee River Watershed (2,082 mi²) are ranked as priority enhancement basins by Florida's Wildlife Legacy Initiative's (FWLI) State Wildlife Action Plan (SWAP). Further, FWLI has identified a goal with three objectives focusing on the basin approach. The 2012-2018 freshwater goal was: improve or maintain hydrologic conditions, water quality, or physical habitats for the support of Species of Greatest

Conservation Need (SGCN) in freshwater systems within high-ranking basins. To meet this goal, FWLI created objectives, with objective 2 being: by 2017, conduct a threats assessment of at least one high-ranking enhancement (peninsular) basin. This project addressed the need for a riverine threats assessment on two priority enhancement basins, both within peninsular Florida.

The objectives of this project were to: (1) identify and inventory the location and magnitude of habitat degradation within the Peace River and Withlacoochee River, including their navigable tributaries; (2) identify and inventory fish passage impacts at road crossings in the watersheds; (3) develop restoration recommendations at each impacted location; (4) develop, for each basin, a prioritized Basin Restoration Plan for state, federal, local agencies, and private landowners for implementing conservation and restoration efforts in the basins; and (5) conduct a fish assemblage assessment of the Withlacoochee basin evaluating fish population metrics (diversity, species richness, etc.) and general habitat associations.

Study Area

The Peace River (106 miles) flows south from its headwaters in Green Swamp to Charlotte Harbor, Florida's second largest open-water estuary (Figure 1). The economic value of recreational and commercial fishing in the Charlotte Harbor area was estimated to exceed \$1 billion annually by the Southwest Florida Water Management District (SWFWMD 2000). While water quality in the harbor is generally considered "good", SWFWMD (2000) expressed concern regarding reduced streamflow in the Peace River and areas within the river where water quality is listed "impaired". Maintaining or enhancing habitat within the Peace River is imperative not only for the river ecosystem, but also for the long-term maintenance of Charlotte Harbor. In addition, the Peace River basin is home to approximately 25 state-listed freshwater obligate SGCN.

The Withlacoochee River (141 miles) originates in the Green Swamp and flows northwest through a diverse range of habitats to Withlacoochee Bay before flowing into the Gulf of Mexico (Figure 1). High urban development, pollution, and altered flow regimes pose several threats to water quality within the watershed (Estevez et al. 1991). Also, the lower Withlacoochee has been severely impacted by the construction of the Cross-Florida Barge Canal in the 1960's (FWC 2012). A number of state-listed freshwater obligate SGCN fauna (n = 33; mammals, birds, fish, mussels, etc.) occur within the Withlacoochee basin.

METHODS

Field surveys were used to identify and assess the severity of site-specific impairments at locations along the Peace River, the Withlacoochee River, and their major tributaries. At the onset of the study, project field staff completed a threats-assessment training course at the United States Fish and Wildlife Service (USFWS) office in Panama City, FL. Training provided the knowledge and skills needed to identify evidence of impairments within the watersheds. Project staff also learned the surveying methods needed to collect data for assessing the severity of impairments. Additionally, the project leader attended all 4 levels of David Rosgen's hydrology short courses including: Applied Fluvial Geomorphology, River Morphology and Applications, River Assessment and Monitoring, and River Restoration and Natural Channel Design. This coursework significantly benefited the stream team's knowledge of river assessment, classification, and restoration practices. Surveys focused on two types of threats: impairment sites, which may occur anywhere within a navigable river or stream, and unpaved road crossings, which occur at an intersection of an unpaved road with a river or stream, typically occurring on non-navigable streams. Additionally, surveyors documented locations, took photos, and recorded observations in noteworthy areas that did not fit into the impairment site criteria (e.g.,

areas of cattle crossings and fencing, non-navigable tributaries that may be degrading water quality, housing or seawalls, clearings, etc.).

Impairment Sites

Stream and river segments were assessed by canoe, boat, airboat, or on foot to identify areas that exhibited evidence of impairment. This included active bank erosion, bank mass-wasting, sediment deposition, riparian zone degradation, channel alteration, and potential areas of nonpoint source pollution (NPSP). At each impairment site identified during the survey, data were collected to complete habitat evaluation data sheets, digital photographs were taken, and beginning and ending Global Positioning System (GPS) coordinates were recorded. Data collected at each impairment site included the following categories: (1) quantitative in-stream features (bankfull width and height, water depth at thalweg, percent canopy cover, percent macrophyte cover, reach length of impact, depth profile, and near-bank maximum depth); (2) qualitative in-stream features (Pfankuch channel stability index [modified for sand bed streams], in-stream woody material, substrate composition, bank material, fish passage barriers, presence of dams or similar stream barriers, channel alteration, and shoring structures); (3) quantitative riparian features (buffer width, floodplain width, bank angle, percent bank root density, bank rooting depth, bankfull height, bank height, and bank surface protection); (4) qualitative riparian features (riparian land use, floodplain access, bank erosion, and livestock access); (5) presence of stream barriers and crossings, unpaved roads or paths, pipe discharges, and trash debris; (6) paved road crossing details, if applicable (road condition, crossing type and structure, road type, and culvert or bridge description); and (7) field conditions at time of survey (current and previous weather and in-stream flow conditions).

Data were analyzed using a scoring system developed for threats assessments in the Florida panhandle (Rosgen 1996, Rosgen et al. 2009, USFWS 2014). For each site, the scoring system generated a "Severity Score" that represented the degree of impairment. The scoring system for impairment sites consisted of 11 threat factors, which were assigned a score ranging from 0 to 1.5, based on data collected at each impairment site (Table 1). The "Severity Scale" ranged from 0 to 16.5 and was subjectively divided into 3 categories (Herrington et al. 2011): "Low Severity" (scores 0-4.0), "Moderate Severity" (scores 4.25-7.25), and "High Severity" (scores 7.5-16.5). Results from this scoring system were used to develop an inventory of site-specific impairments in the Peace River and Withlacoochee River watersheds and to prioritize restoration recommendations.

Unpaved Road Crossings

Unpaved road crossing sites were located using Geographic Information Systems (GIS), google earth, gazetteers, and ground-truthing. At each site, data were collected to complete unpaved road crossing evaluation data sheets (Figure 2), digital photographs were taken, and GPS coordinates were recorded. Data collected at each unpaved road crossing included the following categories: (1) qualitative features (channel morphology and alteration); (2) quantitative and qualitative crossing structure features (crossing type, material, dimensions, upstream skew angle, crossing fill condition, and crossing inlet/outlet condition); and (3) quantitative and qualitative road approach features (dimensions, potential erodible volume, soil type, slope, surface material, and outlet and ditch material).

Data were analyzed using a scoring system based on the Sediment Risk Index (SRI)

Manual for Unpaved Road-Stream Crossing Assessment developed by the USFWS and Three

Rivers Resource Conservation and Development Council (Witmer 2009). This condensed field

guide was derived from 3 manuals: Development and Use of a Sedimentation Risk Index for Unpaved Road-Stream Crossings in the Choctawhatchee Watershed, the Northwest Florida Unpaved Road-Stream Crossing Manual, and the Recommended Practices Manual: A Guideline for Maintenance and Service of Unpaved Roads (Witmer 2009). For each site, the scoring system generated a SRI value that represented the degree of severity of impairment. The scoring system for unpaved road crossings consisted of 18 risk factors, which were given a score ranging from 0 to 5 (Figure 2). The SRI scale ranged from 12-60 and was divided into 3 categories: "Low Risk" (scores 46-60), "Moderate Risk" (scores 37-45), and "High Risk" (scores 12-36). Results from this index were used to develop an inventory and condition assessment of all accessible unpaved road crossing sites in the Peace River and Withlacoochee River watersheds.

Site Prioritization Methods

Impairment sites were prioritized for restoration using GIS heatmaps that were created for both the Peace River and Withlacoochee River watersheds. Heatmaps are visual representations of data, where data values are displayed in a matrix of colors. Additionally, heatmaps display the density of a study feature and can be weighted based on study objectives or questions. For our study, GIS heatmaps were weighted based on 3 variables (site abundance, site length, and calculated severity scores) to generate heatmap rankings. Heatmaps were used to identify "hot spots" or restoration focal areas, where localized stretches of streambank scored highest in terms of these 3 variables. This focal area ranking was modeled after the "Inventory and Prioritization of Impaired Sites in the Yellow River Watershed in Alabama and Florida", in which these categories provide a restoration plan that will minimize cost while completing the highest amount of restoration, i.e., "biggest bang for the buck" (Herrington et al. 2011). Restoring

multiple impairment sites (large-scale restoration) in a river reach at the same time will minimize costs associated with survey, design, permitting, and construction on a foot by foot basis.

Heatmaps were not suitable for unpaved road crossings due to the localized nature of sites within both watersheds. Additionally, it was not applicable to combine unpaved road crossing sites with impairment sites for heatmap production, since they utilize different scoring systems. Therefore, unpaved road crossing sites were prioritized into separate focal areas using location within subwatersheds. Focal areas were then prioritized based on the number of sites and associated SRI scores.

Land Use Land Cover

Land use land cover (LULC) estimates for each watershed were completed in ArcGIS (ESRI 2014) using the 2010 Cooperative Land Cover v2.3 file geodatabase. These data were compiled from multiple sources including Florida Natural Areas Inventory, Florida Department of Environmental Protection (DEP), Florida Fish and Wildlife Conservation Commission (FWC), Yale Mapping Framework, Kresge Foundation, and water management districts. To streamline the data within the Cooperative Land Cover geodatabase, the 59 codes in the Florida Land Use, Cover and Forms Classification System (DOT 1999) were consolidated into 8 classes including: developed, mining, natural forest, open water, pasture, prairie/scrub, tree crops, and wetland.

Fish Assemblage Assessment

Transect sampling was conducted on the Withlacoochee River using a 4.9 m aluminum electrofishing boat with a Smith-RootTM 7.5 GPP unit. During each 100 m electrofishing transect, a pulsed direct current was emitted from the boat to temporarily stun fish for collection. Electrofishing surveys were conducted annually for a three-year period during the spring season

when the river was typically near baseflow water levels (southern hydrologic pattern). Fall sampling events were added to the monitoring schedule in 2016 and 2017 to help gain insight on possible seasonal influences of fish communities. However, these data were largely not included into this final report due to low catchability in the fall 2017 sampling event following Hurricane Irma. As a result, we only had 1 fall fish data set to compare with 3 years of spring data. However, we did include 2 species collected during fall sampling into our total fish presence-absence data, as to compare with historical fisheries data collections.

The primary focus of this sampling was to collect comprehensive fish assemblage data within the entire navigable length of the river including: relative fish abundance and percent composition; and species richness, diversity, and evenness. Fish were collected following FWC standardized Long-Term Monitoring protocols developed for lotic systems by Strickland et al. (2011). The river was divided into three segments (lower, middle, and upper) based on manmade obstructions (Inglis Dam and Wysong-Coogler Water Conservation Structure, Figure 3). In order to determine transect locations, we created a shapefile in ArcGIS (ESRI 2014) with numbered transect points every 25 m along the centerline of each river segment. Using Microsoft Excel, we applied a random number generator to select transects and riverbank side (left or right). Each year, 35-39 transects were sampled along the shoreline and stunned fish were collected using long handle dip nets. All fish collected from each transect were placed into a livewell and then identified, measured (total length to nearest mm), and weighed (wet weight to nearest g) prior to being released. Fish not readily identifiable in the field were placed on ice and brought back to the lab for identification. At the end of each electrofishing transect, effort (seconds), water depth range, average water depth, shoreline type, canopy coverage, instream habitat coverage, and substrate type were recorded. General water quality parameters (dissolved

oxygen [mg/l], salinity [ppt], specific conductivity [µS/cm], and temperature [°C]) were measured using a Yellow Springs Instrument Pro 2030. Turbidity was measured using a 0.2 m diameter Secchi disk. All data were entered into the FWC Freshwater Fisheries Long Term Monitoring Database.

Relative fish abundance was calculated by species and for the community as a whole using catch-per-unit-distance (CPUD) for all Withlacoochee River fish data and for each segment. Specifically, CPUD (fish/km) was calculated as amount of fish caught per a unit of distance (100 m) of electrofishing, multiplied by 10. To evaluate fish community composition, we quantified species diversity (H'), evenness (E), and richness (R) for all 3 years of spring Withlacoochee River fish data and for each segment. The Shannon-Weiner Diversity Index was calculated as follows:

$$H' = -\sum_{i=1}^{S} (p_i)(log_e p_i)$$

where, s = the number of species and pi = the proportion of the total sample represented by the ith species (Shannon and Weaver 1949). Values of the Shannon-Weiner diversity index (H') for real biological communities often fall between 1.5 - 3.5 (Stiling 1999). Evenness (E), based on the Shannon-Weiner Diversity Index, was calculated as follows:

$$E_H = \frac{H}{Hmax} = \frac{H}{\ln S}$$

where, Hmax = total species and H' = the result of the Shannon-Weiner Diversity Index (Stiling 1999). Evenness refers to the similarity of frequencies of different species within a biological community. Evenness values range between 0 and 1, with 0 representing no evenness and 1 being complete evenness. Species richness (R) was defined as the total number of fish species found in a sample area.

RESULTS

Peace River Watershed

Location and Magnitude of Habitat Degradation

The Peace River Watershed is primarily an unconfined alluvial valley flowing through unconsolidated quartz sand, silt, and clayey sand sediments (DEP 2001, Figure 4). The LULC was predominately agriculture (39.7%) including pasture and tree crops (primarily citrus, Figure 5). Developed areas and phosphate mining accounted for 23.7% of the LULC. Natural areas consisting of wetlands, natural forest, prairie/scrub, and open water accounted for 36.6% of the LULC.

Approximately 167.7 river miles were assessed for impairments on the main stem of the Peace River and navigable tributaries (Figure 6, Table 2). A total of 512 impairment sites was identified, including 321 ranked "Moderate Severity", 181 ranked "Low Severity", and 10 ranked "High Severity" (Figure 7, Table 3). There was a total of 113,971 linear feet of impairment sites, which included 78,048 feet ranked "Moderate Severity", 33,026 feet ranked "Low Severity", and 2,898 feet ranked "High Severity". We identified and scored 62 unpaved road crossing sites in the Peace River Watershed (Figure 7, Table 4). The majority (72.6%) of the SRI scores were "Low Risk", followed by "Moderate Risk" (21.0%) and "High Risk" (6.5%). Individual impairment site and unpaved road crossing site summaries are included in Appendices A and B, respectively.

Fish Passage Impacts at Road Crossings

All road crossings and impairment sites in the navigable reaches and public unpaved road crossings in non-navigable reaches were assessed for fish passage blockage. A total of 18 fish passage barriers were identified in the Peace River Watershed, including 15 unpaved road

crossing sites, 1 paved road crossing site, 1 dam (Shell Creek Dam), and 1 water control structure (Lake Hancock outfall). It is important to note that we identified hundreds of unpaved road crossings that could not be assessed for SRI or fish passage blockages due to their location on private lands.

Restoration Recommendations at Each Impacted Location

Generally, our river restoration recommendations are to use NCD methodologies instead of hard structures like gabions, concrete lined channels, rip rap, and log cribs. The NCD approach to river restoration focuses on emulating a natural stable river system that is self-regulating and functioning (Rosgen 2011). The primary benefits of NCD include: reduction of accelerated erosion rates, floodplain connectivity, low maintenance costs, improved aquatic habitat, riparian habitat restoration, enhanced water quality, aesthetic value, and lower cost than traditional methods. For more information regarding NCD please review the following articles: Rosgen (2011) and Harman and Starr (2011).

Restoration recommendations for impairment sites were developed into 3 summarized options (Table 5). The recommended option for each site was specified in the notes section of each individual impairment site summary (Appendix A). Restoration option 1 was generally recommended for impairment sites that occurred on the outside meander bend of the river, due to the high near-bank shear stress environment. Conversely, areas of low near-bank shear stress, often located in straight sections of the river or inside meander bends, were recommended to be restored with option 2 or 3.

For unpaved road crossing sites, restoration recommendations aim to reduce common stream impacts such as sedimentation, erosion, channel alteration, fish passage blockages, loss of aquatic habitat, and lack of floodplain connectivity. For a more in-depth review of methods to

reduce environmental impacts at unpaved road crossings please see Rainer (2005). Generally, we recommend paving unpaved road crossings and installing resilient crossing structures that can accommodate large storm events (i.e., 100-year flows). Crossing structures should be able to convey bankfull flows, sediment, and woody debris without altering upstream or downstream channel morphology. Culverts, box culverts, and bridges should be properly positioned and oriented with the natural flow of the stream channel to prevent high skew angles. Culverts should be adequately sized (culvert width 1.2 times bankfull width, multiple culverts may be needed), footed for the maximum scour depth, and positioned (same grade as stream channel) to prevent outfall drops and retain native substrate. When possible, contractors should use open bottom culverts or buried culverts (culvert bed should match stream bed sediments) and additional floodplain relief culverts.

Prioritized Restoration Plan

Restoration for the Peace River Watershed was prioritized into 3 categories including: impairment site heatmap focal areas, impairment site tertiary locations, and unpaved road crossing site focal areas. Impairment site heatmap focal areas were defined as clusters of impairment sites with moderate to high severity scores. Impairment site tertiary locations were defined as all remaining impairment sites that were not captured within the heatmap focal areas. Unpaved road crossing site focal areas consisted of all accessible, public intersections of unpaved roads and the rivers or tributaries within subwatersheds. Restoration of focal areas, tertiary areas, and unpaved road crossings would provide functional lift to riparian habitats, instream habitats, and water quality.

We identified 10 impairment site heatmap focal areas comprising 37.0 river miles, or 22.1% of the entire surveyed area within the Peace River Watershed (Figure 8). This included 6

focal areas along the main stem of the Peace River, 2 in Charlie Creek, 1 in Horse Creek, and 1 in Prairie Creek. Focal areas contained 286, or 55.9%, of the impairment sites and 77,551 linear feet, or 68.0%, of the impaired streambank length identified within the entire watershed (Table 6). Moreover, focal areas contained 73.1% of the total number and 81.5% of the total length of impaired sites that ranked "Moderate Severity" or "High Severity" within the entire watershed. In other words, 81.5% (by length) of the moderately- or highly-impaired streambank occurred within 22.1% of the surveyed area. Thus, impairment site focal areas contain the largest contributors to habitat degradation and therefore are critical to management and restoration of the Peace River Watershed.

Focal areas were subjectively numbered and organized based on the degree that the heatmap highlighted impaired areas. Generally, numbering of focal areas followed a highest to lowest degree of impairment and unpaved road crossing per area. However, this should not be misinterpreted to indicate that restoration must follow a particular order. Appropriate restoration will ultimately depend upon agency motivation, landowner participation, and availability of funding – regardless of the order completed. Overall, any restorative actions that provide functional lift to the watershed are encouraged.

Impairment Site Focal Areas and Tertiary Locations

Peace River 1 Focal Area (PR1)

PR1 (6.4 river miles) is centrally located in the Peace River Watershed between Zolfo Springs and Gardner, FL in Hardee County. The primary riparian land use types in this focal area were pasture and to a lesser degree natural forest. There were no housing or development observed in the riparian corridor. Impairment site severity scores ranged from 3.0 to 7.0. A total of 63 impairment sites were located within PR1, including 57 ranked "Moderate Severity" and 6

ranked "Low Severity" (Table 6, Figure 9). The total length of impairment sites was 15,915 linear feet, including 14,745 feet ranked "Moderate Severity" and 1,170 feet ranked "Low Severity'. The primary causes of impairment were degraded riparian buffers, obvious NPSP (cattle waste), moderate to high Bank Erosion Hazard Index (BEHI) scores, partial floodplain access, and poor Pfankuch-Channel Stability ratings. The main cause of channel instability in this focal area was likely related to the impact of cattle grazing in the riparian corridor. This has led to active and mass-wasting bank erosion throughout the reach, as well as excess sediment to the channel, resulting in filling of channel habitats. Very limited and insufficient cattle fencing was observed in this area to prevent cattle from accessing the river corridor. Regular cattle grazing within the riparian corridor prevents establishment of vegetation that may otherwise stabilize streambanks. Additionally, during surveys we observed that some riparian areas were cleared for farm roads along the river, which has also led to bank erosion and channel instability. Due to excess sediment in this reach, several long, straight, shallow, and over-widened streambed features have formed between meander bends; these may deter aquatic species passage during periods of low flow.

Two recent channel avulsions (took place over the past 30 to 40 years based on aerial imagery) were documented in the center and lower section of PR1. The avulsions were both likely a result of channel aggradation due to the river's high sediment load, and the river responded by following the fall line of the valley. In both cases, we documented several impairment sites related to the avulsions. In the centrally located avulsion, the entire outside meander bend of the new channel was actively eroding, as well as the location where the main channel meets the two threads. In the lower avulsion, each outside meander bend on the newly formed channel were actively eroding. In both cases, restoration recommendations included

stabilizing the newly formed channel using NCD and creating off channel habitat ponds or wetlands with the old channel locations.

All impairment sites were located on 3 privately-owned properties, which could potentially make large scale restoration a possibility if landowner participation is favorable.

Additionally, river segments downstream of the focal area have been placed on the EPA's 303d list of impaired waters for dissolved oxygen and coliform bacteria, which may be related to cattle waste and sediment from bank erosion entering the river.

Peace River 2 Focal Area (PR2)

PR2 (4.1 river miles) is centrally located in the Peace River Watershed between Zolfo Springs and Gardner, FL in Hardee County. This focal area is immediately downstream of PR1. The primary riparian land use types consisted of pasture and to a lesser degree natural forest. A total of 49 impairment sites were identified in PR2 and severity scores ranged from 2.5 to 7.5 (Table 6). The majority of sites (n = 42) scored "Moderate Severity", 5 sites ranked "Low Severity", and 2 sites ranked "High Severity" (Figure 10). The total length of impairment sites was 11,944 linear feet, including 9,932 feet ranked "Moderate Severity", 1,191 feet ranked "Low Severity", and 821 feet ranked "High Severity". Impairment causes in PR2 were similar to PR1, and were generally due to poor riparian condition, obvious NPSP sources (cattle waste), moderate to very high BEHI scores, limited floodplain access on outside meander bends, and poor Pfankuch-Channel Stability ratings. This focal area was characterized as active or mass wasting banks at nearly every outside meander bend which was caused by the high near-bank shear stress and very little riparian vegetation to stabilize the banks. Most of the large woody debris was highly mobile and not embedded. The main cause of channel instability in PR2 was likely related to poor cattle grazing practices in the riparian corridor. No cattle fencing was observed in this area to prevent cattle from accessing the river. Cleared farm roads were observed parallel to the Peace River, which removed trees that were previously stabilizing streambanks.

At the upper extent of the reach, a farm road led to a private unpaved road crossing. Since it was private, this road crossing was not assessed with standard methods and was not included with unpaved road crossing assessments. However, no sedimentation or fish passage issues were detected in aerial imagery or assessments from on the water. This farm road was mostly covered in grass and had little traffic. However, the high mobility of large woody debris in the Peace River creates the potential for woody debris jams at this location, which could lead to bank and bed scour without regular maintenance.

All impairment sites in this focal area were located on a single privately-owned property, making largescale restoration a possibility if the landowner is willing to participate in restoration efforts. This reach is producing tremendous amount of sediment, making restoration and bank stabilization a high priority for the health of the Peace River.

Peace River 3 Focal Area (PR3)

PR3 (5.5 river miles) is also centrally located in the Peace River Watershed between Zolfo Springs and Gardner, FL in Hardee County. This focal area is immediately upstream of PR1 and is the most northern of all the focal areas. The primary riparian land use types were natural forest and pasture. However, the amount of pasture in the riparian corridor was less than that observed in PR1 and PR2. This focal area consisted of 34 impairment sites with severity scores ranging from 3.0 to 9.25 (Table 6). The majority of sites (n = 27) scored "Moderate Severity", followed by "Low Severity" (n = 6) and "High Severity" (n = 1, Figure 11). The total impairment site length in PR3 was 11,012 linear feet, with 8,372 feet ranked "Moderate Severity", 2,340 feet ranked "Low Severity", and 300 feet ranked "High Severity". The main

causes of impairment in the focal area consisted of poor riparian condition, obvious NPSP sources (cattle waste), moderate to very high BEHI scores, limited floodplain access on outside meander bends, poor Pfankuch-Channel Stability ratings, and shoring structure (only one site with rip-rap). The main cause for channel instability was cattle grazing within the riparian corridor and to a lesser extent, clearing for residential housing. Cattle fencing was rare in the focal area; when it did occur, it was close to the streambank and in some cases hanging over the river due to bank failure. Additionally, the majority of impairment sites were categorized as active erosion, not mass-wasting erosion.

There are 2 locations in PR3 where the river is avulsing or cutting a new channel and forming an oxbow. The first avulsion is in the northern portion of the focal area and we identified 4 associated impairment sites (PI127, PI128, PI129, and PI183). The avulsion is probably related to the high sediment load in the river, the lack of riparian cover to stabilize the bank, and the low radius of curvature on this river meander bend. Additionally, the new cut is creating extreme near-bank shear stress where the two channels converge. If restorative actions are taken, all 4 sites should be stabilized together for the greatest benefit at the lowest cost.

The second avulsion is centrally located within the focal area and has resulted in 3 impairment sites (PI132, PI196, and PI197). This avulsion is also related to the high sediment load in the river and the low radius of curvature on this river meander bend. There is a relatively intact riparian zone in the area of avulsion, which has slowed the process considerably. Overall, this area is highlighted since restoration of this section should take into accounts the river's unique geomorphology.

Impairment sites occurred on 9 different privately-owned properties in PR3. As a result, large scale restoration would require extensive cooperation and coordination among landowners.

This focal area is a large contributor of sediment and NPSP which may contribute to the 303d listing downstream for coliform bacteria.

Peace River 4 Focal Area (PR4)

PR4 (5.2 river miles) is located in the lower Peace River Watershed near the town of Arcadia, FL. The primary riparian land use types were pasture, natural forest, and recreation. A total of 23 impairment sites were identified within this focal area (Table 6). Severity scores ranged from 2.25 to 7.5 and included 14 sites ranked "Moderate Severity", 8 sites ranked "Low Severity", and 1 site ranked "High Severity" (Figure 12). The total impairment site length for the focal area was 10,193 linear feet, which included 6,608 feet ranked "Moderate Severity", 3,350 feet ranked "Low Severity", and 235 feet ranked "High Severity". The main cause of impairment in PR4 consisted of active and mass-wasting banks, poor riparian condition, NPSP sources (cattle waste), moderate to extreme BEHI scores, limited floodplain access on outside meander bends, poor Pfankuch-Channel Stability ratings (upper reach), and shoring structures (rip-rap). This focal area had moderate cattle use during the time of survey and some areas that appeared to have been historically used, which resulted in an overall lower NPSP potential than previously-reported focal areas.

The focal area has a railroad track that impacted the Peace River in a few locations. In several areas within the reach, the railroad track limits the width of the riparian buffer. Near the upper extent of the reach there is a railroad trestle bridge which was accumulating large woody debris and causing bed and bank scour. The trestle bridge has resulted in sands, gravel and slag entering the river. Additionally, an unnamed, highly agriculturally-impaired tributary with little riparian buffer follows the railway down to the Peace River. Aerial imagery shows excess

sediment deposition in the form of a delta bar at its confluence with the Peace River. This impacted tributary warrants further investigation.

In the upper extent of the reach, there was a significant sedimentation source due to numerous unpaved roads used by all-terrain vehicles near a mobile home park. Most of this area is on an inside meander bend and does not have high near-bank shear stress, which decreases erosion. However, we did locate several impairment sites in this location (PI047, PI049, PI050, PI347, and PI350), including an unpaved boat launch with heavy sediment contribution. In addition, the unpaved roads lead to a heavily eroded point bar or washout, which is a popular recreational site.

Near the upper extent of PR4 lies Morgan Park, a DeSoto County owned property. Five impairment sites were located on the county park property, one of which may be restored soon (PI048). The site's streambank is mass-wasting and putting park trails and county property at risk, as well as impacting the river by smothering downstream habitat and degrading water quality. The Charlotte Harbor National Estuary Program has been collaborating with the SWFWMD and DeSoto county to restore this streambank. Currently, the restoration design is complete for this site, but construction in contingent upon funding.

Impairment sites were located on 8 different privately-owned properties in this focal area. The landowner of the property containing the most southern 2 impairment sites is receptive to river restoration and livestock exclusion by fencing. DeSoto county has shown interest in restoring degraded habitat on their property as well. Additionally, the main stem of the Peace River within this focal area is on the EPA's 303d list of impaired waters for fecal coliform and mercury in fish tissues.

Peace River 5 Focal Area (PR5)

PR5 (2.8 river miles on the Peace River and 1.0 river miles on Joshua Creek) is located in the lower Peace River Watershed, south of PR4 near the town of Nocatee, FL. Pasture, natural forest, and recreation were the primary riparian land use types in this focal area. A total of 18 impairment sites were located within PR5 and severity scores ranged from 2.75 to 6.75 (Table 6). Out of the 18 impairment sites, 12 ranked "Moderate Severity" and 6 ranked "Low Severity" (Figure 13). Total impairment site length within the focal area was 5,281 linear feet, which included 4,549 feet ranked "Moderate Severity" and 732 feet ranked "Low Severity". The main causes for impairment in PR5 were active and mass-wasting banks, degraded riparian conditions, NPSP sources (livestock), moderate to high BEHI scores, limited floodplain access on outside meander bends, and poor Pfankuch-Channel Stability ratings (Peace River only). PR5 differs from other focal areas, in that sites were located on the Peace River (n = 13) and Joshua Creek (n = 5). The section of Joshua Creek that was included in focal area PR5 had a good Pfankuck channel stability rating. In addition, all sites on Joshua Creek had "Low Severity" ratings.

The majority of the sites (12 of 18 sites) in this focal area occurred on 1 landowner's property, and the landowner has expressed interest in restoring the river along his property. This landowner has approximately 2,200 acres and almost 5 miles of riverfront property, known as the Peace River Preserve. The landowner is conservation-minded and has previously applied for an easement with the Natural Resources Conservation Service (NRCS),but did not finish the application process for unknown reasons.

On the southern extent of PR5 lies an airboat tour business called Peace River Charters. This business, along with high recreational airboat traffic, has impacted this focal area and the focal area to the south (PR6), due to increased wave action and physically driving over river

banks, which is exacerbating streambank erosion through increased shear stress. The Peace River in PR5 has been placed on the EPA's 303d list of impaired waters for fecal coliform and mercury in fish tissues. The high fecal coliform levels are likely related to cattle grazing upstream of this focal area, as well as local NPSP.

Peace River 6 Focal Area (PR6)

PR6 (2.4 river miles) is located in the lower Peace River Watershed, downstream of PR5 and south of the town of Nocatee, FL. The primary land use types in the riparian areas were pasture and natural forest. A total of 9 impairment sites, ranging from 4.25 to 7.0 were located within this focal area (Table 6). All sites ranked "Moderate Severity" and their total impairment site length was 2,902 linear feet (Figure 14). Impairments were primarily due to active and masswasting banks, degraded riparian conditions, NPSP sources (cattle), moderate to high BEHI scores, limited floodplain access on outside meander bends, and a poor Pfankuch-Channel Stability rating. Channel instability in PR6 was likely related to poor cattle grazing practices in the riparian corridor combined with airboat traffic, as described in PR5. Limited cattle fencing was observed in this area to prevent cattle from accessing the river. In some areas, cattle fencing was hanging over the river due to streambank erosion. Impairment sites were located on 3 privately-owned properties and 1 publicly-owned property (Florida Forest Service). Focal area PR6 is not on the EPA's 303d list of impaired waters.

There was an "older" channel avulsion on the lower extent of this focal area. No impairment sites were located related to the avulsion, suggesting it occurred a relatively long time ago and banks were able to stabilize naturally. Review of aerial imagery going back to 1994 showed that this was not a recent avulsion. This likely occurred due to the high sediment

load in the river, which caused aggradation and the river responded by following the fall line of the valley.

Charlie Creek 1 Focal Area (CC1)

CC1 (3.6 river miles) is located in the southern extent of Charlie Creek near the confluence of the Peace River. The main riparian land use type in this focal area were agriculture and to a lesser degree natural forest. A total of 33 impairment sites with severity scores ranging from 4.75 to 7.25 was identified in CC1 (Table 6). All sites ranked "Moderate Severity" and the total impairment site length was 9,850 linear feet (Figure 15). Impairments in this focal area were due to active and mass-wasting banks, degraded riparian conditions, NPSP sources (cattle), moderate to very high BEHI scores, limited floodplain access on outside meander bends, and a poor Pfankuch-Channel Stability rating. Nearly every outside meander bend was eroding due to lack of riparian vegetation to stabilize banks. This focal area had some of the highest cattle impacts observed in this study. There were obvious signs of cattle degradation throughout the reach and no fencing to prevent cattle from accessing the riparian corridor. In addition, there were several locations that were used as tractor crossings which were contributing large amounts of sediment. All impairment sites were located on 1 privately-owned property which could potentially make large-scale restoration a possibility if the landowner is supportive. Charlie Creek within CC1 is included on the EPA's 303d list of impaired waters for fecal coliform, which is consistent with the high amount of cattle waste entering the stream.

At the northern extent of the focal area, we identified an unusual impairment site (PI407). This site was a mitigation project for the road expansion of nearby highway 17. However, in the process of creating a wetland within the riparian corridor, most of the streambank vegetation was removed and the bank became unstable. In addition, at the time of survey there was more than 6

acres of bare soil that could readily wash into the creek during rain or high-water events. Further investigation is required to determine if construction and appropriate stabilization has been completed.

Charlie Creek 2 Focal Area (CC2)

CC2 (2.3 river miles) is located in the central region of Charlie Creek at the Sweetwater Road crossing. The main riparian land use types in this focal area were agriculture and natural forest. A total of 17 impairment sites with severity scores ranging from 3.5 to 8.0 were identified in CC2 (Table 6). Out of the 17 impairment sites, 15 ranked "Moderate Severity", 1 ranked "Low Severity", and 1 ranked "High Severity" (Figure 16). Total impairment site length for the focal area was 3,530 linear feet, which included 2,940 feet ranked "Moderate Severity", 230 feet ranked "Low Severity", and 360 feet ranked "High Severity". Impairments in this focal area were primarily due to active and mass-wasting banks, poor riparian conditions, NPSP sources (cattle), moderate to very high BEHI scores, limited floodplain access on outside meander bends, and a fair Pfankuch-Channel Stability rating. Charlie Creek within CC2 has been placed on the EPA's 303d list of impaired waters for fecal coliform, which is consistent with the high amount of cattle waste entering the stream. Very limited and insufficient cattle fencing was observed in this area to prevent cattle from accessing the river corridor and grazing on riparian vegetation that may otherwise stabilize streambanks over time. Additionally, aerial imagery reviews and field surveys revealed that some riparian areas were cleared for farm roads near the river. This has led to destabilizing streambanks and surface erosion. The full impact of private unpaved roads was not captured in the impairment site severity scores, but sometimes these areas impacted riparian buffer widths. All impairment sites were located on 4 privately-owned properties.

Horse Creek 1 Focal Area (HC1)

HC1 (2.2 river miles) is located in the central region of Horse Creek upstream of Highway 72. The main riparian land use types in this focal area were agriculture and natural forest. A total of 19 impairment sites with severity scores ranging from 4.0 to 7.5 was identified in HC1 (Table 6). Out of the 19 impairment sites, 16 ranked "Moderate Severity", 2 ranked "High Severity", and 1 ranked "Low Severity" (Figure 17). Total impairment site length for the focal area was 2,375 linear feet, which included 1,810 feet ranked "Moderate Severity", 465 feet ranked "High Severity", and 100 feet ranked "Low Severity". Impairments in HC1 were primarily due to active and mass-wasting banks, poor riparian conditions, NPSP sources (cattle), moderate to very high BEHI scores, limited floodplain access on outside meander bends, and a poor Pfankuch-Channel Stability rating. The main cause of instability in this focal area was related to cattle access within the riparian corridor. Riparian buffers were moderately intact which was probably why most of the erosion was documented as active, not mass wasting. Cattle fencing was present in some areas of the reach, however it appeared that landowners may rotate cattle into the riparian area during certain times of the year. Horse Creek within HC1 has been placed on the EPA's 303d list of impaired waters for biological oxygen demand and dissolved oxygen, which may be related to the high NPSP potential that was documented.

All impairment sites in this focal area were located on 1 privately-owned property, making largescale restoration a possibility if the landowner is willing to participate in restoration efforts. This reach is producing a large amount of sediment, making restoration and bank stabilization a high priority for the long-term health of Horse Creek and the Peace River.

Prairie Creek 1 Focal Area (PC1)

PC1 (1.9 river miles) is located in the central region of Prairie Creek. The main riparian land use types in this focal area were natural forest and pasture. A total of 21 impairment sites with severity scores ranging from 2.5 to 6 were identified in PC1 (Table 6). Out of the 21 impairment sites, 11 ranked "Low Severity" and 10 ranked "Moderate Severity" (Figure 18). Total impairment site length for the focal area was 4,549 linear feet, which included 2,432 feet ranked "Low Severity" and 2,117 feet ranked "Moderate Severity". Impairments in PC1 were primarily due to active erosion, impacted riparian conditions, NPSP sources (cattle), moderate to very high BEHI scores, limited floodplain access on outside meander bends, and a fair Pfankuch-Channel Stability rating. PC1 was characterized as a slightly incised stream with a relatively intact riparian corridor. The main causes for channel instability in this focal area were channel incision and cattle grazing (historic and, to a lesser extent, current). Although during surveys cattle grazing was not observed directly, we did document signs of cattle use. This focal area is completely owned by Charlotte County, who recently acquired the property and manages it as part of Prairie Creek Preserve. Prairie Creek within PC1 has been placed on the EPA's 303d list of impaired waters for total dissolved solids and dissolved oxygen.

In the central region of the focal area, a historic cattle and vehicle crossing was documented that was producing large amounts of sediment. The native-soil road leading to the crossing, on both sides, had very loose sand that could readily erode into the stream (the potential sediment erodible volume was estimated to be 65.2 cubic yards per rain event). We also observed that, due to the high sediment load entering the stream, the crossing was creating backwatering conditions in the lateral scour pool directly upstream. Additionally, downstream of the crossing, the stream was shallow and sediment islands were found. This crossing should be

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stabilized with native vegetation and vehicle access should be prohibited to improve stream habitat.

Peace River Watershed Tertiary Locations

Tertiary locations for restoration occurred throughout the Peace River Watershed outside of focal areas. Tertiary locations accounted for 226 impairment sites with severity scores ranging from 1.0 to 8.75 (Table 6). Out of the 226 impairment sites, 137 ranked "Low Severity", 86 ranked "Moderate Severity", and 3 ranked "High Severity". Total impairment site length for tertiary locations was 36,419 linear feet, including 21,481 feet ranked "Low Severity", 14,223 feet ranked "Moderate Severity", and 716 feet ranked "High Severity". Most (75.7%) of the impairment sites that were ranked "Low Severity" within the entire Peace River Watershed occurred in tertiary locations.

Unpaved Road Crossing Focal Areas

Unpaved road crossing sites in the Peace River Watershed were divided into 7 focal areas (Figure 19) including: Charlie Creek, Shell/Prairie Creeks, Peace River at Arcadia, Payne Creek, Coastal Peace River, Peace River at Zolfo Springs, and Horse Creek.

Charlie Creek Focal Area

The Charlie Creek Focal Area had the highest number of unpaved road crossing sites assessed (n = 22), with SRI scores ranging from 38 to 60 (Table 7). Sixteen sites ranked "Low Risk" and 6 sites ranked "Moderate Risk". The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 1 of the 22 sites had fish passage barriers due to sediment blocking the culvert.

Shell/Prairie Creek Focal Area

We assessed 10 unpaved road crossing sites in the Shell/Prairie Creek Focal Area, and SRI scores ranged from 34 to 60. Seven sites ranked "Low Risk", 2 sites ranked "Moderate Risk", and 1 site ranked "High Risk" (Table 7). The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 2 of the 10 sites had fish passage barriers caused by culvert outfall drops.

Peace River at Arcadia Focal Area

The Peace River at Arcadia Focal Area contained 9 unpaved road crossing sites and SRI scores ranged from 36 to 54. Seven sites ranked "Low Risk", 1 site ranked "Moderate Risk", and 1 site ranked "High Risk" (Table 7). The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 7 of the 9 sites had fish passage barriers caused by culvert outfall drops and aquatic vegetation blockages.

Payne Creek Focal Area

We assessed 7 unpaved road crossing sites in the Payne Creek Focal Area, and SRI scores ranging from 35 to 60. Five sites ranked "Low Risk", 1 site ranked "Moderate Risk", and 1 site ranked "High Risk" (Table 7). The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 1 of the 7 sites had fish passage barriers caused by culvert outfall drops.

Coastal Peace River Focal Area

We assessed 5 unpaved road crossing sites in the Coastal Peace River Focal Area, and SRI scores ranged from 28 to 58. Three sites ranked "Low Risk", 1 site ranked "Moderate Risk", and 1 site ranked "High Risk" (Table 7). The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 2 of the 5 sites had fish passage barriers caused by culvert outfall drops. This focal area had the highest-ranking unpaved road crossing site (PU031, SRI 28) and contributed greater than 80 cubic yards of sediment per rain event.

Peace River at Zolfo Springs Focal Area

We assessed 5 unpaved road crossing sites in the Peace River at Zolfo Springs Focal Area, and SRI scores ranged from 42 to 53. Two sites ranked "Moderate Risk" and 3 sites ranked "Low Risk" (Table 7). The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 2 of the 5 sites had fish passage barriers caused by culvert outfall drops.

Horse Creek Focal Area

We assessed 4 unpaved road crossing sites in the Payne Creek Focal Area, and SRI scores ranged from 51 to 58. All 4 sites ranked "Low Risk" (Table 7). The main causes for impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, and potential for sedimentation from road approaches. None of the sites had fish passage barriers.

Withlacoochee River Watershed

Location and Magnitude of Habitat Degradation

The Withlacoochee River Watershed is primarily an unconfined alluvial valley flowing through unconsolidated quartz sand, silt, and sandy clay, with an underlain layer of limestone (DEP 2001, Figure 20). The LULC was predominately agriculture (26.7%), including pasture and tree crops (primarily citrus, Figure 21). Developed areas and phosphate mining accounted for 24.4% of the LULC. Natural areas consisting of wetlands, natural forest, prairie/scrub and open water accounted for 48.8% of the LULC.

Approximately 131.6 river miles were assessed for impairments on the main stem of the Withlacoochee River and navigable tributaries (Figure 22, Table 8). A total of 24 impairment sites was identified, including 15 ranked "Low Severity", 7 ranked "Moderate Severity", and 2 ranked "High Severity" (Figure 23, Table 9). There was a total of 1,934 linear feet of impairment sites, which included 1,229 feet ranked "Low Severity", 673 feet ranked "Moderate Severity", and 32 feet ranked "High Severity". We identified and scored 20 unpaved road crossing sites in the Withlacoochee River Watershed (Figure 23, Table 10). The majority (80.0%) of the SRI scores were "Low Risk", followed by "Moderate Risk" (15.0%) and "High Risk" (5.0%). Individual impairment site and unpaved road crossing site summaries are included in Appendices C and D, respectively.

Fish Passage Impacts at Road Crossings

All road crossings and impairment sites in the navigable reaches and public unpaved road crossings in non-navigable areas were assessed for fish passage blockage. Three fish passage barriers were identified in the Withlacoochee River Watershed, including 1 at an unpaved road

crossing site, 1 at the Lake Rousseau Dam, and 1 at the Wysong-Coogler Water Conservation Structure. It is important to note that we identified hundreds of unpaved road crossings that could not be assessed for SRI or fish passage blockages due to their location on private lands.

Restoration Recommendations at Each Impacted Location

Generally, our river restoration recommendations are to use NCD methodologies instead of hard structures like gabions, concrete lined channels, rip rap, and log cribs. The NCD approach to river restoration focuses on emulating a natural stable river system that is self-regulating and functioning (Rosgen 2011). The primary benefits of NCD include: reduction of accelerated erosion rates, floodplain connectivity, low maintenance costs, improved aquatic habitat, riparian habitat restoration, enhanced water quality, aesthetic value, and lower cost than traditional methods. For more information regarding NCD please review the following articles: Rosgen (2011) and Harman and Starr (2011).

Restoration recommendations for impairment sites were developed into 3 summarized options (Table 5). The recommended option for each site was specified in the notes section of each individual impairment site summary (Appendix C). Restoration option 1 was generally recommended for impairment sites that occurred on the outside meander bend of the river, due to the high near-bank shear stress environment. Conversely, areas of low near-bank shear stress, often located in straight sections of the river or inside meander bends, were recommended to be restored with option 2 or 3.

For unpaved road crossing sites, restoration recommendations aim to reduce common stream impacts such as sedimentation, erosion, channel alteration, fish passage blockages, loss of aquatic habitat, and lack of floodplain connectivity. For a more in-depth review of methods to reduce environmental impacts at unpaved road crossings please see Rainer (2005). Generally,

we recommend paving unpaved road crossings and installing resilient crossing structures that can accommodate large storm events (i.e., 100-year flows). Crossing structures should be able to convey bankfull flows, sediment, and woody debris without altering upstream or downstream channel morphology. Culverts, box culverts, and bridges should be properly positioned and oriented with the natural flow of the stream channel to prevent high skew angles. Culverts should be adequately sized (culvert width 1.2 times bankfull width, multiple culverts may be needed), footed for the maximum scour depth, and positioned (same grade as stream channel) to prevent outfall drops and retain native substrate. When possible, contractors should use open bottom culverts or buried culverts (culvert bed should match stream bed sediments) and additional floodplain relief culverts.

Prioritized Restoration Plan

Restoration for the Withlacoochee River was prioritized into 3 categories including: impairment site heatmap focal areas, impairment site tertiary locations, and unpaved road crossing site focal areas. Impairment site heatmap focal areas were defined as clusters of impairment sites with moderate to high severity scores. Impairment site tertiary locations were defined as all remaining impairment sites that were not captured within the heatmap focal areas. Unpaved road crossing site focal areas consisted of all accessible, public intersections of unpaved roads and the rivers or tributaries within subwatersheds. Restoration of focal areas, tertiary areas, and unpaved road crossings would provide functional lift to riparian habitats, instream habitats, and water quality.

We identified 2 impairment site heatmap focal areas comprising 32.8 river miles, or 24.9% of the entire surveyed area within the Withlacoochee River Watershed (Figure 24). Focal areas contained 20, or 83.3%, of the impairment sites and 1,617 linear feet, or 83.6%, of the

impaired streambank length identified within the entire watershed (Table 11). Moreover, focal areas contained 77.8% of the total number and 92.2% of the total length of impaired sites that ranked "Moderate Severity" or "High Severity" within the entire watershed. In other words, 92.2% (by length) of the moderately- or highly-impaired streambank occurred within 24.9 % of the surveyed area. Thus, impairment site focal areas are the largest contributors to habitat degradation and therefore are essential to the management and restoration of the Withlacoochee River Watershed. Restoring multiple impairment sites (large-scale restoration) in a river reach is not required for the Withlacoochee River, since impairment sites were not clustered together. However, it would still be recommended to combine sites in a single project, when possible, to reduce cost and time of survey, design, and permitting. Overall, restoration of focal areas would provide functional lift to riparian habitats, instream habitats and water quality.

Focal areas were subjectively numbered and organized based on the degree that the heatmap highlighted impaired areas. Generally, numbering of focal areas followed a highest to lowest degree of impairment and unpaved road crossing per area. However, this should not be misinterpreted to indicate that restoration must follow a particular order. Appropriate restoration will ultimately depend upon agency motivation, landowner participation, and availability of funding – regardless of the order completed. Overall, any restorative actions that provide functional lift to the watershed are encouraged.

Impairment Sites Focal Areas and Tertiary Locations

Withlacoochee River 1 Focal Area (WR1)

WR1 (26.8 river miles) is located in the upper Withlacoochee River Watershed between Nobleton and Dade City, FL. It is important to note that the river mile length of WR1 is considerably larger than any other focal area. The primary riparian land use types in this focal

area were natural forest, residential, recreation, transportation, and utilities. Impairment site severity scores ranged from 2.25 to 7.5. A total of 17 impairment sites were located within WR1 and the majority of sites (n = 12) ranked "Low Severity", followed by "Moderate Severity" (n = 3) and "High Severity" (n = 2, Table 11, Figure 25). There was a total of 1,192 linear feet of impairment sites, which included 942 feet ranked "Low Severity", 218 feet ranked "Moderate Severity", and 32 feet ranked "High Severity". The primary cause of impairment was degraded riparian buffers, NPSP potential, active erosion, moderate to very high BEHI scores, shoring structures, and partial floodplain access on outside meander bends. Overall, the riparian habitat was in very good condition in this focal area. The identified impairment sites were primarily related to recreational use, residential areas, and roads. Additionally, Pfankuch channel stability ratings were ranked good in WR1.

Impairment sites in this focal area were located on 10 different privately-owned properties. Ten sites were located on state of Florida properties (Florida Forest Service, SWFWMD, and Department of Transportation, which should make restoration and/or partnership development a viable option. The possibility of large-scale restoration would not be feasible in this focal area, since all sites were not in close proximity to each other. The Withlacoochee River in WR1 has been placed on the EPA's 303d list of impaired waters for dissolved oxygen and mercury in fish tissues. The impaired dissolved oxygen levels are likely due to low water velocity conditions and organic enrichment.

Withlacoochee River 2 Focal Area (WR2)

WR2 (6.0 river miles) is located in the lower Withlacoochee River Watershed between Lake Rousseau and Yankeetown, FL. The primary riparian land use types in this focal area were natural forest, residential, utilities, and pasture. Impairment site severity scores ranged from 3.5

to 5.0 (Table 11). A total of 3 impairment sites were located within the WR1 focal area, with 2 sites ranked "Moderate Severity" and 1 site ranked "Low Severity" (Figure 26). Two sites were located on the lower Withlacoochee River (LWR), and 1 site was located on the historically-connected section the Withlacoochee River between Inglis dam and the Cross-Florida Barge Canal. There was a total of 425 linear feet of impairment sites, which included 400 feet ranked "Moderate Severity" and 25 feet ranked "Low Severity". The primary causes of impairments were degraded riparian buffers, NPSP potential, high BEHI scores, and partial floodplain access on outside meander bends.

This particular area of the Withlacoochee River has been severely altered through the construction of the Inglis Dam and Cross-Florida Barge Canal. The Inglis Dam and dredging of the LWR has resulted in a very deep channel with little submersed vegetation due to light attenuation. The stabilization of water levels in the LWR, relatively intact riparian forests, and a mixture of shoring structures have made this area resilient to erosion. However, the function of the LWR ecosystem has been altered through reduction of sediment from the dam and loss of connectivity to the floodplain due to controlled releases of water.

Impairment sites in this focal area were located on 3 different privately-owned properties. The lower Withlacoochee River in WR2 has been placed on the EPA's 303d list of impaired waters for mercury in fish tissues and benthic macroinvertebrates bioassessments, while the Withlacoochee River between Lake Rousseau and the Cross-Florida barge canal has been listed for dissolved oxygen, chlorophyll-*a* and mercury in fish tissues.

Withlacoochee River Watershed Tertiary Locations

Tertiary locations for restoration occurred throughout the Withlacoochee River Watershed outside of focal areas. Tertiary areas accounted for 4 impairment sites with severity scores

ranging from 1.5 to 4.75 (Table 11). Out of the 4 impairment sites, 2 ranked "Low Severity" and 2 ranked "Moderate Severity". Total impairment site length for tertiary locations was 317 linear feet, with 262 feet ranked "Low Severity" and 55 feet ranked "Moderate Severity".

Unpaved Road Crossing Focal Areas

Unpaved road crossings in the Withlacoochee River Watershed were divided into 3 focal areas (Figure 27) including: upper Withlacoochee River, Little Withlacoochee River, and Gum Slough/Jumper Creek.

Upper Withlacoochee River Focal Area

We assessed 7 unpaved road crossing sites in the Upper Withlacoochee River Focal Area, and SRI scores ranged from 35 to 58 (Table 12). Six sites ranked "Low Risk" and 1 site ranked "High Risk". The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. There were no fish passage barriers identified in this focal area.

Little Withlacoochee River Focal Area

We assessed 7 unpaved road crossing sites in the Little Withlacoochee River Focal Area, and SRI scores ranged from 42 to 60 (Table 12). Five sites ranked "Low Risk" and 2 sites ranked "Moderate Risk". The main causes for impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. There were no fish passage barriers identified in this focal area.

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Gum Slough/Jumper Creek Focal Area

We assessed 5 unpaved road crossing sites in the Gum Slough/Jumper Creek Focal Area, and SRI scores ranged from 45 to 60 (Table 12). Four sites ranked "Low Risk" and 1 site ranked "Moderate Risk". The main causes of impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Additionally, 1 of the 5 sites had a fish passage barrier caused by a culvert outfall drop.

Fish Assemblage Assessment

Withlacoochee River - All Segments Combined

Electrofishing surveys were conducted annually on the Withlacoochee River in the spring season for a three-year period (2016-2018) near baseflows. A total of 16,277 fish comprised of 29 families and 54 species (40 freshwater and 14 marine) was collected during all spring electrofishing surveys (transects n = 113). The common name, scientific name, abundance, catch per unit of distance (CPUD-km), weight, and relative composition by number and weight of fish species collected by electrofishing on the Withlacoochee River for all spring sampling events are displayed in Table 13. Total species composition by number was 2.6% marine, compared to 97.4% freshwater species. The eastern mosquito fish (*Gambusia holbrooki*) was the most abundant fish species collected, representing 43.1% of the species composition, with a catch rate of 620.4 fish/km. The second-most abundant fish species was bluegill (*Lepomis macrochirus*) comprising 8.2% of the species composition with a catch rate of 118.3 fish/km. Popular freshwater sport fish species (bluegill, largemouth bass [*Micropterus salmoides*], redbreast sunfish [*Lepomis auratus*], redear sunfish [*Lepomis microlophus*], and spotted sunfish [*Lepomis punctatus*]) made up 25.4% of fishes collected by number. Bowfin (*Amia calva*) was the

dominant species by weight, comprising 35.7% of the total catch weight. The second-most dominant species by weight was the Florida gar (*Lepisosteus platyrhincus*) comprising 19.3% of the total biomass. The striped mullet (*Mugil cephalus*) was the highest composition marine species by number 0.8% and weight at 6.6%. Fish communities in the Withlacoochee River displayed relatively high diversity (2.4) and moderate evenness (0.59, Table 14). Exotic fish species collected included blue tilapia (*Oreochromus aurea*), vermiculated sailfin catfish (*Pterygoplichthys disjunctivus*), and walking catfish (*Clarias batrachus*). Additionally, during non-standardized sampling, we collected the brown hoplo (*Hoplosternum littorale*).

Lower Withlacoochee River

The lower Withlacoochee River fish sampling area included the river reach between the Inglis Bypass Spillway and the lower extent of housing development in Yankeetown.

Additionally, the lower segment included the reach between Inglis Dam and the Barge Canal.

The riparian areas of the lower Withlacoochee River were largely utilized by single family homes with docks and seawall embankments, and this area of the river was very deep due to previous dredging projects and lack of natural sediment input. In the lower Withlacoochee River, a total of 1,610 fish comprised of 35 species was collected during all spring electrofishing surveys (transects n = 39, Table 15). Of the 35 species collected, 14 were categorized as marine or estuarine species. Therefore, freshwater fish species richness was significantly lower than other river segments. The Shannon Index and evenness were 2.6 and 0.73, respectively, and were higher than all other segments when marine species were included in the analysis (Table 14). However, if marine fish species were removed from analysis, the Shannon Index and evenness were 2.0 and 0.63, respectively. CPUD in the lower segment was 412.8 fish/km and was the lowest of all segments. Bluegill was the most abundant fish species collected,

representing 23.1% of the species composition with a catch rate of 95.4 fish/km. Marine fish species only occurred in the lower Withlacoochee River due to the dam at Lake Rousseau which prevented upstream migration. Total species composition by number was 26.3% marine, compared to 73.7% freshwater. The striped mullet (*Mugil cephalus*) comprised the highest marine species composition by number 8.6% and the most dominant of all species by weight at 25.4%. It is important to note that we observed 1 tarpon (*Megalops atlanticus*) that was too large to net and safely bring onboard the electrofishing boat. If this large tarpon had been collected, it had potential to impact fisheries data including total biomass and percent composition by weight. The American eel (*Anguilla* rostrate), a SGCN, was also collected in the lower Withlacoochee River and occurred solely in the lower segment, since a dam prevents upstream movement.

Total instream habitat coverage and instream habitat coverage categories (submersed vegetation, emergent vegetation, floating vegetation, and other) were visually estimated at each fish sampling transect. The total mean instream habitat coverage was 42.0% in all transects of the lower Withlacoochee River, which was the lowest of all 3 segments. The dominant instream habitat coverage category was "other", which included the following, from most dominant to least dominant order: snags (woody debris, brush, and stumps), concrete (rock and rubble), and mast (man-made structure, fishing piers, and boat docks). The vegetative instream habitat coverage categories (submersed vegetation, emergent vegetation, and floating vegetation) were very low, and consisted of less than 1.0% of the total mean instream habitat coverage. The lack of habitat coverage was a result of greater water depths (due to previous dredging and sediment retention above the dam), light attenuation due to depths and turbidity, and an abbreviated littoral zone.

Middle Withlacoochee River

The middle Withlacoochee River sampling area included the river reach between the Wysong-Coogler Water Conservation Structure to the upper extent of Lake Rousseau. In the middle Withlacoochee River, a total of 5,174 fish comprised of 36 species was collected during all spring electrofishing surveys (transects n = 37, Table 15). The Shannon Index (2.4) and evenness (0.67) were the highest of any segment when only freshwater fish species were included in the analysis (Table 14). CPUD in the middle segment was 1,398.3 fish/km. Eastern mosquito fish was the most abundant fish species collected, representing 33.6% of the species composition, with a catch rate of 470.5 fish/km. Bowfin was the dominant species by weight, comprising 35.0% of the total catch weight. The redeye chub (*Notropis harperi*) was the only SGCN collected in the middle Withlacoochee River.

In the middle Withlacoochee River fish sampling transects, the mean total instream habitat coverage was 55.7%. The mean categorical instream habitat coverages were 20.9% emergent vegetation (water-pennywort [Hydrocotyle sp.], spatterdock [Nuphar luteum] and giant knotweed [Polygonum densiflorum]), 22.7% submersed vegetation (filamentous algae, hydrilla [Hydrilla verticillata], southern naiad [Najas guadalupensis], and American eelgrass [Vallisneria americana]), 22.4% other (snags and manmade structures), and 6.9% floating vegetation (water fern [Salvinia sp.] and common duckweed [Lemna minor]).

Upper Withlacoochee River

The upper Withlacoochee River sampling area included the river reach between Ridge Manor and the Wysong-Coogler Water Conservation Structure. In the upper Withlacoochee River, a total of 9,493 fish comprised of 37 species was collected during all spring electrofishing surveys (transects n = 37, Table 15). The Shannon Index (1.9) and evenness (0.54) were the

lowest of any segment (Table 14), while the CPUD in the upper segment was the highest of any segment (2,565.7 fish/km). The Shannon Index, evenness, and CPUD were influenced greatly by the abundance of Eastern mosquito fish. The Eastern mosquito fish was the most abundant fish species collected, representing 55.3% of the species composition and a catch rate of 1,417.6 fish/km. Bowfin was the dominant species by weight, comprising 45.4% of the total catch weight. The redeye chub, a SGCN, was also collected in the upper Withlacoochee River. Exotic fish species including the blue tilapia and walking catfish were only collected in the upper river segment.

In the upper Withlacoochee River fish sampling transects, the mean total instream habitat coverage was 54.2%. The mean categorical instream habitat coverages were 30.9% submersed vegetation (coontail [Ceratophyllum demersum], hydrilla, and filamentous algae), 19.6% other (snags and manmade structures), 17.3% emergent vegetation (giant knotweed, water-pennywort, and spatterdock), and 2.6% floating vegetation (water fern and common duckweed).

DISCUSSION

Peace River Watershed

Approximately 167.7 river miles were assessed for impairments on the main stem of the Peace River and navigable tributaries, and 512 impairment sites were identified. The majority (62.7%) of impairment sites ranked "Moderate Severity" and were primarily impacted due to degraded riparian buffers, obvious NPSP (cattle waste), moderate to very high BEHI scores, active or mass wasting bank erosion, partial floodplain access, and poor to fair Pfankuch-Channel Stability ratings. Streambanks and channel material in the Peace River Watershed were predominantly composed of sand, which is more highly erodible than larger particle sizes. The BEHI estimate accounts for particle size by utilizing a bank material adjustment for sand (adds 10 points), which

increased BEHI scores for most sites. Very few identified impairment sites ranked "High Severity" (2.9%). Typically, "High Severity" sites contained one of the less common risk factors (shoring structures, pipe discharge, or channel alteration) to increase risk category from "Moderate Severity" to "High Severity". Overall, risk factors including channel alteration, shoring structures, pipe discharge, water odors, and fish passage barriers were very uncommon in the study. It is important to note that we did document numerous private housing areas with shoring structures (seawall and riprap), but these areas were not actively eroding and were not categorized as impairment sites in need of future restoration.

Overall, the results of the Peace River Watershed threats assessment have shown that certain reaches of stream and riparian habitats have been severely degraded, primarily due to ranching, agriculture, and denuding riparian forests. This coincides with the Peace River Watershed's LULC being predominately agriculture (39.7%). In fact, the majority of sites (62.9%) were located on landowners' properties associated with agriculture and ranching. Additionally, more than a quarter of impairment sites in the Peace River Watershed occurred on a single private landowner's property. Interestingly, Pfankuch-channel stability ratings often correlated with landowners and management of their property. This illustrated that impairments were often a result of common feature, including land use or land management. In focal areas PR1, PR2, PR3, and CC1, heavy cattle grazing and agricultural use within the riparian corridor has resulted in active and mass wasting banks on almost every outside meander bend. On the other hand, other river sections, such as the upper Peace River (Bartow south to Zolfo Springs), exhibited a relatively intact riparian forest and few degraded areas. Interestingly, we observed many reaches where pasture lands bordered the river with a narrow band of riparian vegetation remaining (< 25 feet), usually with cattle fencing, and yet the lateral stability of the stream was

not compromised. While this narrow riparian buffer may be insufficient in the filtering of NPSP, this illustrates how valuable even a small band of riparian forest is for river stability and associated instream habitat. For more information regarding riparian condition in the Peace River Watershed, please see our GIS analysis evaluating riparian LULC and statistical prediction of riparian impairment in non-navigable streams and reaches (Appendix E).

While it appears that the channel instability in the Peace River is primarily a result of poor cattle grazing practices, we theorize that Hurricane Charley in 2004 may have exacerbated conditions. Hurricane Charley made landfall near Punta Gorda as a category 4 storm and its path followed the main stem of the Peace River. Review of historical aerial imagery revealed that the hurricane uprooted countless trees in the riparian corridor in Hardee and DeSoto counties. This made matters worse, since cattle grazing had already destabilized this section by changing vegetation composition and density. The uprooting of riparian trees accelerated streambank erosion by causing erosive cross currents that increase shear stress, bank cutting, bank sloughing, and bank failure. Additionally, cattle grazing hindered the colonization of new vegetation.

Aggradation was the prevailing stream geomorphological impact identified in the Peace River, Charlie Creek, and Horse Creek. Aggradation is the raising of the streambed elevation due to sediment deposition over time and occurs when the sediment load is higher than the sediment transport capacity of the stream (Rosgen et al. 2009). Aggradation has a negative feedback loop, where an increase in sediment load reduces bed slope, which in turn, increases streambank erosion and sediment load. Additionally, high streambank erosion and decreases in bed slope lead to channel over-widening or a high width-to-depth ratio, which was documented in numerous stream reaches. As noted in our results section, we documented several avulsions which often are caused by channel aggradation. Furthermore, we observed numerous other signs

of excess sediment deposition including enlarged point bars, mid-channel bars, diagonal bars, and delta bars at tributary confluences. The ecological impact of aggradation and over-widened streams are increased water temperatures, loss of habitat complexity (loss of deep pools utilized by larger fish species), and loss of biological function (Rosgen et al. 2009).

In the Peace River Watershed, the majority (72.6%) of SRI scores for unpaved road crossings were "Low", followed by "Moderate" (21.0%), and "High" (6.5%). The main causes for impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. We identified hundreds of possible unpaved road crossings through aerial imagery, but we only assessed 62 sites because the others were on private lands. Generally, most unpaved road crossing sites presented a high SRI score, which equates to a "Low Risk" category. However, the cumulative sediment impact of assessed and unassessed unpaved road crossings in the Peace River Watershed are contributing to immense sedimentation and degradation of smaller tributaries, which then flow into the larger tributaries and eventually to the Peace River. On the other hand, based on our findings, public unpaved road crossings are much less pervasive than in the Yellow River Watershed threats assessment, which identified 339 sites (Herrington et al 2011). Additionally, the Peace River Watershed is almost twice the size of the Yellow River Watershed, thus public unpaved road crossings are quite infrequent in comparison.

As mentioned above, 18 fish passage barriers were located in the Peace River Watershed at unpaved road crossings sites (n = 15), 1 paved road crossing site, 1 dam (Shell Creek Dam), and 1 water control structure (Lake Handcock outfall). Additionally, numerous shallow, overwidened sections (especially in the Peace River) may deter aquatic species passage at periods of low flow. Fish passage barriers may be impacting aquatic SGCN and other species from

accessing and utilizing parts of the Peace River Watershed. Further investigation is required to understand the impacts of fish barriers in the watershed. Currently, the Southeast Aquatic Resource Partnership (SARP) and partners have been creating an aquatic connectivity inventory of all possible aquatic barriers (dams, culverts, and road crossings) in the southeast, which will certainly shed light on the subject.

Withlacoochee River Watershed

Approximately 131.6 river miles were assessed for impairments in the navigable reaches of the Withlacoochee River Watershed, and 24 impairment sites were identified. The majority (62.5%) of impairment sites ranked "Low Severity" and were primarily impacted due to degraded riparian buffers, NPSP potential, moderate to very high BEHI scores, active bank erosion, and partial floodplain access. Similar to the Peace River Watershed, the streambanks and channel material in the Withlacoochee River Watershed were predominantly composed of sand, which is more highly erodible than larger particle sizes. The streambanks of some reaches of the Withlacoochee River Watershed were composed of limestone outcropping, which is very stable. Likewise, many streambanks were lined with bald cypress which are among one of the best streambank-stabilizing trees in Florida. Similar to the Peace River Watershed, risk factors including channel alteration, pipe discharge, shoring structures, water odors, and fish passage barriers were uncommon. However, it is important to note that we documented numerous private housing areas with shoring structures (seawall and riprap). However, these areas were not actively eroding, so they were not categorized as impairment sites that would require restoration.

Overall, the assessed areas of the Withlacoochee River Watershed were very stable and riparian buffers were in excellent condition. We identified less than 2,000 linear feet of

impairment sites in the Withlacoochee River Watershed. Of the 24 impairment sites that we identified, most were related to recreational activities and were relatively small in area. This included land disturbing activities such as rope swings, vehicle and all-terrain-vehicle access, fishing access points, and unpaved boat launches. Only 2 of the impairment sites we identified were a result of agricultural impacts. Although GIS analysis determined that agriculture was the dominant (26.7%) LULC category, very little agriculture occurred within the riparian corridor of the navigable reaches of the Withlacoochee River Watershed that were surveyed. Another reason we found few impairment sites in the Withlacoochee River may be related to it being dammed in 1909. As a result, water levels were stabilized, which decreases stream power and shear stress, which in turn decreases streambank erosion. While finding few impairment sites is a good thing, in reality, the Withlacoochee River does not function like a natural free-flowing river. Similar to many other impounded rivers in our nation, the natural flow regime of the Withlacoochee River Watershed has been altered. It is common for impounded rivers to be over widened far above dams due to backwatering and increased sedimentation due to settling, while being deeper and narrower below dams since they are sediment starved (commonly called "clear water discharge" since water typically contains very low suspended sediments or bed load). Clear water discharge can also have severe biological impacts on the downstream habitats and estuarine environment by altering productivity and geomorphology (Turek et al. 1987). These general impacts were consistent with observation made in the Withlacoochee River, with many areas upstream of the dam having a low baseflow to bankfull ratio (resulting from aggradation due to low stream power), as well as fine silts and detritus settled over a sandy substrate. Downstream of the dam, the channel was very deep (historically dredged) and had a limited littoral zone, indicating that sediment supply has been trapped in the reservoir for many years.

Initially we were surprised by how few impairment sites were identified by the Withlacoochee River Watershed threats assessment, since Florida's SWAP listed it as a high priority basin for habitat enhancement. Upon closer examination, we determined the SWAP GIS habitat enhancement ranking system was based on the potential for urban development by 2060, threats to freshwater habitats, and habitat-use data for freshwater obligate SGCN. Therefore, since the threats assessment survey primarily investigated river stability, pollution potential, and degradation within the riparian corridor, it was not comparable to the GIS study conducted for the SWAP. Additionally, the threats assessment study focused on only the navigable portions of the watershed, while the SWAP GIS analysis evaluated the entire watershed. For more information regarding riparian condition in the Withlacoochee River Watershed, please see our GIS analysis evaluating riparian LULC and statistical prediction of riparian impairment in non-navigable streams and reaches (Appendix E).

In the Withlacoochee River Watershed, the majority (80.0%) of SRI scores for unpaved road crossings were "Low", followed by "Moderate" (15.0%) and "High" (5.0%). The main causes for impairment were upstream and downstream channel alteration, inlet and outlet sedimentation, high skew angles, crossing fill condition, and potential for sedimentation from road approaches. Although we identified hundreds of unpaved road crossings through aerial imagery, only 20 sites were assessed because most sites were on private lands. Generally, most unpaved road crossing sites presented a low SRI score or threat index. However, the cumulative sediment impact of assessed and unassessed unpaved road crossings in the Withlacoochee River Watershed are contributing to sedimentation, which may be degrading smaller tributaries which then flow into the larger tributaries and eventually to the Withlacoochee River. On the other hand, based on our findings, public unpaved road crossings are much less pervasive then in the

Yellow River Watershed threats assessment, which identified 339 sites (Herrington et al 2011).

Additionally, with the Withlacoochee River Watershed being almost twice the size of the Yellow River Watershed, public unpaved road crossings are quite infrequent in comparison.

As mentioned above, 3 fish passage barriers were located in the Withlacoochee River Watershed: 1 unpaved road crossings site, 1 dam (Lake Rousseau/Inglis Dam) and 1 water control structure (Wysong-Coogler Water Conservation Structure). Additionally, numerous shallow, over-widened sections may deter aquatic species passage at periods of low flow. Fish passage barriers may be impacting SGCN from accessing and utilizing parts of the Withlacoochee River Watershed. Further investigation is required to understand the impacts of fish barriers in the watershed. Currently, SARP and partners have been creating an aquatic connectivity inventory of all possible aquatic barriers (dams, culverts, and road crossings) in the southeast, which will certainly shed light on the subject.

Fish Assemblage Assessment

Our fish assemblage assessment represents the first multi-year, comprehensive and standardized survey on the entire navigable portion of the Withlacoochee River main stem. Prior fish surveys either did not follow a standardized CPUD methodology (FWC unpublished data) or focused efforts on localized areas like Lake Rousseau or haphazard locations. Recently, FWC has conducted multi-year fish surveys following standardized methodologies on 2 spring run tributaries of the Withlacoochee River including Rainbow River (Johnson et al. 2019) and Gum Slough (Nagid et al. 2012). The combined data of these surveys provide researchers with the ability to analyze future impacts in the watershed associated with population growth and land use changes.

The Withlacoochee River has had significant anthropogenic impacts from the construction of the Cross-Florida Barge Canal, damming of the river, and the conversion of lands to agriculture and urban areas. Despite these alterations, the species richness found in our study was high relative to the natural zoogeography of the watershed. Review of historical fish community presence/absence data of the Withlacoochee River (Table 16) did not indicate a decline in species richness due to recent degradation (past 30 years). Unfortunately, due to a lack of comparable baseline fisheries data, we were not able to infer changes to CPUD, diversity, biomass, or fish community composition due to anthropogenic impacts. However, our study documented a total of 56 fish species which is higher than previous fisheries surveys and there were only 8 fish species previously documented that we did not detect during our sampling efforts.

The Withlacoochee River Watershed historically contained 3 fish species currently listed as SGCN, including the American eel, the black banded sunfish (*Enneacanthus chaetodon*), and the redeye chub. The American eel and redeye chub were documented in our surveys. The American eel was only found below the dam in the lower Withlacoochee River, due to this fish passage barrier. Interestingly, Johnson et al. (2019) documented the American eel in Rainbow River, upstream of the dam, which indicates that they must be finding their way through the barrier. On the other hand, the redeye chub was only found above the dam. The redeye chub is a zooplanktivorous species that typically inhabits springs, spring runs, and streams and rivers receiving spring flows (Robins et al. 2018). The lack of occurrence indicates that the lower Withlacoochee River may not be able to support this specialist species. The blackbanded sunfish was not collected in our surveys, probably because this species typically inhabits areas that were

not captured in our sampling design, including swamps, vegetated lakes and ponds, and backwater creeks of rivers (Robins et al. 2018).

Non-native fish species collected during surveys included the blue tilapia, brown hoplo (collected during non-standard sampling), vermiculated sailfin catfish, and walking catfish. All 4 of these non-native species are established in Florida and these collections represent a relatively recent expansion in the northwest edge of each of their ranges (USGS 2019). In fact, our collection of these non-native species was the first documentation of their occurrence in the main stem of the Withlacoochee River (USGS 2019). In the Withlacoochee River Watershed, the first records of blue tilapia were in 1977, brown hoplo first appeared in 2009, vermiculated sailfin catfish were first recorded in 1999 and in the Rainbow River in 2007, and the walking catfish was limited to one record in Gum Slough during 2013 (USGS 2019). These non-native species comprised a very small component of the fish communities, with less than 10 individuals collected total. However, they may pose a severe risk to native fish communities if they expand in the basin. It is important to note that our survey methodology may have underestimated nonnative fish abundance due to their preference of backwater habitat, which was not sampled, and low catchability with electrofishing gear. Additionally, species such as the blue tilapia may be more abundant in Lake Rousseau (not sampled) due to their preference for dense vegetation, high turbidity, and eutrophic waters.

The Withlacoochee River has historically been subject to fish kills primarily related to hypoxia. The majority of the Withlacoochee River and tributaries attain state water quality standards, however there are some reaches listed as "Impaired" due to nutrients (chlorophyll-a and algal mats), mercury in fish tissues, and dissolved oxygen. It is important to note that the middle segment of the river experienced fish kills in 2017, which occurred between the project's

second and third spring sampling events. This particular event was a result of Hurricane Irma, which flushed vast amounts of decaying organic matter from the surrounding watershed, including Green Swamp, into the main stem of the river. Subsequent decomposition consumed oxygen more rapidly than it could be replaced, resulting in hypoxia. No fish kills were reported below the dam, which we attributed to re-aeration of the water as it passed through the turbulent spillway. We documented the lowest CPUD and total biomass of the study during the fall 2017 survey, which was probably related to the fish kills and high water levels at the time of sampling.

The lower Withlacoochee River had the lowest CPUD, biomass, and freshwater fish species richness of all river segments. Additionally, the lower segment contained very few insectivorous and planktivorous species, while omnivorous and piscivorous species were common. As stated earlier, differences in fish communities in the lower Withlacoochee River may be attributed to the lack of suitable habitat, which is related to greater water depths (due to previous dredging and sediment retention above the dam), altered sediment size, light attenuation due to depths and turbidity, and an abbreviated littoral zone. Additionally, fish diversity tends to decrease as rivers become more tidally influenced. Also, the greater depths of this segment reduced fish catchability, since electrofishing gear is generally only effective to a depth of approximately 6-8 feet. We collected 14 fish species categorized as marine within the lower Withlacoochee River. One marine species of importance is the common snook, which had not been collected prior in the lower Withlacoochee River. The common snook is a tropical and subtropical, estuarine-dependent, euryhaline species (Taylor et al. 2000). The distribution of the common snook is restricted by temperature and the Withlacoochee River is near the northern extent of their range. However, with warming ocean temperatures, the common snook has displayed northern range expansion. The common snook is a popular game species and therefore represents a new fishing opportunity. Also, the common snook is a new competitor with other piscivorous species including largemouth bass, Florida gar, longnose gar and bowfin in this region. Therefore, fish communities in the lower Withlacoochee River may experience changes as this "new resident" becomes better established. However, the common snook is also susceptible to extensive mortalities during severe cold winter events, which could substantially decrease their abundance in the river.

CONCLUSIONS

Peace River Watershed

In the Peace River Watershed, 512 impairment sites and 62 unpaved road crossing sites were identified. This is an alarming figure, especially considering that the threats assessment was limited to navigable reaches of rivers and streams and publicly accessible unpaved road crossing sites. The net impact of the identified and unidentified impairment and unpaved road crossing sites has severely impacted the geomorphology, aquatic habitat, and water quality of the Peace River Watershed. Overall, we recommend concentrating restoration efforts in the 10 impairment site focal areas and 7 unpaved road crossing site focal areas we established in the Peace River Watershed. Additionally, we recommend that multiple impairment or unpaved road crossing sites be restored under the same project to minimize cost of survey, design, and construction. However, we recognize that funding for large-scale restoration or multiple sites at the same time may not be feasible due to funding constraints, and we encourage any restoration projects that provide functional lift. If large scale restoration is not possible, entities should focus on highranking sites (severity scores and SRI), which are larger contributors to habitat degradation. Additionally, entities should consider impact on priority resources and habitat. Foreseeable restoration constraints include (1) lack of knowledge of proper stream restoration techniques; (2)

impairment sites are mostly located on private landowners' property and funding agencies typically prefer restoring public properties to ensure long term maintenance; (3) most focal areas occur on several private landowner properties, so permission must be granted from all parties; (4) stream restoration is expensive and can cost approximately \$300.00 to \$500.00 per linear foot; and (5) difficulty accessing remote restoration site locations with heavy machinery.

Survey, design, and restoration of the 512 impairment sites in the Peace River Watershed would cost an estimated \$65 million.

Based on the findings of the threats assessment project, we sought and secured funding from FWC's FWLI SWG and the Aquatic Habitat Restoration and Enhancement sub-section (AHRES) for a pilot restoration project of 2 impairment sites on the Peace River beginning 2019. Both restoration sites consisted of severely degraded streambanks with limited floodplain access. The 2 restoration sites are located near Zolfo Springs (PI135) and Arcadia (PI059). Estimated erosion rates were 117.2 and 197.4 tons/year for site PI135 and PI059, respectively. Additionally, the project will have a monitoring component that will assess fish communities, erosion rates, and utilize photo points at each restoration site and control sites (impairment and reference site in close proximity). The project will restore and stabilize the streambanks using NCD by installing toe wood structures, as utilized by USFWS and FWC on the Chipola River and St. Mary's River. We hope that this project will spur future restoration in the Peace River Watershed, as well as demonstrate the use of natural stream restoration methods in Southwest Florida.

Withlacoochee River Watershed

In the Withlacoochee River Watershed, 24 impairment sites and 20 unpaved road crossing sites were identified. The majority of sites ranked low in severity and SRI. Generally, this is largely

due to the Withlacoochee River and tributaries having an intact riparian plant community and little agriculture within the river's riparian habitat. This indicates that within the navigable portion of the watershed, managers should focus efforts into preservation of riparian habitats, in addition to restoration. The net impact of the identified and unidentified impairment and unpaved road crossing sites has impacted the geomorphology, aquatic habitats, and water quality of the Withlacoochee River Watershed. Overall, we recommend concentrating restoration efforts in the impairment site focal areas and unpaved road crossing site focal areas we established in the Withlacoochee River Watershed. Additionally, we recommend that multiple impairment or unpaved road crossing sites be restored under the same project to reduce cost of survey, design, and construction. However, we recognize that funding for multiple sites at the same time may not be feasible due to funding constraints and encourage any restoration projects that provide functional lift. If restoring multiple sites at the same time is not possible, entities should focus on high-ranking sites (severity scores and SRI), which are larger contributors to habitat degradation. Additionally, entities should consider impact on priority resources and habitat. Foreseeable restoration constraints include (1) lack of knowledge of proper stream restoration techniques; (2) most focal areas occur on several landowner properties, so permission must be granted from all parties; (3) stream restoration is expensive and can cost approximately \$300.00 to \$500.00 per linear foot, and (4) difficulty accessing restoration locations with heavy machinery. A rough estimate for survey, design, and restoration of the 24 impairment sites in the Withlacoochee River Watershed is \$1.1 million.

As with any index or scoring system, one can find biases and limitations. One limitation of the impairment site ranking system we observed was the ranking of fish passage barriers. For instance, the dam at Lake Rousseau has impacted and altered miles of riverine habitat and, thus,

should be ranked high for restoration, removal, and decommission. The Inglis Dam is the single largest threat to the river system and has altered water quality, aquatic and terrestrial wildlife communities, and riverine habitat. Since the 1970's, over 1,400 dams have been removed in the United States in order to restore natural river function (Bellmore et al. 2019). The benefits of dam removal include: (1) restore natural river flows and ecosystem function; (2) restore passage for freshwater obligate SGCN and federally threatened East Indian Manatee; (3) long-term cost reduction through lack of future dam maintenance, repeated repairs, liability, and inspections (once completed, the river maintains itself, one time cost); and (4) many dams are at the end of their sediment design lifespan of either 50 or 100 years, in which afterwards they become a safety issue or costly sediment removal is required. The challenges of dam removal include social issues and acceptance, and upfront cost of survey, design, removal, and feasibility study (if required).

The findings of the threats assessment project have already generated possible restoration projects in the upper Withlacoochee River by AHRES biologists. These sites are located on the Florida Forest Service lands and consist of a degraded streambank with limited floodplain access that resulted from illegal recreational access, an unpaved road leading to a boat launch, and an area with limited fish and recreational user passage at low flows (Withlacoochee River at Silver Lake). These projects are contingent upon funding; nevertheless, it is encouraging that entities are already considering restoration projects before the completion of the threats assessment project.

Fish Assemblage Assessment

Anthropogenic impacts within the Withlacoochee River basin have severely altered the natural flow regime and fluvial geomorphology of the main stem river. As discussed in the

Withlacoochee River Watershed section above, the impoundment of the river system has led to large scale changes, both upstream and downstream of the dam structure. This includes, but is not limited to, the river becoming over-widened above the dam due to backwatering and increased sediment settling, increased nutrients and associated dense aquatic vegetation in the reservoir, a deeper and narrower channel below the dam due to a lack of sediment supply, and a loss of floodplain connectivity due to stabilized flows especially below the dam. These fluvial geomorphological changes in the Withlacoochee River have had large scale ecological impacts related to: loss of riverine habitat, changes in sediment sizes which may impact fish spawning, and an increase in lentic-associated fish and macroinvertebrate species. These impacts over time often translate to decreases in species richness, diversity, and CPUD, though these trends were difficult to ascertain in our study due to a lack of comparable baseline data. Based on our results, the lower Withlacoochee River displayed higher fish community impacts than other segments, due to anthropogenic influences.

As stated earlier, our sampling efforts represent the first comprehensive fish surveys following FWC's LTM standardized protocol on the navigable portion of the Withlacoochee River. In that regard, we recommend that the navigable portion of the Withlacoochee River be included in a regular fisheries sampling regime, following LTM protocol, to provide better long-term data, which can be used to monitor changes in communities and help make informed management decisions. Due to a lack of previous standardized fisheries data, we were only able to make comparisons of presence/absence data with historical data. Despite the vast changes in Withlacoochee River's riverine habitat, the main stem of the river contained fish diversity appropriate for the natural zoogeography of the watershed and similar species accounts from the late 1980's. One major change to the fish community was the addition of 4 exotic fish species

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that were not previously documented in the mainstem river. Unfortunately, these species are now characteristic of most waterbodies in peninsular Florida. With an increasing population and a greater demand for water in the Withlacoochee River Watershed, this 3-year survey provides baseline fisheries data to evaluate future studies. Lastly, if city, state, and federal governments and local citizens were to pursue a dam removal project on the Withlacoochee River, this study would also provide baseline data to evaluate changes following dam removal.

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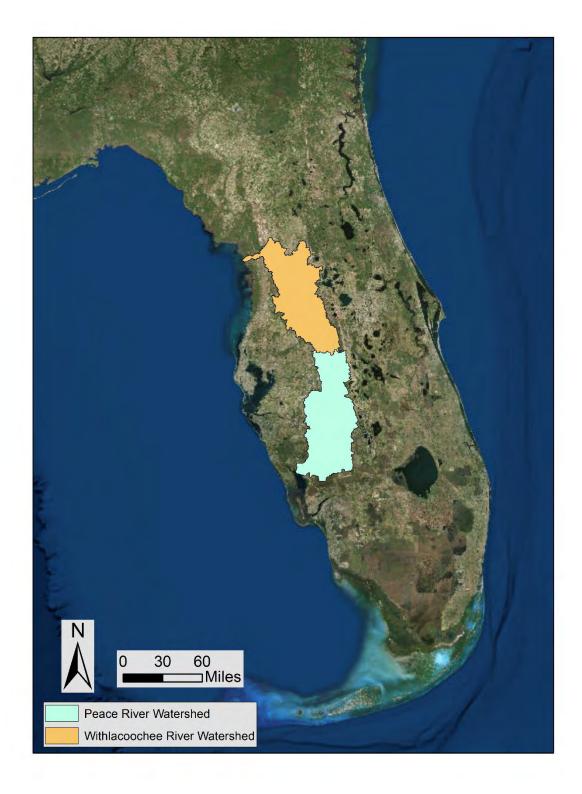


Figure 1. Map displaying the location of the Peace and Withlacoochee Watersheds in the state of Florida.

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Table 1. Risk factors and scoring criteria used for evaluating impairment sites (USFWS 2014). BEHI = bank erosion hazard index.

Risk Factor	0	0.5	1	1.5	Max Possible Score	
Pfankuch channel stability index	Good		Fair	Poor	1.5	
Channel alteration	None	Historic, Mostly Recovered	In Recovery	Recent, No Recovery	1.5	
Bank erosion	osion Not Eroding Historic Active Mass-wasting		1.5			
ВЕНІ	Low-Very Low	Moderate	High	Very High- Extreme	1.5	
Local non-point source pollution	No Evidence	Slight	Moderate Potential	Obvious Sources	1.5	
Shoring structures	Not Present			Present	1.5	
Pipe discharge	Not Present			Present	1.5	
Water odors	Not Present			Present	1.5	
Fish passage barrier	Not Present			Present	1.5	
Riparian buffer width	0	0.25	0.5	0.75	_	
Right bank	100ft	50-99ft	30-49ft	0-29ft	0.75	
Left bank	100ft	50-99ft	30-49ft	0-29ft	0.75	
Floodplain access	0.0	0.25		0.75	_	
Right bank	Full	Partial		None	0.75	
Left bank	Full	Partial		None	0.75	

		Crossin	g ID;			
BASELINE	Date:	Co	County:			
Road:	Longitude:	La	titude:			
Watershed:	Subb	oasin:				
Crew:						
PHOTOPOINTS	Camera:	Camer	Camera Settings:			
Photopoint	Latitude	Longitude	Camera Height	Camera Frame No.		
Upstream channel from crossing		-				
Downstream channel from crossing						
Right road approach from crossing						
Left road approach from crossing				-		
Crossing structure from: U/S D/S						
Right road approach from hilltop						
Left road approach from hilltop						
WATERWAY	Stream Name:					
	5	3	1	Score		
Upstream Channel Morphology:	A B C E Wetland	DA Beaver Da	m D F G Ponder	d		
Downstream Channel Morphology:	A B C E Wetland	DA Beaver Da	m D F G Ponder	d		
Downstream Channel/Bank Alteration:	Natural	Minor or Partia	al High			
Comments:			TOTAL:			
CROSSING STRUCTURE	Crossing Type: Cul	vert Bridge Fo	nd Number of Culve	rts:		
Culvert Type: Round Pipe Elli	ptical Open Arch Box	Trough Box	Open Box Other:			
Structure Materials: (Corrugated) Meta Wood		Synthetic Reir Clay Roc	nforced Concrete k Other:			
Dimensions: Length/Span:	Diameter/Width		Culvert Outfall Drop:			
	5	3	1	Score		
Upstream Culvert Skew Angle (Worst):	< 5°	5° to 30°	> 30°			
Crossing Fill Condition (Dominant):	Good Vegetated	Fair Riprap				
Crossing Inlet/Outlet Condition:	No Impairment	Sediment Island	ds Blocked			

Figure 2. Data sheet and scoring system used to assess unpaved road crossings (Witmer 2009).

CROSSING	ID:	
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ROAD APPROACHES I	Right = Right Road Approach When Facing Downstream							
Dimensions (Right): Length:	mi. Width:	ft. Road Prism Fill:	in. Slope:	%				
Potential Eroded Volume (Ri	tight): Length × Width × Road Prism Fill × 16.3 = c.y.							
Dimensions (Left): Length:	mi. Width: ft. Road Prism Fill:		in. Slope:	%				
Potential Eroded Volume (I	Left): Length × Width × Road Prism Fill × 16.3 = c.							
	5	3	1	Score				
Potential Eroded Volume (Mean):	< 21 c.y.	21 to 40 c.y.	> 40 c.y.					
Soil Type: Soil K-Factor:	≤ 0.20	0.21 to 0.40	> 0.40					
Road Approach Slope (Mean): %	≤ 2.0%	≤ 2.0% 2.1% to 4.0%						
Road Approach Surface Material:	ALL Aggregate OR 1 AP: Aggregate 1 AP: Sand/Clay		ALL Native Soil OR 1 AP: Native Soil 1 AP: Sand/Clay					
Comments:			TOTAL:					

ROAL	APPROAG	CHES II								
Left Outlet (Pick One):	Vegetated	Riprap	Synthetic	+1	Left Ditch (Pick One):	Vegetated	Riprap	Synthetic	+1	
	Bare Soil	Concrete	Other	+0		Bare Soil	Concrete	Other	+0	
U/S	U/S Right Outlet (Pick One):	Vegetated	Riprap	Synthetic	+1	Right Ditch (Pick One):	Vegetated	Riprap	Synthetic	+1
		Bare Soil	Concrete	Other	+0		Bare Soil	Concrete	Other	+0
	Left Outlet (Pick One):	Vegetated	Riprap	Synthetic	+1	Left Ditch	Vegetated	Riprap	Synthetic	+1
D/S		Bare Soil	Concrete	Other	+0	(Pick One):	Bare Soil	Concrete	Other	+0
	Right Outlet (Pick One):	Vegetated	Riprap	Synthetic	+1	Right Ditch	Vegetated	Riprap	Synthetic	+1
		Bare Soil	Concrete	Other	+0	(Pick One):	Bare Soil	Concrete	Other	+0
				SUM:	_				SUM:	_
	Improved Outlet		IF SUM =	4, 2, or 0:	+1	Improved Drainage		IF SUM =	4, 2, or 0:	+1
System:		I	F SUM = 1:	+2	System: IF SUM		F SUM = 1:	+2		
			II	F SUM = 3:	+0			II	F SUM = 3:	+0
	TOTAL:							TO	TAL:	

SEDIMENTATION RISK INDEX (SRI)	TOTAL SRI SCORE:
SRI scores range from 12 to 60. Low scores indicate a high risk for sedimentation from unpaved roads into streams or waterbodies.	SCORE.

Figure 2. Continued.

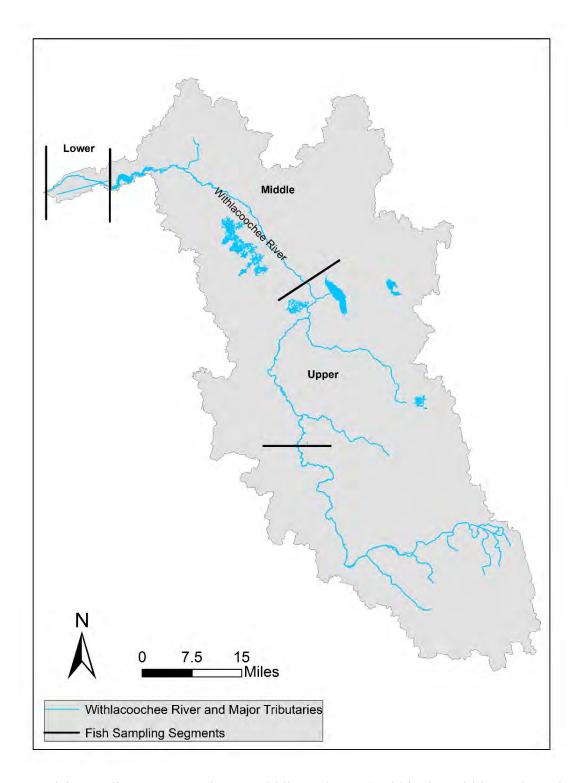


Figure 3. Fish sampling segments (lower, middle, and upper) within the Withlacoochee River.

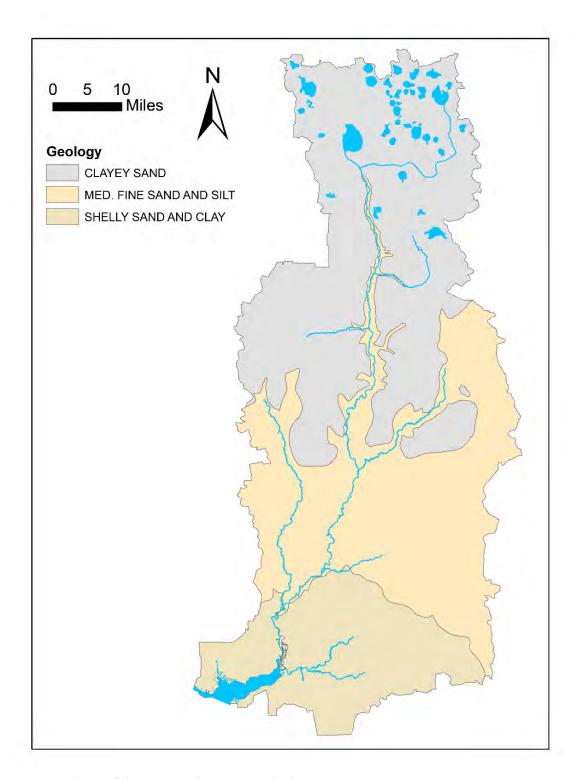


Figure 4. Geology of the Peace River Watershed.

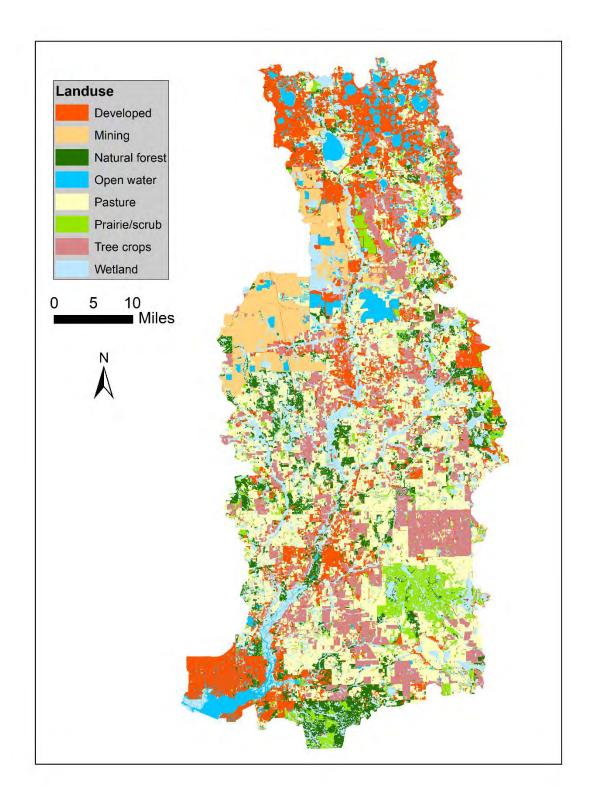


Figure 5. Land use land cover of the Peace River Watershed.

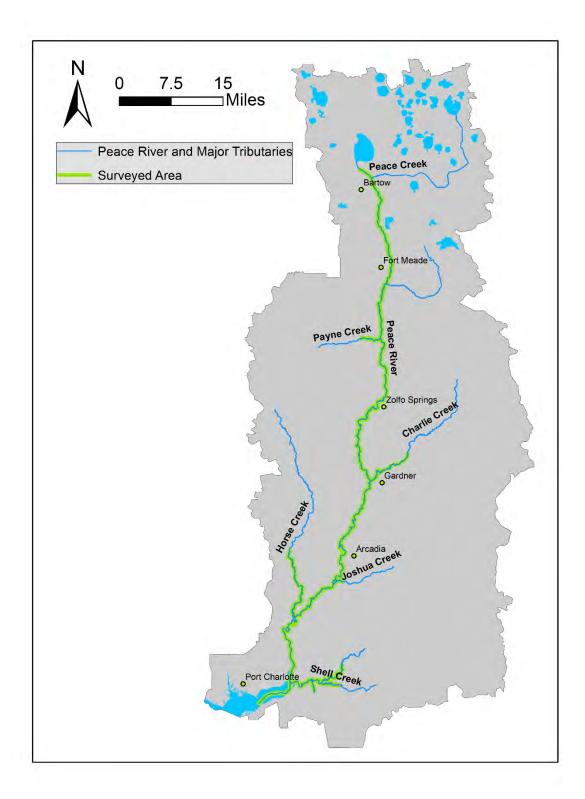


Figure 6. Area surveyed within the Peace River Watershed during 2015-2019.

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Table 2. Number of river miles and impairment sites assessed in each waterbody within the Peace River Watershed during 2015-2019.

Waterbody	River Miles	Impairment Sites
Peace River	103.7	278
Charlie Creek	21.8	117
Horse Creek	14.8	63
Prairie Creek	9.2	27
Shell Creek	8.7	6
Payne Creek	3.5	7
Joshua Creek	2.4	9
Saddle Creek	2.3	2
Myrtle Slough	1.25	1
Whidden Creek	0.07	1
Limestone Creek	0.04	1
Total:	167.7	512

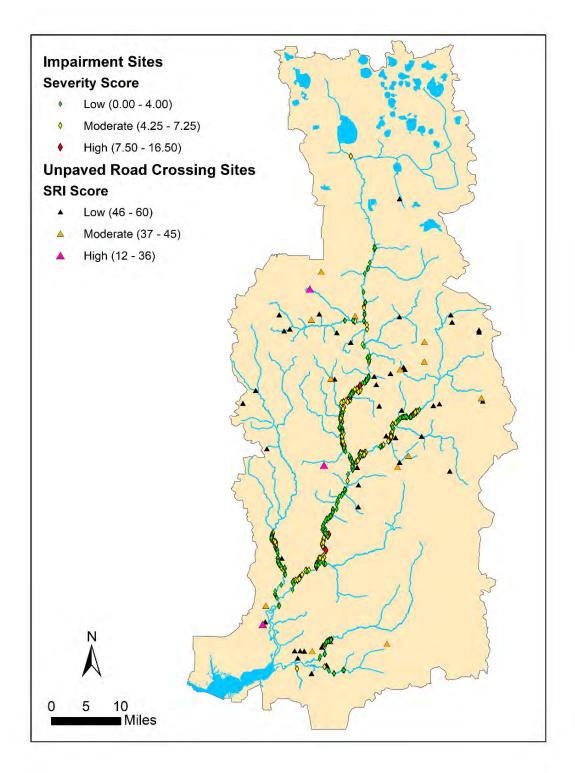


Figure 7. Location and ranking of all scored impairment sites and unpaved road crossing sites in the Peace River Watershed during 2015-2019. SRI = Sediment Risk Index.

Table 3. Frequency (number) and site length (feet) of impairment sites for each severity score category (low, moderate, and high), per waterbody, that were identified in the Peace River Watershed during 2015-2019.

Waterbody	Severity Score	Range	Frequency	Site Length (ft)	Waterbody	Severity Score	Range	Frequency	Site Length (ft)
Peace River	Low	0.00-4.00	181	33,026		Low	0.00-4.00	5	154
Watershed	Moderate	4.25-7.25	321	78,048	Payne Creek	Moderate	4.25-7.25	2	85
(Total)	High	7.50-16.5	10	2,898		High	7.50-16.5	0	0
		Total:	512	113,971			Total:	7	239
	Low	0.00-4.00	83	19,222		Low	0.00-4.00	8	507
Peace River	Moderate	4.25-7.25	188	53,160	Joshua Creek	Moderate	4.25-7.25	1	90
	High	7.50-16.5	7	2,073		High	7.50-16.5	0	0
		Total:	278	74,454			Total:	9	597
C1 1:	Low	0.00-4.00	37	6,734		Low	0.00-4.00	0	0
Charlie Creek	Moderate	4.25-7.25	79	16,968	Saddle Creek	Moderate	4.25-7.25	2	216
CICCK	High	7.50-16.5	1	360		High	7.50-16.5	0	0
		Total:	117	24,062			Total:	2	216
	Low	0.00-4.00	27	3,553	3.6 .4	Low	0.00-4.00	0	0
Horse Creek	Moderate	4.25-7.25	34	5,002	Myrtle Slough	Moderate	4.25-7.25	1	90
	High	7.50-16.5	2	465	Slough	High	7.50-16.5	0	0
		Total:	63	9,020			Total:	1	90
ъ	Low	0.00-4.00	16	2,662	3371 : 1 1	Low	0.00-4.00	1	11
Prairie Creek	Moderate	4.25-7.25	11	2,273	Whidden Creek	Moderate	4.25-7.25	0	0
Creek	High	7.50-16.5	0	0	Cicck	High	7.50-16.5	0	0
		Total:	27	4,935			Total:	1	11
	Low	0.00-4.00	4	138	T :	Low	0.00-4.00	1	45
Shell Creek	Moderate	4.25-7.25	2	164	Limestone Creek	Moderate	4.25-7.25	0	0
	High	7.50-16.5	0	0	CICCK	High	7.50-16.5	0	0
		Total:	6	302			Total:	1	45

Table 4. Frequency and percent of unpaved road crossings, per Sediment Risk Index (SRI) score, that were identified in the Peace River Watershed during 2015-2019.

SRI	Range	Frequency	Percent
Low	46-60	46	72.6
Moderate	37-45	12	21.0
High	12-36	4	6.5
Total Sites:		62	

Table 5. Table of restoration options for impairment sites.

Restoration Option 1: Bank stabilization (mechanical). Install toe wood structures (regrade bank, place root wad logs over foundation logs, grade in a bankfull bench and low terrace, cover bank with erosion control fiber, and follow a native vegetation planting plan); install J-hook or cross vane structures if necessary; and restrict cattle, recreational, and vehicle access (pave road if necessary).

Restoration Option 2: Bank stabilization (mechanical or non-mechanical). Regrade bank if necessary (grade in a bankfull bench and low terrace, cover with erosion control fiber, and follow native vegetation planting plan) and restrict cattle, recreational, and vehicle access (pave road if necessary).

Restoration Option 3: Passive restoration (non-mechanical). Modify land use practices to reverse the cause of impairment (i.e., fence out cattle and block vehicle or recreational access) and allow bank to revegetate and restore naturally by self-recovery.

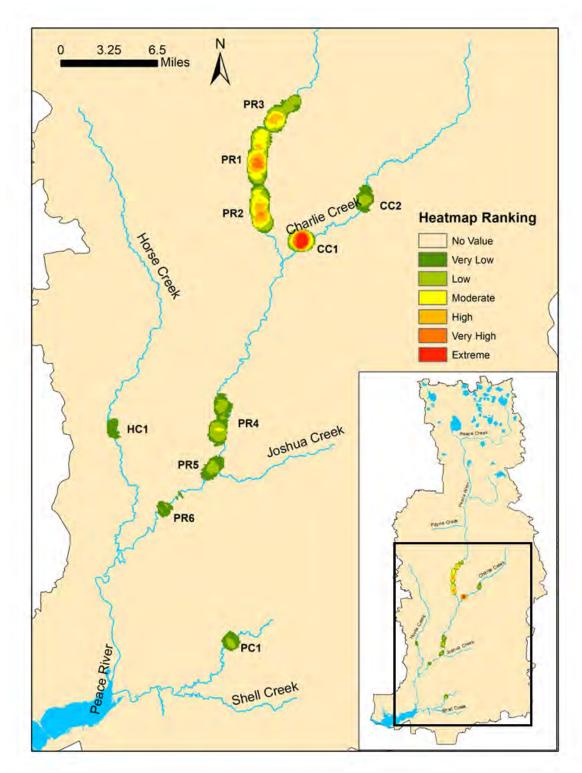


Figure 8. GIS heatmap rankings and impairment site heatmap focal areas for restoration within the Peace River Watershed. Focal area descriptors: PR1 = Peace River 1, PR2 = Peace River 2, ..., PR6 = Peace River 6, CC1 = Charlie Creek 1, CC2 = Charlie Creek 2, PC1 = Prairie Creek 1, and HC1 = Horse Creek 1.

Table 6. Frequency (number) and site length (feet) of impairments for each site severity score, per focal area, that were identified in the Peace River Watershed during 2015-2019.

Focal Area	Severity Score	Range	Frequency	Site Length (ft)	Focal Area	Severity Score	Range	Frequency	Site Length (ft)
D D' 1	Low	0 - 4.0	6	1,170	Cl. 1: C. 1.1	Low	0 - 4.0	0	0
Peace River 1 (PR1)	Moderate	4.25 - 7.25	57	14,745	Charlie Creek 1 (CC1)	Moderate	4.25 - 7.25	33	9,850
	High	7.50 - 16.5	0	0	(CCI)	High	7.50 - 16.5	0	0
		Total:	63	15,915.0			Total:	33	9,850
D D: 0	Low	0 - 4.0	5	1,191	G1 1: G 1.0	Low	0 - 4.0	1	230
Peace River 2 (PR2)	Moderate	4.25 - 7.25	42	9,932	Charlie Creek 2 (CC2)	Moderate	4.25 - 7.25	15	2,940
(FR2)	High	7.50 - 16.5	2	821	(CC2)	High	7.50 - 16.5	1	360
		Total:	49	11,944			Total:	17	3,530
Peace River 3	Low	0 - 4.0	6	2,340	Horse Creek 1 (HC1)	Low	0 - 4.0	1	100
	Moderate	4.25 - 7.25	27	8,372		Moderate	4.25 - 7.25	16	1,810
(PR3)	High	7.50 - 16.5	1	300	(ncı)	High	7.50 - 16.5	2	465
		Total:	34	11,012			Total:	19	2,375
D D: 4	Low	0 - 4.0	8	3,350	D ' ' C 11	Low	0 - 4.0	11	2,432
Peace River 4 (PR4)	Moderate	4.25 - 7.25	14	6,608	Prairie Creek 1 (PC1)	Moderate	4.25 - 7.25	10	2,117
(1 K 4)	High	7.50 - 16.5	1	235	(101)	High	7.50 - 16.5	0	0
		Total:	23	10,193			Total:	21	4,549
D. D. 5	Low	0 - 4.0	6	732	T:	Low	0 - 4.0	137	21,481
Peace River 5 (PR5)	Moderate	4.25 - 7.25	12	4,549	Tertiary Locations	Moderate	4.25 - 7.25	86	14,223
(1 K3)	High	7.50 - 16.5	0	0	Locations	High	7.50 - 16.5	3	716
		Total:	18	5,281			Total:	226	36,419
D D: 6	Low	0 - 4.0	0	0					
Peace River 6 (PR6)	Moderate	4.25 - 7.25	9	2,902					
(1 KU)	Lligh	7.50 16.5	Λ	0					

7.50 - 16.5

Total:

9

2,902

High

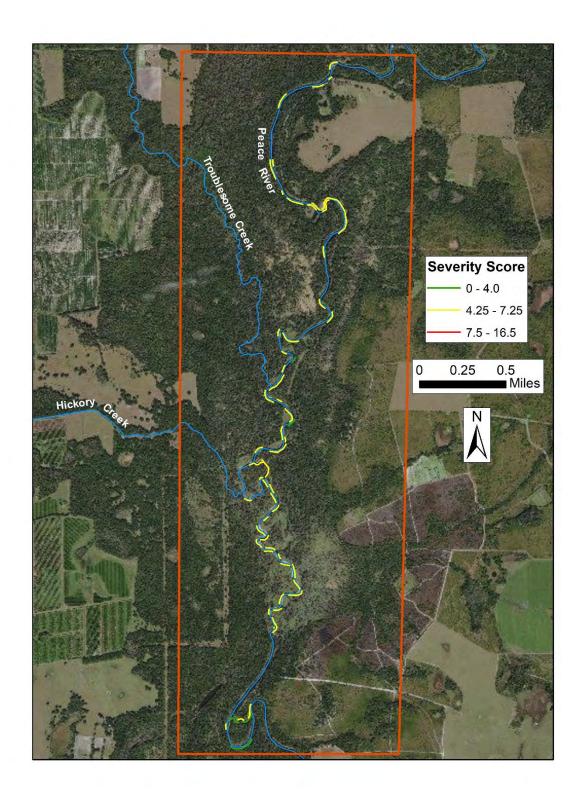


Figure 9. Location and ranking of impairment sites identified in the Peace River 1 focal area.

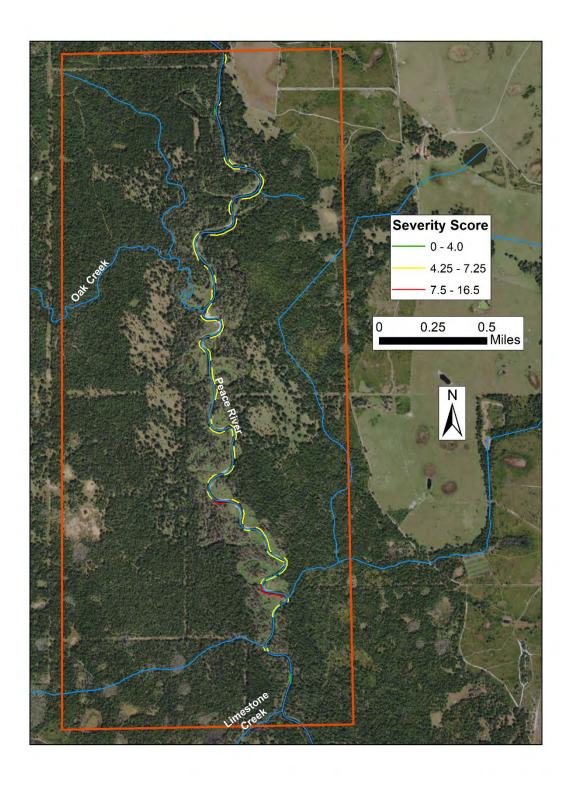


Figure 10. Location and ranking of impairment sites identified in the Peace River 2 focal area.

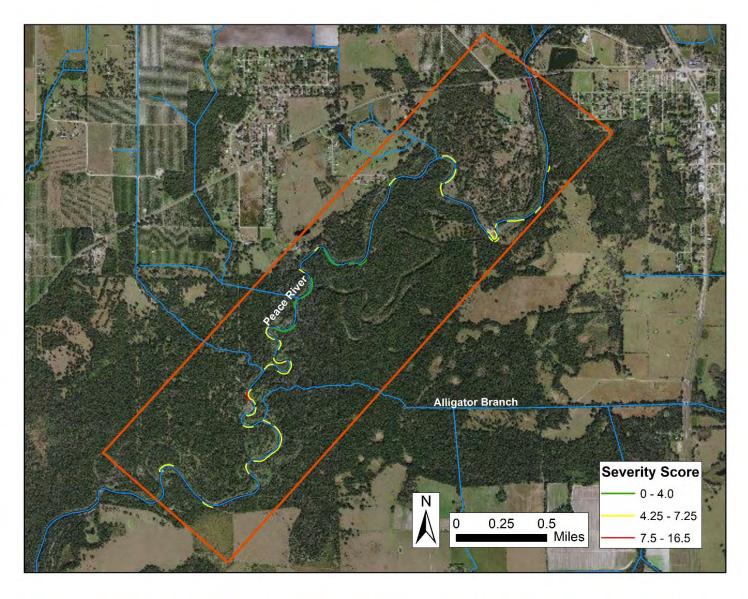


Figure 11. Location and ranking of impairment sites identified in the Peace River 3 focal area.

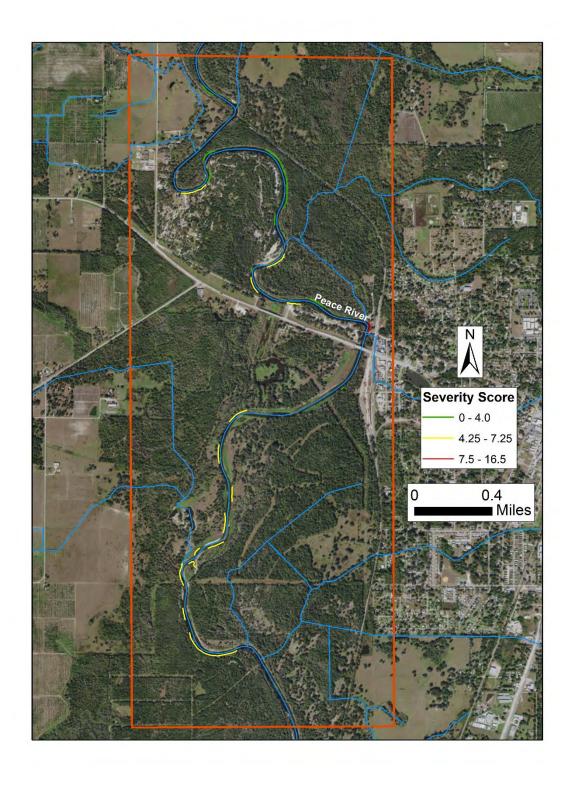


Figure 12. Location and ranking of impairment sites identified in the Peace River 4 focal area.

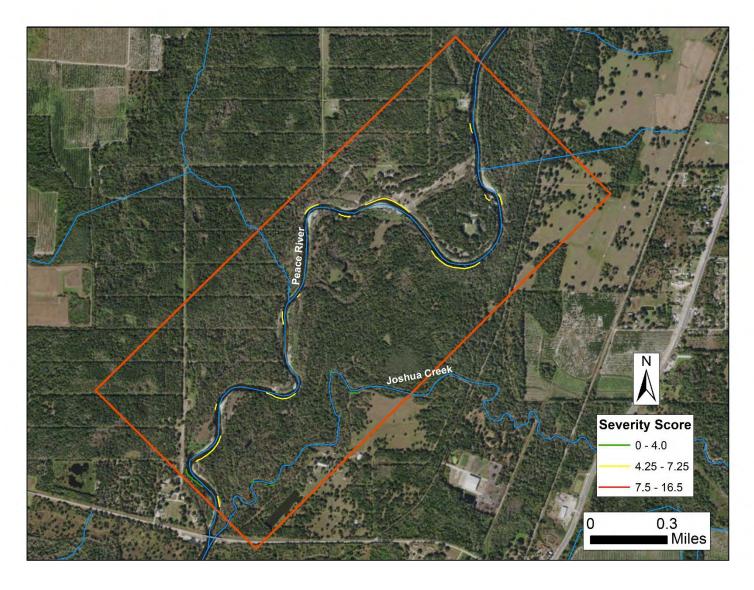


Figure 13. Location and ranking of impairment sites identified in the Peace River 5 focal area.

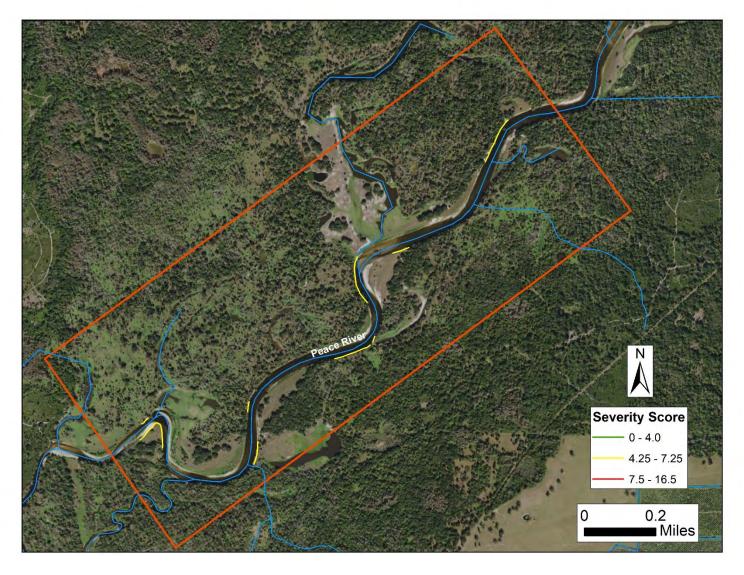


Figure 14. Location and ranking of impairment sites identified in the Peace River 6 focal area.

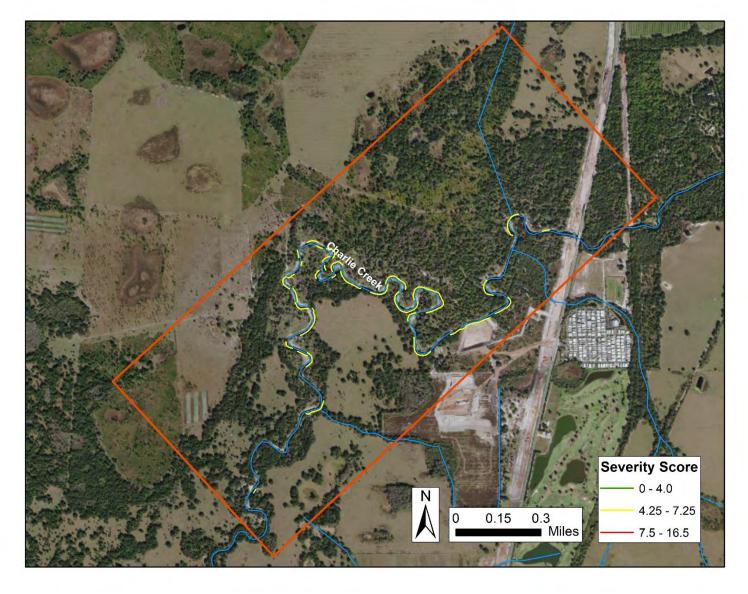


Figure 15. Location and ranking of impairment sites identified in the Charlie Creek 1 focal area.

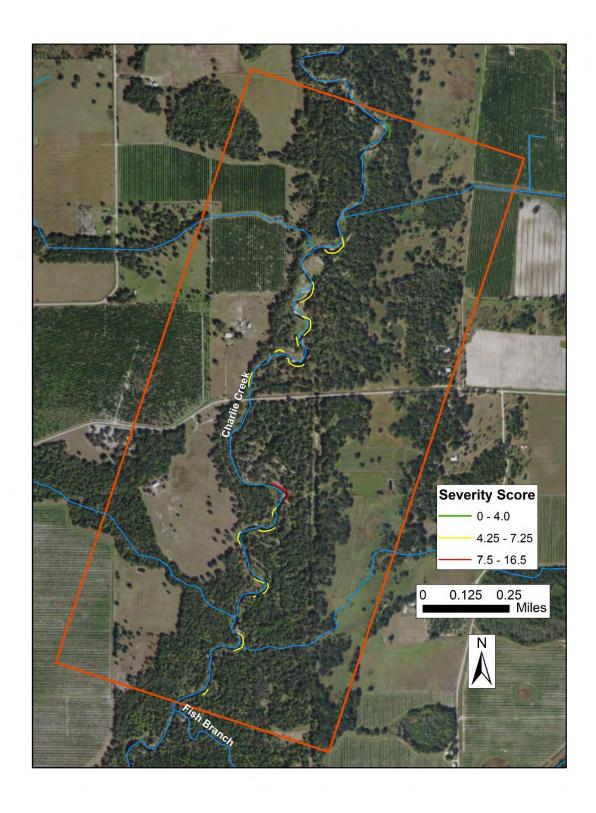


Figure 16. Location and ranking of impairment sites identified in the Charlie Creek 2 focal area.

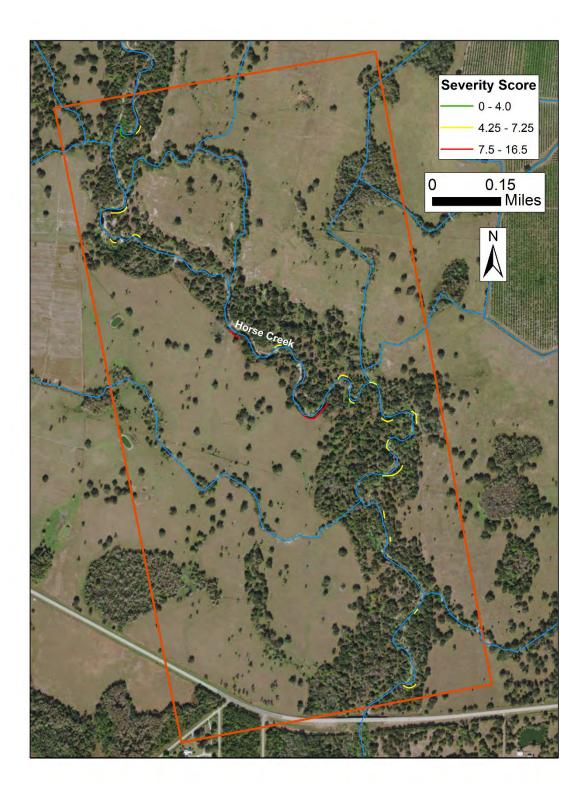


Figure 17. Location and ranking of impairment sites identified in the Horse Creek 1 focal area.

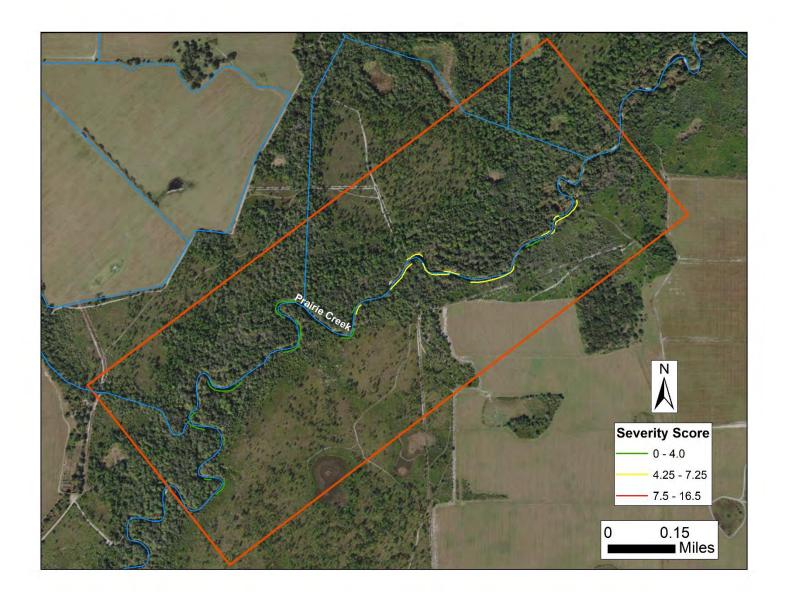


Figure 18. Location and ranking of impairment sites identified in the Prairie Creek 1 focal area.

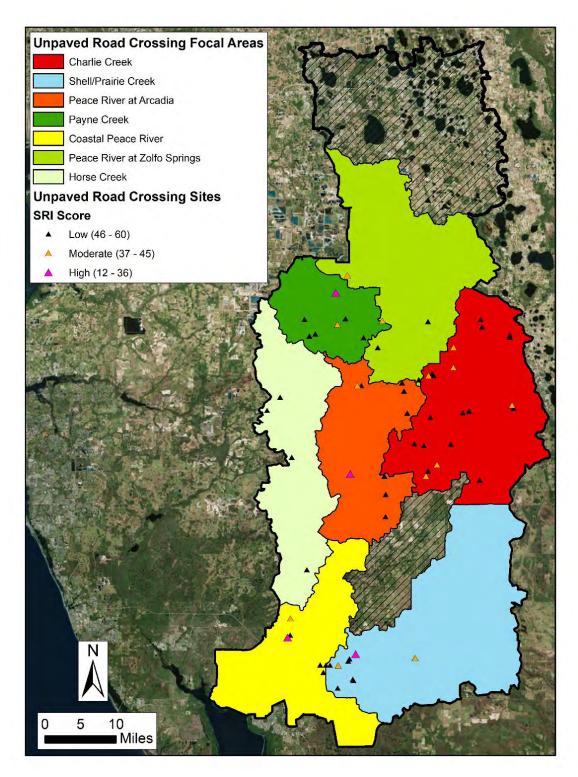


Figure 19. Location and ranking of all scored unpaved road crossings, per focal area, within the Peace River Watershed.

Table 7. Frequency (number) of unpaved road crossing sites for each Sediment Risk Index (SRI) category (low, moderate, and high), per focal area, that were surveyed in the Peace River Watershed during 2015-2019.

Focal Area	SRI	Range	Frequency	Focal Area	SRI	Range	Frequency
Charlie	Low	46-60	16	Coastal Peace	Low	46-60	3
Cnarne Creek	Moderate	37-45	6	River	Moderate	37-45	1
	High	12-36	0	Kivei	High	12-36	1
	To	otal Sites:	22		T	otal Sites:	5
C111/D:	Low	46-60	7	D D	Low	46-60	3
Shell/Prairie Creek	Moderate	37-45	2	Peace River at Zolfo Springs	Moderate	37-45	2
CICCK	High	12-36	1 High				0
	To	otal Sites:	10		T	Total Sites:	
D D:	Low	46-60	7		Low	46-60	4
Peace River at Arcadia	Moderate	37-45	1	Horse Creek	Moderate	37-45	0
at Alcadia	High	12-36	1		High	12-36	0
	To	otal Sites:	9		T	otal Sites:	4
D	Low	46-60	5				
Payne Creek	Moderate	37-45	1				
CICCK	High	12-36	1	_			
	To	otal Sites:	7	_			

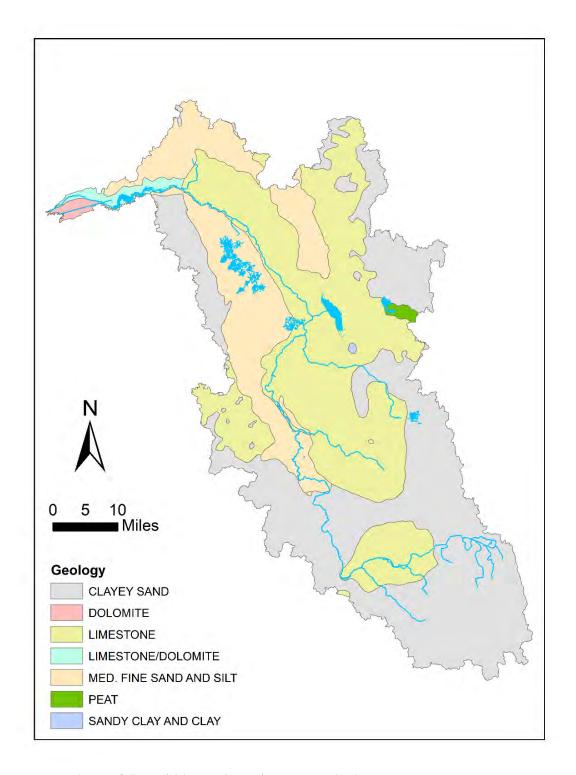


Figure 20. Geology of the Withlacoochee River Watershed.

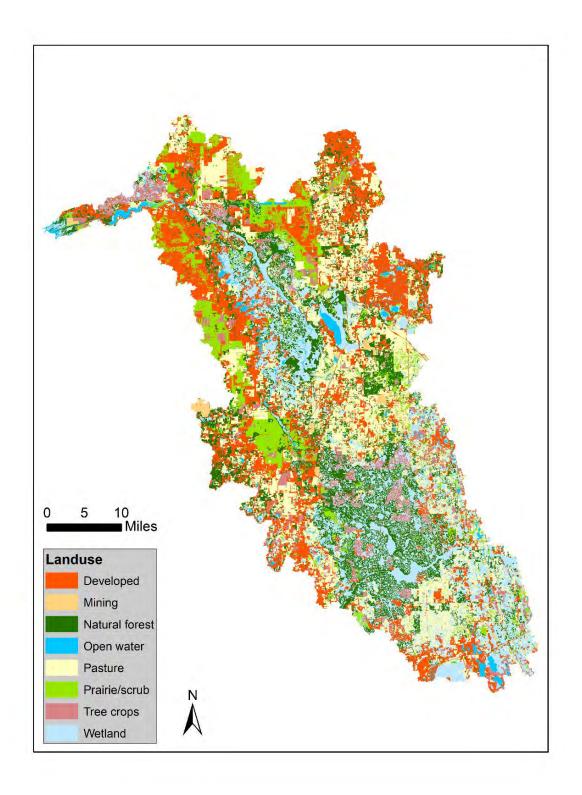


Figure 21. Land use land cover of the Withlacoochee River Watershed.

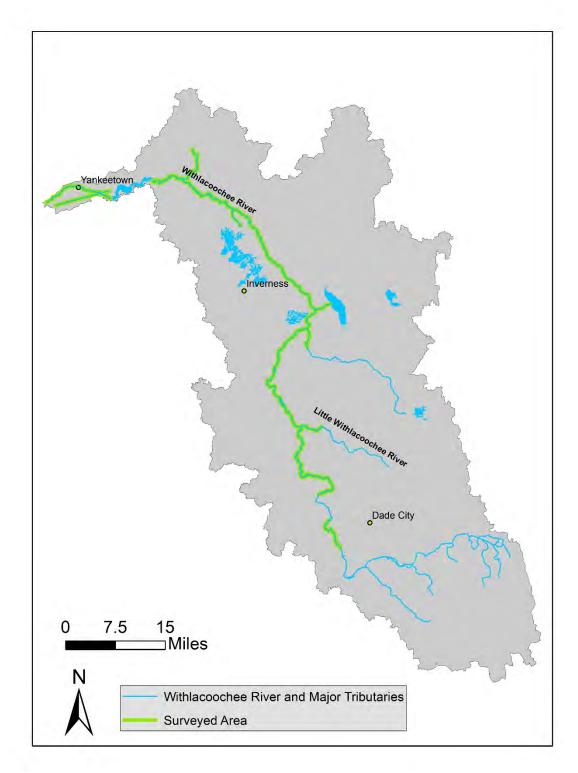


Figure 22. Area surveyed within the Withlacoochee River Watershed during 2015-2019. Note the small section west of Dade City was not surveyed due to numerous log jams.

Table 8. Number of river miles and impairment sites assessed in each waterbody within the Withlacoochee River Watershed during 2015-2019.

Waterbody	River Miles	Impairment Sites
Withlacoochee River	114.7	24
Rainbow River	5.6	0
Little Withlacoochee River	5.1	0
Jumper Creek	3.3	0
Tsala Apopka Canal	2.8	0
Total:	131.6	24

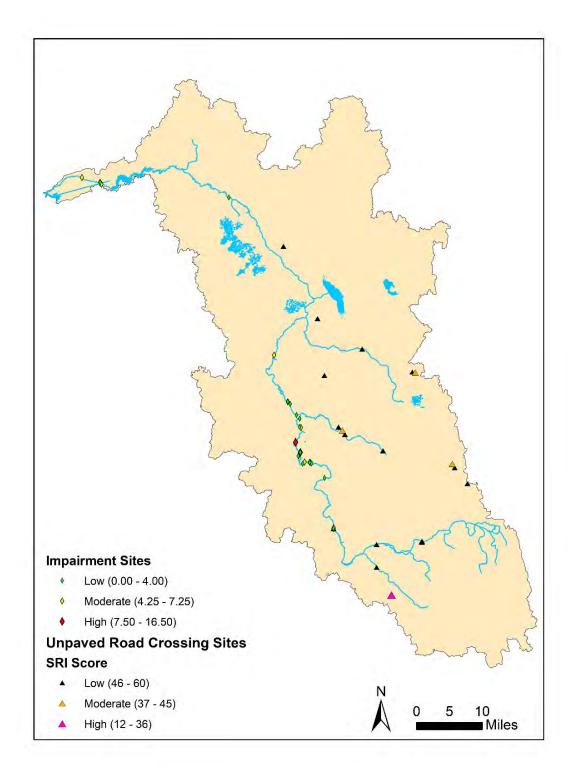


Figure 23. Location and ranking of all scored impairment sites and unpaved road crossing sites in the Withlacoochee River Watershed during 2015-2019. SRI = Sediment Risk Index.

Table 9. Frequency (number) and site length (feet) of impairment sites for each severity score category (low, moderate, and high) that were identified in the Withlacoochee River during 2015-2019 (no impairment sites were identified on tributaries).

Severity Score	Range	Frequency	Site Length (ft)
Low	0 - 4.0	15	1,229
Moderate	4.25-7.25	7	673
High	7.50-16.5	2	32
	Total:	24	1,934

Table 10. Frequency and percent of unpaved road crossings per Sediment Risk Index (SRI) category that were identified in the Withlacoochee River Watershed during 2015-2019.

SRI	Range	Frequency	Percent
Low	46-60	16	80.0
Moderate	37-45	3	15.0
High	12-36	1	5.0
	Total Sites:	20	

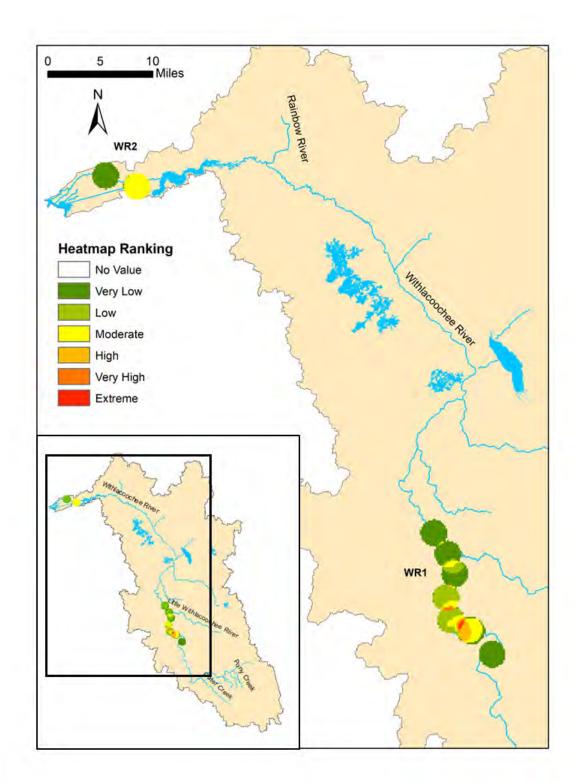


Figure 24. GIS heatmap rankings and impairment site heatmap focal areas for restoration within the Withlacoochee River Watershed. Focal area descriptors WR1=Withlacoochee River 1 and WR2=Withlacoochee River 2.

Table 11. Frequency (number) and site length (feet) of impairments for each site severity score category (low, moderate, and high), per focal area and tertiary locations, that were identified in the Withlacoochee River Watershed during 2015-2019.

Focal Area	Severity Score	Range	Frequency	Site Length (ft)
W'41 1 D' 1	Low	0 - 4.0	12	942
Withlacoochee River 1 (WR1)	Moderate	4.25 - 7.25	3	218
(WKI)	High	7.50 - 16.5	2	32
		Total:	17	1,192
W.41 1 D. 0	Low	0 - 4.0	1	25
Withlacoochee River 2 (WR2)	Moderate	4.25 - 7.25	2	400
(WK2)	High	7.50 - 16.5	0	0
		Total:	3	425
	Low	0 - 4.0	2	262
Tertiary Locations	Moderate	4.25 - 7.25	2	55
	High	7.50 - 16.5	0	0
		Total:	4	317

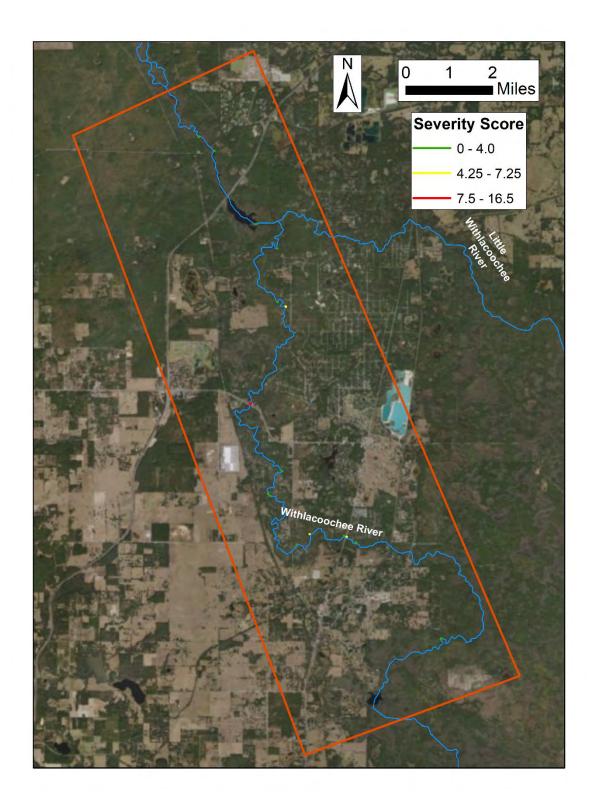


Figure 25. Location and ranking of impairment sites identified in the Withlacoochee River 1 focal area.

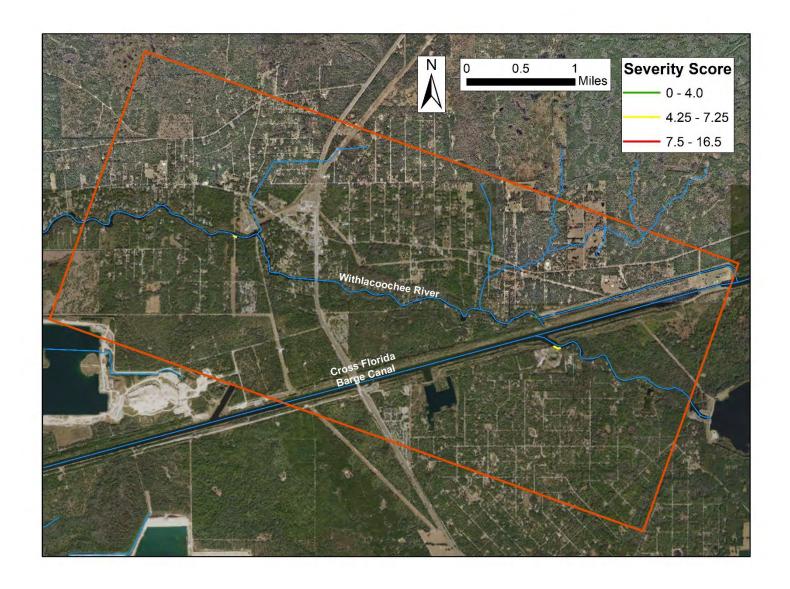


Figure 26. Location and ranking of impairment sites identified in the Withlacoochee River 2 focal area.

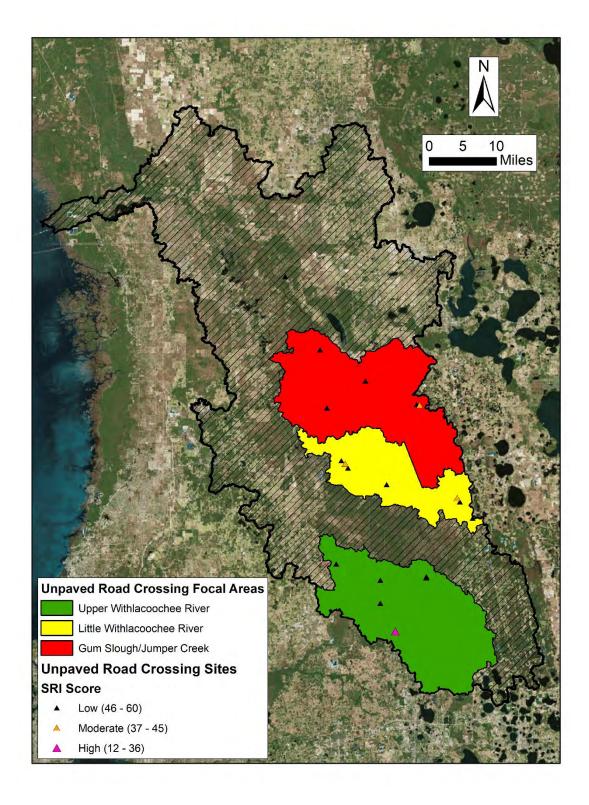


Figure 27. Location and ranking of all scored unpaved road crossing, per focal area, within the Withlacoochee River Watershed.

Table 12. Number of unpaved road crossing sites for each Sediment Risk Index (SRI) category, per focal area, that were surveyed in the Withlacoochee River Watershed during 2015-2019.

Focal Area	SRI	Range	Frequency
	Low	46-60	6
Upper Withlacoochee River	Moderate	37-45	0
	High	12-36	1
	To	tal Sites:	7
	Low	46-60	5
Little Withlacoochee River	acoochee River Moderate		2
	High	12-36	0
	To	tal Sites:	7
	Low	46-60	4
Gum Slough/Jumper Creek	Moderate	37-45	1
	High	12-36	0
·	To	5	

Table 13. Abundance, relative abundance, weight (grams), and percent composition by number and weight of fish species collected by electrofishing during the 3 spring sampling events (2016, 2017, and 2018) on the Withlacoochee River. # = number, CPUD = catch per unit distance (individuals/kilometer), SE = standard error, Wt. (g) = weight in grams, % Comp. = percent composition, * = marine species, ** = non-native species, and NM = not measured.

composition, – marine	species, — non-native specie	Fish/km				% Comp.		
Common Name	Scientific Name	#	CPUD (SE)	Wt. (g)	#	Wt.		
*American eel	Anguilla rostrata	16	1.4 (<0.1)	3,835	0.1	0.4		
*Atlantic needlefish	Strongylura marina	5	0.4 (<0.1)	100	< 0.1	< 0.1		
black crappie	Pomoxis nigromaculatus	31	2.7 (0.1)	616	0.2	0.1		
**blue tilapia	Oreochromus aurea	1	0.1 (<0.1)	1,237	< 0.1	0.1		
bluefin killifish	Lucania goodei	222	19.6 (0.5)	76	1.4	< 0.1		
bluegill	Lepomis macrochirus	1,337	118.3 (1.1)	34,589	8.2	3.9		
bluespotted sunfish	Enneacanthus gloriosus	24	2.1 (0.1)	39	0.1	< 0.1		
bowfin	Amia calva	285	25.2 (0.4)	314,553	1.8	35.7		
brook silverside	Labidesthes sicculus	107	9.5 (0.2)	203	0.7	< 0.1		
brown bullhead	Ameiurus nebulosus	12	1.1 (<0.1)	4,010	0.1	0.5		
chain pickerel	Esox niger	10	0.9 (<0.1)	1,989	0.1	0.2		
channel catfish	Ictalurus punctatus	2	0.2 (<0.1)	45	< 0.1	< 0.1		
coastal shiner	Notropis petersoni	896	79.3 (1.5)	998	5.5	0.1		
*crevalle jack	Caranx hippos	1	0.1 (<0.1)	1,248	< 0.1	0.1		
dollar sunfish	Lepomis marginatus	386	34.2 (0.8)	1,955	2.4	0.2		
Eastern mosquitofish	Gambusia holbrooki	7,011	620.4 (17)	2,056	43.1	0.2		
Everglades pygmy sunfish	Elassoma evergladei	1	0.1 (<0.1)	<1	< 0.1	< 0.1		
Florida gar	Lepisosteus platyrhincus	412	36.5 (0.6)	170,148	2.5	19.3		
golden shiner	Notemigonus crysoleucas	514	45.5 (1.6)	2,002	3.2	0.2		
golden topminnow	Fundulus chrysotus	140	12.4 (0.8)	238	0.9	< 0.1		
*gray snapper	Lutjanus griseus	20	1.8(0.1)	1,593	0.1	0.2		
*hogchoker	Trinectes maculatus	60	5.3 (0.2)	126	0.4	< 0.1		
*inland silverside	Menidia beryllina	88	7.8 (0.6)	328	0.5	< 0.1		
ironcolor shiner	Notropis chalybaeus	27	2.4 (0.1)	34	0.2	< 0.1		
lake chubsucker	Erimyzon sucetta	94	8.3 (0.2)	35,455	0.6	4.0		
largemouth bass	Micropterus salmoides	626	55.4 (0.6)	93,847	3.8	10.7		
least killifish	Heterandria formosa	719	63.6 (3.5)	58	4.4	< 0.1		
longnose gar	Lepisosteus osseus	53	4.7 (0.1)	46,241	0.3	5.3		
Okefenokee pygmy sunfish	Elassoma okefenokee	5	0.4 (<0.1)	<1	< 0.1	< 0.1		
*pinfish	Lagodon rhomboides	6	0.5 (<0.1)	2	< 0.1	< 0.1		
pirate perch	Aphredoderus sayanus	35	3.1 (0.1)	89	0.2	< 0.1		
redbreast sunfish	Lepomis auritus	637	56.4 (1.1)	12,415	3.9	1.4		
redear sunfish	Lepomis microlophus	385	34.1 (0.4)	18,527	2.4	2.1		
redeye chub	Notropis harperi	134	11.9 (0.3)	291	0.8	< 0.1		
redfin pickerel	Esox americanus americanus	13	1.2 (<0.1)	67	0.1	< 0.1		
sailfin molly	Poecilia latipinna	127	11.2 (0.5)	142	0.8	< 0.1		
Seminole killifish	Fundulus seminolis	6	0.5 (<0.1)	105	< 0.1	< 0.1		
*sheepshead	Archosargus probatocephalus	5	0.4 (<0.1)	245	< 0.1	< 0.1		
*snook (common)	Centropomus undecimalis	6	0.5 (<0.1)	4,064	< 0.1	0.5		
*speckled worm eel	Myrophis punctatus	2	0.2 (<0.1)	8	< 0.1	< 0.1		
*spot	Leiostomus xanthurus	23	2 (0.2)	1,570	0.1	0.2		
spotted sunfish	Lepomis punctatus	1,153	102 (1.1)	29,663	7.1	3.4		
*striped mullet	Mugil cephalus	138	12.2 (0.4)	58,270	0.8	6.6		
swamp darter	Etheostoma fusiforme	36	3.2 (0.1)	8	0.2	< 0.1		
tadpole madtom	Noturus gyrinus	3	0.3 (<0.1)	4	< 0.1	< 0.1		
taillight shiner	Notropis maculatus	13	1.2 (0.1)	16	0.1	< 0.1		
*tarpon	Megalops atlanticus	1	0.1 (<0.1)	NM	< 0.1	NM		
threadfin shad	Dorosoma petenense	5	0.4 (<0.1)	48	< 0.1	< 0.1		
Judiii Jiida	2010301114 perenense	5	0.1 (.0.1)	10	0.1	0.1		

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*tidewater mojarra	Eucinostomus harengulus	52	4.6(0.2)	2,730	0.3	0.3
**vermiculated sailfin catfish	Pterygoplichthys disjunctivus	5	0.4 (<0.1)	4,728	< 0.1	0.5
**walking catfish	Clarias batrachus	1	0.1 (<0.1)	81	< 0.1	< 0.1
warmouth	Lepomis gulosus	325	28.8 (0.5)	10,606	2.0	1.2
white catfish	Ameiurus catus	12	1.1 (<0.1)	10,811	0.1	1.2
yellow bullhead	Ameiurus natalis	36	3.2 (0.2)	7,767	0.2	0.9
	Total:	16,277	1440.4 (21.0)	879,888		

Table 14. Number of fish collected, biomass, CPUD-km, species richness, Shannon index, and evenness index for fish species collected by electrofishing on the Withlacoochee River, per segment, during the 3 spring sampling events (2016, 2017, and 2018). CPUD = catch per unit distance (individuals/kilometer), SE = standard error, and FW = only freshwater fish species included.

	Lower	Middle	Upper	Total		
Number Fish collected	1,610	5,174	9,493	16,277		
Biomass (grams)	229,250	321,083	329,555	879,888		
CPUD-km (SE)	412.8 (4.6)	1,398.3 (15.7)	2,565.7 (57.1)	1,440.4 (21.0)		
Species Richness	35 (21 FW)	37	37	54		
Shannon Index	2.6 (2.0 FW)	2.4	1.9	2.4		
Evenness Index	0.73 (0.63 FW)	0.67	0.54	0.59		

Table 15. Abundance, relative abundance, weight (grams), and percent composition by number and weight of fish species collected by electrofishing on the Withlacoochee River during the 3 spring sampling events (2016, 2017, and 2018) divided by river segment. # = number, CPUD = catch per unit distance (individuals/kilometer), SE = standard error, Wt. = weight in grams, % Comp. = percent composition, * = marine species, ** = non-native species, and NM = not measured.

	Lower Withlacoochee River					Middle Withlacoochee River					Upper Withlacoochee River					
		Fish/km	Fish/km <u>% Comp.</u>			Fish/km <u>% Comp.</u>					Fish/km				<u>% Comp.</u>	
Common Name	#	CPUD (SE)	Wt. (g)	#	Wt.	#	CPUD (SE)	Wt. (g)	#	Wt.	#	CPUD (SE)	Wt. (g)	#	Wt.	
*American eel	16	4.1 (0.1)	3,835	1.0	1.7	-	-	-	-	-	-	-	-	-	-	
*Atlantic needlefish	5	1.3 (0.1)	100	0.3	< 0.1	-	-	-	-	-	-	-	-	-	-	
black crappie	-	-	-	-	-	12	3.2 (0.2)	354	0.2	0.1	19	5.1 (0.2)	262	0.2	0.1	
**blue tilapia	-	-	-	-	-	-	-	-	-	-	1	0.3 (<0.1)	1,237	< 0.1	0.4	
bluefin killifish	1	0.3 (<0.1)	<1	0.1	< 0.1	99	26.8 (1.1)	40	1.9	< 0.1	122	33.0 (1.2)	36	1.3	< 0.1	
bluegill	372	95.4 (1.9)	8,118	23.1	3.5	544	147.0 (2.2)	16,594	10.5	5.2	421	113.8 (1.7)	9,877	4.4	3.0	
bluespotted sunfish	-	-	-	-	-	3	0.8 (<0.1)	<1	0.1	< 0.1	21	5.7 (0.2)	39	0.2	< 0.1	
bowfin	27	6.9 (0.1)	52,591	1.7	22.9	108	29.2 (0.9)	112,280	2.1	35.0	150	40.5 (0.9)	149,682	1.6	45.4	
brook silverside	44	11.3 (0.4)	96	2.7	< 0.1	34	9.2 (0.2)	73	0.7	< 0.1	29	7.8 (0.3)	34	0.3	< 0.1	
brown bullhead	4	1.0 (0.1)	236	0.2	0.1	3	0.8 (<0.1)	677	0.1	0.2	5	1.4 (<0.1)	3,097	0.1	0.9	
chain pickerel	2	0.5 (<0.1)	833	0.1	0.4	5	1.4 (<0.1)	1,086	0.1	0.3	3	0.8 (<0.1)	70	< 0.1	< 0.1	
channel catfish	-	-	-	-	-	-	-	-	-	-	2	0.5 (<0.1)	45	< 0.1	< 0.1	
coastal shiner	56	14.4 (1.2)	67	3.5	< 0.1	454	122.7 (2.4)	586	8.8	0.2	386	104.3 (3.5)	345	4.1	0.1	
*crevalle jack	1	0.3 (<0.1)	1,248	0.1	0.5	-	-	-	-	-	-	-	-	-	-	
dollar sunfish	4	1.0 (<0.1)	10	0.2	< 0.1	121	32.7 (0.8)	575	2.3	0.2	261	70.5 (2.1)	1,370	2.7	0.4	
Eastern mosquitofish	25	6.4 (0.3)	6	1.6	< 0.1	1741	470.5 (12.8)	563	33.6	0.2	5245	1,417.6 (47.7)	1,487	55.3	0.5	
Everglades pygmy sunfish	-	-	-	-	-	-	-	-	-	-	1	0.3 (<0.1)	<1	< 0.1	< 0.1	
Florida gar	50	12.8 (0.5)	34,864	3.1	15.2	183	49.5 (1.3)	74,305	3.5	23.1	179	48.4 (1.2)	60,979	1.9	18.5	
golden shiner	-	-	-	-	-	48	13.0 (0.5)	1,142	0.9	0.4	466	126.0 (4.5)	860	4.9	0.3	
golden topminnow	-	-	-	-	-	7	1.9 (0.1)	8	0.1	< 0.1	133	36.0 (2.6)	230	1.4	0.1	
*gray snapper	20	5.1 (0.2)	1,593	1.2	0.7	-	-	-	-	-	-	-	-	-	-	
*hogchoker	60	15.4 (0.5)	126	3.7	0.1	-	-	-	-	-	-	-	-	-	-	
*inland silverside	88	22.6 (1.8)	328	5.5	0.1	-	-	-	-	-	-	-	-	-	-	
ironcolor shiner	-	-	-	-	-	27	7.3 (0.4)	34	0.5	< 0.1	-	-	-	-	-	
lake chubsucker	-	-	-	-	-	57	15.4 (0.4)	22,006	1.1	6.9	37	10.0 (0.4)	13,449	0.4	4.1	
largemouth bass	69	17.7 (0.3)	22,825	4.3	10.0	267	72.2 (0.9)	35,941	5.2	11.2	290	78.4 (1.3)	35,081	3.1	10.6	
least killifish	-	-	-	-	-	60	16.2 (0.7)	4	1.2	< 0.1	659	178.1 (10.6)	54	6.9	< 0.1	

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Table 15. Continued.

	Lower Withlacoochee River					Middle Withlacoochee River						Upper Withlacoochee River					
		Fish/km		% C	omp.		Fish/km		<u>% C</u>	omp.		Fish/km		<u>% Comp.</u>			
Common Name	#	CPUD (SE)	Wt. (g)	#	Wt.	#	CPUD (SE)	Wt. (g)	#	Wt.	#	CPUD (SE)	Wt. (g)	#	Wt.		
longnose gar	10	2.6 (<0.1)	15,249	0.6	6.7	15	4.1 (0.2)	8,341	0.3	2.6	28	7.6 (0.2)	22,651	0.3	6.9		
Okefenokee pygmy sunfish	-	-	-	-	-	4	1.1 (<0.1)	<1	0.1	< 0.1	1	0.3 (<0.1)	<1	< 0.1	< 0.1		
*pinfish	6	1.5 (<0.1)	2	0.4	< 0.1	-	-	-	-	-	-	-	-	-	-		
pirate perch	-	-	-	-	-	23	6.2 (0.2)	68	0.4	< 0.1	12	3.2 (0.1)	21	0.1	< 0.1		
redbreast sunfish	125	32.1 (0.6)	2,541	7.8	1.1	310	83.8 (2.9)	6,311	6.0	2.0	202	54.6 (1.3)	3,563	2.1	1.1		
redear sunfish	69	17.7 (0.3)	2,514	4.3	1.1	186	50.3 (1.0)	9,855	3.6	3.1	130	35.1 (0.5)	6,158	1.4	1.9		
redeye chub	-	-	-	-	-	78	21.1 (0.8)	145	1.5	< 0.1	56	15.1 (0.6)	146	0.6	< 0.1		
redfin pickerel	1	0.3 (<0.1)	2	0.1	< 0.1	8	2.2 (0.1)	58	0.2	< 0.1	4	1.1 (<0.1)	7	< 0.1	< 0.1		
sailfin molly	-	-	-	-	-	18	4.9 (0.2)	27	0.3	< 0.1	109	29.5 (1.4)	115	1.1	< 0.1		
Seminole killifish	-	-	-	-	-	6	1.6 (0.1)	105	0.1	< 0.1	-	-	-	-	-		
*sheepshead	5	1.3 (<0.1)	245	0.3	0.1	-	-	-	-	-	-	-	-	-	-		
*snook (common)	6	1.5 (0.1)	4,064	0.4	1.8	-	-	-	-	-	-	-	-	-	-		
*speckled worm eel	2	0.5 (<0.1)	8	0.1	< 0.1	-	-	-	-	-	-	-	-	-	-		
*spot	23	5.9 (0.6)	1,570	1.4	0.7	-	-	-	-	-	-	-	-	-	-		
spotted sunfish	310	79.5 (1.4)	9,644	19.3	4.2	558	150.8 (2.3)	12,440	10.8	3.9	285	77.0 (1.5)	7,579	3.0	2.3		
*striped mullet	138	35.4 (0.9)	58,270	8.6	25.4	-	-	-	-	-	-	-	-	-	-		
swamp darter	-	-	-	-	-	17	4.6 (0.3)	5	0.3	< 0.1	19	5.1 (0.2)	3	0.2	< 0.1		
tadpole madtom	-	-	-	-	-	1	0.3 (<0.1)	<1	< 0.1	< 0.1	2	0.5 (<0.1)	4	< 0.1	< 0.1		
taillight shiner	-	-	-	-	-	4	1.1 (<0.1)	2	0.1	< 0.1	9	2.4 (0.2)	14	0.1	< 0.1		
*tarpon	1	0.3 (<0.1)	NM	0.1	NM	-	-	-	-	-	-	-	-	-	-		
threadfin shad	3	0.8 (<0.1)	47	0.2	< 0.1	2	0.5 (<0.1)	1	< 0.1	< 0.1	-	-	-	-	-		
*tidewater mojarra	52	13.3 (0.7)	2,730	3.2	1.2	-	-	-	-	-	-	-	-	-	-		
**vermiculated sailfin catfish	1	0.3 (<0.1)	1,289	0.1	0.6	2	0.5 (<0.1)	2,098	< 0.1	0.7	2	0.5 (<0.1)	1,341	< 0.1	0.4		
**walking catfish	-	-	-	-	-	-	-	-	-	-	1	0.3 (<0.1)	81	< 0.1	< 0.1		
warmouth	9	2.3 (<0.1)	98	0.6	< 0.1	130	35.1 (0.7)	5,752	2.5	1.8	186	50.3 (1.2)	4,756	2.0	1.4		
white catfish	3	0.8 (<0.1)	4,065	0.2	1.8	7	1.9 (0.1)	4,292	0.1	1.3	2	0.5 (<0.1)	2,454	< 0.1	0.7		
yellow bullhead	1	0.3 (<0.1)	24	0.1	< 0.1	28	7.6 (0.7)	5,315	0.5	1.7	7	1.9 (<0.1)	2,428	0.1	0.7		
Total:	1,610	412.8 (4.6)	229,250			5,174	1,398.4 (15.7)	54,815			9,485	2,565.7 (57.1)	329,555				

Table 16. Presence/absence fish collection data for the Withlacoochee River. FMNH = Florida Museum of Natural History, * = marine species, ** = non-native species, and NS = collected during non-standard fish sampling.

Common Name	Scientific Name	FMNH 1931-1976	FWC 1984-1988	FWC 2016-2018
*American eel	Anguilla rostrata		X	X
*Atlantic needlefish	Strongylura marina	X	X	X
bay anchovy	Anchoa mitchilli		X	X (NS)
black crappie	Pomoxis nigromaculatus		X	X
blackbanded darter	Percina nigrofasciata		X	
**blue tilapia	Oreochromus aurea			X
bluefin killifish	Lucania goodei	X	X	X
bluegill	Lepomis macrochirus	X	X	X
bluespotted sunfish	Enneacanthus gloriosus	X	X	X
bowfin	Amia calva		X	X
brook silverside	Labidesthes sicculus	X	X	X
brown bullhead	Ameiurus nebulosus		X	X
brown hoplo	Hoplosternum littorale			X (NS)
chain pickerel	Esox niger		X	X
channel catfish	Ictalurus punctatus		X	X
coastal shiner	Notropis petersoni	X	X	X
*crevalle jack	Caranx hippos			X
dollar sunfish	Lepomis marginatus	X	X	X
Eastern mosquitofish	Gambusia holbrooki	X	X	X
Everglades pygmy sunfish	Elassoma evergladei	X	X	X
flagfish	Jordanella floridae	X	X	
Florida gar	Lepisosteus platyrhincus		X	X
gizzard shad	Dorosoma cepedianum		X	
golden shiner	Notemigonus crysoleucas	X	X	X
golden topminnow	Fundulus chrysotus	X	X	X
*gray snapper	Lutjanus griseus			X
*hogchoker	Trinectes maculatus	X	X	X
*inland silverside	Menidia beryllina	X		X
ironcolor shiner	Notropis chalybaeus	X		X
lake chubsucker	Erimyzon sucetta	X	X	X
largemouth bass	Micropterus salmoides	X	X	X
least killifish	Heterandria formosa	X	X	X
lined topminnow	Fundulus lineolatus			
longnose gar	Lepisosteus osseus		X	X
metalic shiner	Pteronotropis metallicus	X		
Okefenokee pygmy sunfish	Elassoma okefenokee	X		X
*pinfish	Lagodon rhomboides			X
pirate perch	Aphredoderus sayanus	X	X	X
pugnose minnow	Opsopoeodus emiliae			
rainwater killifish	Lucania parva			
redbreast sunfish	Lepomis auritus	X	X	X
redear sunfish	Lepomis microlophus	X	X	X
redeye chub	Notropis harperi	X		X
redfin pickerel	Esox americanus americanus	X	X	X
sailfin molly	Poecilia latipinna	X	X	X
Seminole killifish	Fundulus seminolis	X	X	X
*sheepshead	Archosargus probatocephalus			X
*snook (common)	Centropomus undecimalis			X
*speckled worm eel	Myrophis punctatus		X	X

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*spot	Leiostomus xanthurus			X
spotfin mojarra	Eucinostomus argenteus		X	
spotted sunfish	Lepomis punctatus	X	X	X
*striped mullet	Mugil cephalus		X	X
swamp darter	Etheostoma fusiforme	X	X	X
tadpole madtom	Noturus gyrinus	X	X	X
taillight shiner	Notropis maculatus		X	X
*tarpon	Megalops atlanticus			X
threadfin shad	Dorosoma petenense		X	X
*tidewater mojarra	Eucinostomus harengulus			X
**vermiculated sailfin catfish	Pterygoplichthys disjunctivus			X
**walking catfish	Clarias batrachus			X
warmouth	Lepomis gulosus	X	X	X
white catfish	Ameiurus catus		X	X
yellow bullhead	Ameiurus natalis		X	X
	Total:	31	44	56

Appendix A. Peace River Watershed impairment site summaries.

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.08903 Longitude: -81.98089

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI001 Reach Length: 492 ft. Landowner: David Gutierrez



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (20.48)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	*Present	1.5
Water Odor:	Normal	0
Fish Passage Barrier:	None	0

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					-	
15				/		
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15				100		
10	- No.		_ /			
		CTI - 1				
	NB _{MAX}	/Thalweg				
25			Width (ft)			

Shoring Stractares	TTOTIC		
Pipe Discharge:	*Present	1.5	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	5.5	LB Landuse: Natural Forest, Residential

Notes: *Drainage ditch from agricultural area; Loose material at toe of bank from recent erosion; 303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue), Chlorophyll-A

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.08989 Longitude: -81.97868

Severity Scale: 2.0-Low

County: Desoto Site Number: PI002 Reach Length: 330 ft.

Landowner: Kitty Gail Coleman





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (13.66)	0
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	10 ft.	0.75
RB: Floodplain Access:	Full	0



Additional Site Features

Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: Moderate
RB Landuse: Natural Forest
LB Landuse: Natural Forest, Residential

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue), Chlorophyll-A

Partial

Severity Scale:

0.25

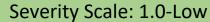
2.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.11975 Longitude: -81.95080



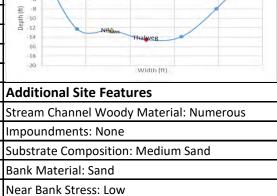
County: Desoto Site Number: Pl003 Reach Length: 345 ft.

Landowner: CSX Transportation Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (11.44)	0
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



RB Landuse: Natural Forest

LB Landuse: Natural Forest

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Full

Full

Severity Scale:

0

0

1.0

Restoration Option 2

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.10447 Longitude: -81.98413

Severity Scale: 1.5-Low

County: Desoto Site Number: PI004 Reach Length: 154 ft.

Landowner: State of Florida (TIITF)





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.33)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
	-	

Full

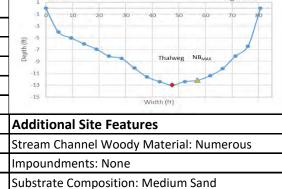
Full

Severity Scale:

0

0

1.5



Bank Material: Sandy Clay

Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: NA

RB: Floodplain Access:

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.10904 Longitude: -81.98753



County: Desoto Site Number: PI005 Reach Length: 147 ft. Landowner: Patricia Eaton





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.76)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0

Full

Full

Severity Scale:

0

0

3.75

(E) -5 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate

RB Landuse: Residential

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (BOD, DO)

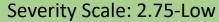
Restoration Option 2

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.10988 Longitude: -81.98820



County: Desoto Site Number: PI006 Reach Length: 315 ft. Landowner: Jean Stephens





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Non-eroding	0
BEHI:	Moderate (22.01)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75



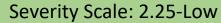
Impoundments: None Substrate Composition: Medium Sand LB: Riparian Buffer: 100 ft. 0 Bank Material: Sand Full 0 RB: Floodplain Access: Near Bank Stress: Moderate Full LB: Floodplain Access: 0 RB Landuse: Residential **Severity Scale:** 2.75 LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.11130 Longitude: -81.98770



County: Desoto Site Number: Pl007 Reach Length: 740 ft.

Landowner: TIITF/Children & Families





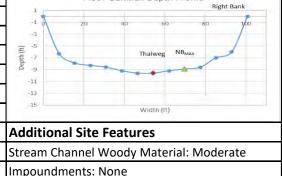
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.44)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

2.25



PI007 Bankfull Depth Profile

Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Residential
LB Landuse: Natural Forest

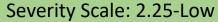
Notes: 303d: Impaired - Public Water Supply (BOD, DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.11645 Longitude: -81.98770



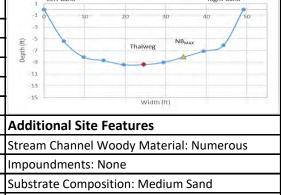
County: Desoto Site Number: Pl008 Reach Length: 275 ft.

Landowner: TIITF/State of Florida



2		
	PIOO8 Bankfull Depth Profile	(E

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.66)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



Bank Material: Sand

Near Bank Stress: Low

LB Landuse: Natural Forest

RB Landuse: Agriculture, Natural Forest

Notes: Cattle access; Property of Frank V. Desguin ends near river bank; 303d: Impaired -

Full

Full

Severity Scale:

0

0

2.25

Public Water Supply (BOD, DO)

Restoration Option 2 or 3

RB: Floodplain Access:

Limestone Creek

Watershed: Peace River

Subwatershed: Limestone Creek

Latitude: 27.37881 Longitude: -81.84332

Severity Scale: 2.5-Low

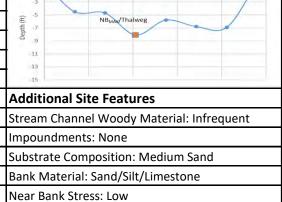
County: Hardee Site Number: Pl009 Reach Length: 45 ft.

Landowner: Ben Hill Griffin Inc.





	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.43)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0



RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI009 Bankfull Depth Profile

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (DO)

100 ft.

Full

Full

Severity Scale:

0

0

0

2.5

Restoration Option 1

LB: Riparian Buffer:

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.37642 Longitude: -81.84036

Severity Scale: 2.25-Low

County: Hardee Site Number: Pl010 Reach Length: 392 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	Depth (ft)
BEHI:	Moderate (20.66)	0.5	1000
Local NPSP:	No evidence	0	113
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Add
Water Odor:	Normal	0	Stre
Fish Passage Barrier:	None	0	Imp
RB: Riparian Buffer:	40 ft.	0.5	Sub
LB: Riparian Buffer:	100 ft.	0	Ban
RB: Floodplain Access:	Full	0	Nea

Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Notes: Light cattle access (historic) which has recently been fenced out; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0.25

2.25

Partial

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.36948 Longitude: -81.83217

Severity Scale: 2.0-Low

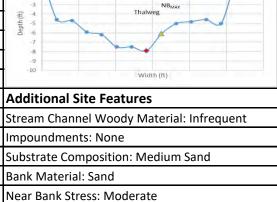
County: Hardee Site Number: PI013 Reach Length: 44 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Historic	0.5
BEHI:	Moderate (29.38)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5



Right Bank

Notes: Campsite w/fire pit, possible cattle access; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

0

0

2.0

RB Landuse: Pasture

LB Landuse: Natural Forest

100 ft.

Full

Full

Severity Scale:

Restoration Option 2 or 3

LB: Riparian Buffer:

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.36709 Longitude: -81.83198

Severity Scale: 2.0-Low

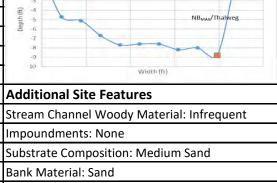
County: Hardee Site Number: Pl014 Reach Length: 110 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.04)	0.5
Local NPSP:	No evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0



Near Bank Stress: Very High

LB Landuse: Natural Forest

RB Landuse: Pasture, Natural Forest

PI014 Bankfull Depth Profile

Right Bank

Notes: Farm road approx. 200 ft. behind river bank; Cattle access; Mostly grass with sparse trees;

0

0

2.0

Full

Full

Severity Scale:

303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.36376 Longitude: -81.82900

Severity Scale: 3.5-Low

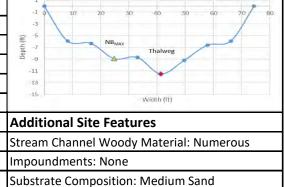
County: Hardee Site Number: PI015 Reach Length: 58 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor Ranking		Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.33)	1
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Sand, Gravel

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

Near Bank Stress: Low

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

3.5

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.35073 Longitude: -81.82693



County: Hardee Site Number: PI016 Reach Length: 403 ft.

Landowner: Limestone Ranch LLC



			i sau
Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	-1
Channel Alteration:	None	0	-3

Risk Factor	Ranking	Score	PIO16
Pfankuch-Channel Stability:	Good	0	1 10 20
Channel Alteration:	None	0	-3
Bank Erosion:	Mass-wasting	1.5	th day
BEHI:	Very High (42.96)	1.5	ă .9 -11
Local NPSP:	No Evidence	0	-13
Shoring Structures:	None	0	-15
Pipe Discharge:	None	0	Additional Site I
Water Odor:	Normal	0	Stream Channel W
Fish Passage Barrier:	None	0	Impoundments: N
RB: Riparian Buffer:	100 ft.	0	Substrate Compos
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sai
RB: Floodplain Access:	Partial	0.25	Near Bank Stress:
LB: Floodplain Access:	Full	0	RB Landuse: Natu

Severity Scale:

3.25



Dept.	NB _{MAX} /Thalweg	
-11		
-13		
-15	Width (ft)	
Additional Site Fea	atures	
Stream Channel Woo	ody Material: Moderate	
Impoundments: None	ne	
Substrate Composition	on: Medium Sand	
Bank Material: Sand,	, Small Gravel	
Near Bank Stress: Hig	gh	
RB Landuse: Natural	Forest	

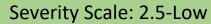
LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.34867 Longitude: -81.82478



County: Hardee Site Number: PI017 Reach Length: 160 ft.

Landowner: Glen O. Douglas





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.52)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
		•



None	0	Width (ft)
None	0	Additional Site Features
Normal	0	Stream Channel Woody Material: Moderate
None	0	Impoundments: None
100 ft.	0	Substrate Composition: Fine Sand/Silt
40 ft.	0.5	Bank Material: Sand
Full	0	Near Bank Stress: Moderate
Full	0	RB Landuse: Natural Forest
Severity Scale:	2.5	LB Landuse: Natural Forest, Pasture
	None Normal None 100 ft. 40 ft. Full	None 0 Normal 0 None 0 100 ft. 0 40 ft. 0.5 Full 0 Full 0

Notes: Recreational use area w/picnic pavilion; Cattle access; Water input at downstream end of site; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.34691 Longitude: -81.82620

Severity Scale: 4.5-Moderate

County: Hardee Site Number: Pl018 Reach Length: 59 ft.

Landowner: IMC - Agrico Company





Ranking	Score
Good	0
None	0
Active	1
Very High (42.46)	1.5
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
100 ft.	0
40 ft.	0.5
	Good None Active Very High (42.46) Obvious Sources None None Normal None 100 ft.



	Severity Scale:	4.5	LB Landuse: Recreation, Natural Forest
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Infreqent
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (n)

Notes: Upstream of Gardner public boat ramp; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.30452 Longitude: -81.84046



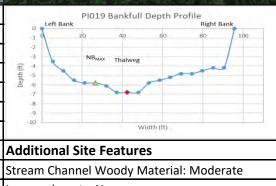
County: Desoto Site Number: PI019 Reach Length: 461 ft.

Landowner: Mildred Rosenthal





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.66)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0



5.1.5.1.1.6 5 ti di ottan 651		•	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand/Silt
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	4.0	LB Landuse: Pasture, Natural Forest

Notes: Cattle fence along bank with cattle access; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.34329 Longitude: -81.82555

Severity Scale: 4.0-Low

County: Hardee Site Number: PI020 Reach Length: 28 ft.

Landowner: Peace River Outpost Inc.



Risk Factor	Ranking	Score	PIO20 Ba
Pfankuch-Channel Stability:	Good	0	Left Bank
Channel Alteration:	None	0	3 5 -5 NB _N
Bank Erosion:	Active	1	-5 NB _N
BEHI:	Extreme (48.05)	1.5	- B .9 -11
Local NPSP:	Moderate Potential	1	-13
Shoring Structures:	None	0	-15
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Wo
Fish Passage Barrier:	None	0	Impoundments: Nor
RB: Riparian Buffer:	100 ft.	0	Substrate Compositi
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Lo

Full

Severity Scale:



-15 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand/Silt
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Natural Forest
LB Landuse: Recreation

Notes: Gardner Peace River Outpost takeout point; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

4.0

Restoration Option 2

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.34623 Longitude: -81.82635

Severity Scale: 4.5-Moderate

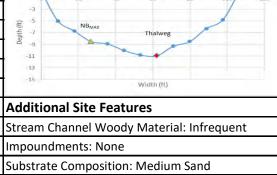
County: Hardee
Site Number: PI021
Reach Length: 93 ft.

Landowner: Peace River Outpost Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (42.32)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Sand

Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Recreation, Natural Forest

Notes: Gardner public boat ramp; unpaved road leading to boat launch is contributing a high sediment input, we estimated 96.3 C. Y. per rain event, 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

0

4.5

Full

Full

Severity Scale:

Restoration Option 2

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38539 Longitude: -81.84366

Severity Scale: 5.75-Moderate

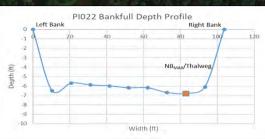
County: Hardee Site Number: PI022 Reach Length: 195 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.54)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75



Shoring Structures:	None	0	-10 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand/Silt/Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	5.75	LB Landuse: Pasture, Natural Forest

Notes: Low lying pasture in floodplain with cattle access; Bank material very cohesive;

303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38657 Longitude: -81.84378

Severity Scale: 7.5-High

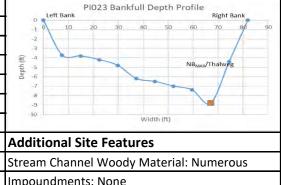
County: Hardee Site Number: Pl023 Reach Length: 550 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (41.32)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Rinarian Buffer:	∩ ft	0.75



Impoundments: None Substrate Composition: Medium Sand Bank Material: Sand LB: Riparian Buffer: U ft. RB: Floodplain Access: Full 0 Near Bank Stress: High LB: Floodplain Access: Full 0 RB Landuse: Pasture, Natural Forest **Severity Scale:** 7.5 LB Landuse: Pasture

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38770 Longitude: -81.84354

Severity Scale: 6.5-Moderate

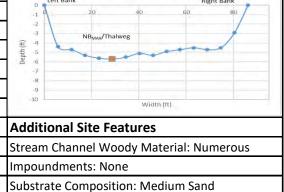
County: Hardee Site Number: PI024 Reach Length: 380 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (42.44)	1.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest, Pasture

0

0.25

6.5

PI024 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Partial

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38840 Longitude: -81.84299

Severity Scale: 5.75-Moderate

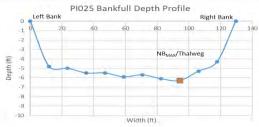
County: Hardee Site Number: Pl025 Reach Length: 456 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (26.32)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



-10 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Clay
Near Bank Stress: High
RB Landuse: Pasture
LB Landuse: Natural Forest

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.75

Restoration Option 1

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39195 Longitude: -81.84711

Severity Scale: 7.5-High

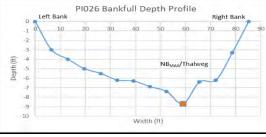
County: Hardee Site Number: Pl026 Reach Length: 272 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (40.81)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



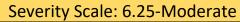
	Severity Scale:	7.5	LB Landuse: Pasture, Natural Forest
B: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: High
.B: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
ish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	-10 Width (ft)

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39242 Longitude: -81.84794



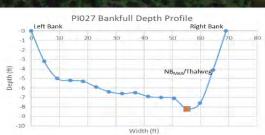
County: Hardee Site Number: Pl027 Reach Length: 117 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (28.39)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
	0.0	0.75



Shoring Structures:	None	0	-10 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	6.25	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue).

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39366 Longitude: -81.84698

Severity Scale: 6.75-Moderate

County: Hardee Site Number: Pl028 Reach Length: 295 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.71)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	75 ft.	0.25



Near Bank Stress: High

LB Landuse: Natural Forest, Pasture

RB Landuse: Pasture

PI028 Bankfull Depth Profile

Right Bank

Notes: Intact forested riparian buffer; 303d: Impaired - Aquatic Life Harvesting (mercury in fish mercury in fish tissue

0

0.25

6.75

Full

Partial

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39568 Longitude: -81.84643



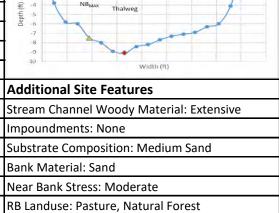
County: Hardee Site Number: PI029 Reach Length: 182 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.73)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in Fish tissue)

Partial

Severity Scale:

0.25

5.5

Restoration Option 1

Watershed: Peace River Subwatershed: Lake Hancock

Latitude: 27.92479 Longitude: -81.82983

Severity Scale: 7.0-Moderate

County: Polk

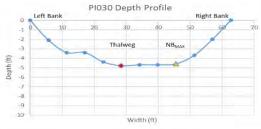
Site Number: PI030 Reach Length: 108 ft.

Landowner: J K Stuart Properties LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Old Channelization	0.5
Bank Erosion:	Active	1
BEHI:	Extreme (47.85)	1.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75



Shoring Structures:	Present	1.5	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: None
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
B: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand/Silt
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Low
B: Floodplain Access:	Partial	0.25	RB Landuse: Transportation
	Severity Scale:	7.0	LB Landuse: Transportation

Notes: Right bank near constructed wetland from Lake Hancock; 303d: Impaired - Aquatic Life Harvesting (Chlorofyll-A, DO, fecal coliform)

Watershed: Peace River Subwatershed: Lake Hancock

Latitude: 27.92479 Longitude: -81.82983

Severity Scale: 7.0-Moderate

County: Polk

Site Number: PI031 Reach Length: 108 ft.

Landowner: J K Stuart Properties LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Old Channelization	0.5
Bank Erosion:	Active	1
BEHI:	Very High (44.46)	1.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75

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-6 -7							
-8							
-9 -10			Widt	is (ft)			
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Shoring Structures:	Present	1.5	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: None
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
B: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand/Silt
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
B: Floodplain Access:	Partial	0.25	RB Landuse: Transportation
	Severity Scale:	7.0	LB Landuse: Transportation

Notes: Left bank near constructed wetland from Lake Hancock; 303d: Impaired - Aquatic Life Harvesting (Chlorofyll-A, DO, fecal coliform)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.30298 Longitude: -81.84171

Severity Scale: 4.0-Low

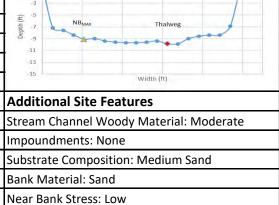
County: Desoto Site Number: Pl032 Reach Length: 270 ft

Landowner: Mildred Rosenthal





			- 6
Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0]
Channel Alteration:	None	0]
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High (38.49)	1	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	1
Water Odor:	Normal	0	9,
Fish Passage Barrier:	None	0	I
RB: Riparian Buffer:	20 ft.	0.75	0,
LB: Riparian Buffer:	100 ft.	0	I



RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

PI032 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in Fish tissue)

0

0.25

4.0

Full

Partial

Severity Scale:

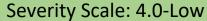
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.29677 Longitude: -81.84797



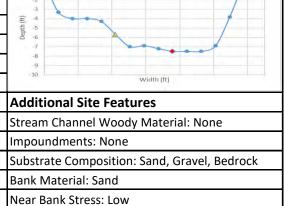
County: Desoto Site Number: PI033 Reach Length: 34 ft.

Landowner: Desoto County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.15)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	15 ft.	0.75



RB Landuse: Pasture, Natural Forest

LB Landuse: Recreational Use, Natural Forest

PI033 Bankfull Depth Profile

Right Bank

Notes: Fishing access at Brownville Park; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0.25

0

4.0

Partial

Full

Severity Scale:

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.28503 Longitude: -81.85720

Severity Scale: 5.0-Moderate

County: Desoto Site Number: Pl034 Reach Length: 140 ft.

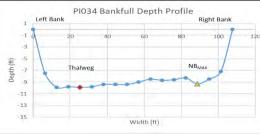
Landowner: Rose Mary Peters



Risk Factor	Ranking	Score	PIO34 Ba
Pfankuch-Channel Stability:	Good	0	1 20 40
Channel Alteration:	None	0	-3
Bank Erosion:	Historic	0.5	thalweg
BEHI:	High (30.63)	1	Ö .9
Local NPSP:	Moderate Potential	1	-13
Shoring Structures:	Present	1.5	-15
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non-
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Lov

Full

Severity Scale:



width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Residential
LB Landuse: Natural Forest

Notes: House at top of bank; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

5.0

Restoration Option 1 or 2

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.28351 Longitude: -81.85602

Severity Scale: 3.25-Low

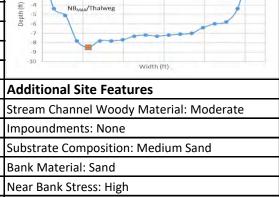
County: Desoto Site Number: PI035 Reach Length: 95 ft.

Landowner: Larry & Wendy Vinson





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.73)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in Fish tissue)

0.25

3.25

Partial

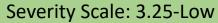
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.26983 Longitude: -81.85934



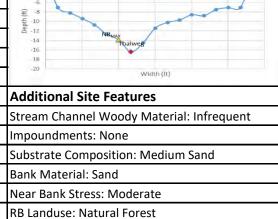
County: Desoto Site Number: PI036 Reach Length: 55 ft. Landowner: Colleen Hyre



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PI036 Bankfull Depth Profile

Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	Very High (41.19)	1.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	100 ft.	0	
LB: Riparian Buffer:	100 ft.	0	



LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Partial

Severity Scale:

0

0.25

3.25

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.26996 Longitude: -81.86546



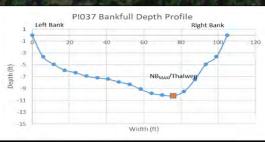
County: Desoto Site Number: PI037 Reach Length: 65 ft.

Landowner: Fort Desoto LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.64)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Rinarian Buffer:	100 ft	Ω



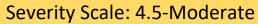
Local IVI SI .	Obvious sources	1.5	-15
Shoring Structures:	None	0	-15 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	4.0	LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.26735 Longitude: -81.86597



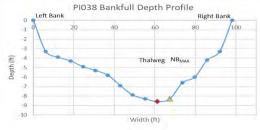
County: Desoto Site Number: PI038 Reach Length: 410 ft.

Landowner: Charlotte Bragg



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (43.25)	1.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	100 ft	0



wiath (it)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Recreational, Natural Forest
LB Landuse: Natural Forest

Notes: Canoe outpost-looks like historic pasture; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0.25

0

4.5

Partial

Full

Severity Scale:

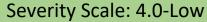
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.25678 Longitude: -81.87133



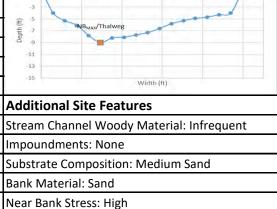
County: Desoto Site Number: PI039 Reach Length: 65 ft.

Landowner: Dana & Kathy Simonson





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (41.78)	1.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75



LB Landuse: Historic Pasture, Natural Forest

RB Landuse: Natural Forest

PI039 Bankfull Depth Profile

Right Bank

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Partial

Severity Scale:

0

0.25

4.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.25682 Longitude: -81.87214

Severity Scale: 5.25-Moderate

County: Desoto Site Number: PI040 Reach Length: 85 ft.

Landowner: Elmer & Nancy Mott





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (40.34)	1.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand

0

5.25

Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Historic Pasture, Natural Forest

PIO40 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.25590 Longitude: -81.87400

Severity Scale: 5.0-Moderate

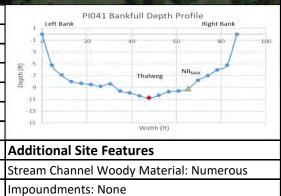
County: Desoto Site Number: Pl041 Reach Length: 430 ft.

Landowner: Constructora Limonar Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (36.36)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
·		



RB: Riparian Buffer:

Oft.

O.75
Substrate Composition: Medium Sand

LB: Riparian Buffer:

100 ft.

OBank Material: Sand

RB: Floodplain Access:
Partial
O.25
Near Bank Stress: Moderate

LB: Floodplain Access:
Full
ORB Landuse: Pasture

Severity Scale:
5.0
LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.25273 Longitude: -81.87607



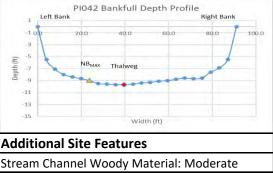
County: Desoto Site Number: PI042 Reach Length: 160 ft.

Landowner: Peace River Wildlife Sanct.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.16)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0



	Severity Scale:	1.75	LB Landuse: Natural Forest
B: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
RB: Floodplain Access:	Full	Full 0 Near Bank Stress: Moderate	
.B: Riparian Buffer:	parian Buffer: 100 ft. 0 Bank Material: Sand		Bank Material: Sand
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
ish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.25214 Longitude: -81.87852

Severity Scale: 3.75-Low

County: Desoto Site Number: PI043 Reach Length: 145 ft.

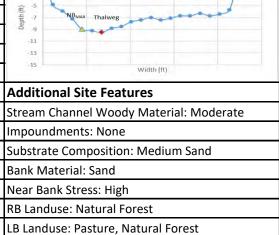
Landowner: Peace River Wildlife Sanct.





PI043 Bankfull Depth Profile

"是我们,不是一个人,我们就是是我们		() 1000年 李海
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (25.8)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



Notes: Three separate sites within reach - South site worked up; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

0.25

3.75

Full

Partial

Severity Scale:

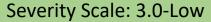
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

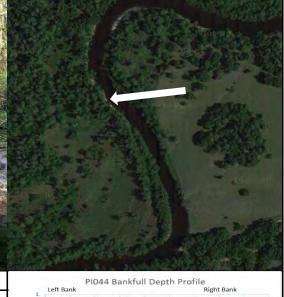
Latitude: 27.25112 Longitude: -81.88039



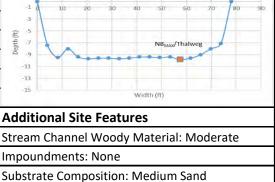
County: Desoto Site Number: PI044 Reach Length: 76 ft.

Landowner: Constructora Limonar LLC





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Risk Factor	Ranking	Score	PIO44 Bai
Pfankuch-Channel Stability:	Good	0	1 -1 10 20 30
Channel Alteration:	None	0	-3
Bank Erosion:	Mass-wasting	1.5	75 -5 Opeth (ft)
BEHI:	Moderate (25.6)	0.5	G .9
Local NPSP:	Slight Potential	0.5	-13
Shoring Structures:	None	0	-15
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand



Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Full

Severity Scale:

0

0

3.0

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Reclaimed Field, Natural Forest

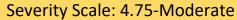
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.24943 Longitude: -81.87923



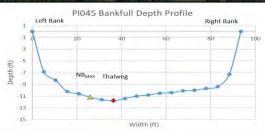
County: Desoto Site Number: PI045 Reach Length: 225 ft.

Landowner: Zalmon Sherwood





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High (36.23)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	100 ft.	0	
LB: Riparian Buffer:	0 ft.	0.75	



	Severity Scale:	4.75	LB Landuse: Pasture
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

Notes: Cattle field on left bank with fence; No riparian zone (a few trees); 303d: Impaired -

Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.24745 Longitude: -81.88279

Severity Scale: 2.5-Low

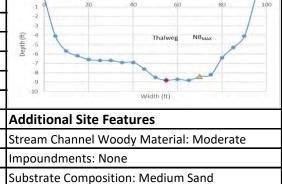
County: Desoto Site Number: PI046 Reach Length: 150 ft.

Landowner: Constructora Limonar LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (31.38)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



Bank Material: Sand

Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0

0

2.5

PI046 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.23230 Longitude: -81.88788

Severity Scale: 4.0-Low

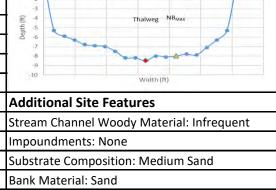
County: Desoto Site Number: PI047 Reach Length: 200 ft.

Landowner: Four Marnan Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (29.35)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	70 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest, Transportation

Near Bank Stress: Moderate

LB Landuse: Natural Forest

Notes: Unpaved road nearby; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Partial

Severity Scale:

0.25

4.0

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.22673 Longitude: -81.88287

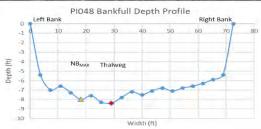
Severity Scale: 6.25-Moderate

County: Desoto Site Number: PI048 Reach Length: 550 ft. Landowner: Desoto County





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	Extreme (46.88)	1.5	
Local NPSP:	Moderate Potential	1	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	20 ft.	0.75	
	2 = C:		



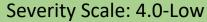
200ai 111 51 1	Tribaciate i oteritiai		
Shoring Structures:	None	0	-10 width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	25 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	None	0.75	RB Landuse: Recreational, Natural Forest
	Severity Scale:	6.25	LB Landuse: Natural Forest, Recreational

Notes: Bank appears to have been rebuilt. Pipe protruding from bank feeds wetland/stream at flood stage; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.22636 Longitude: -81.88464



County: Desoto Site Number: PI049 Reach Length: 70 ft.

Landowner: George & Jonica Lempeneau





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (35.17)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



RB Landuse: Recreation

LB Landuse: Natural Forest

PI049 Bankfull Depth Profile

Right Bank

Notes: Recreational access; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

4.0

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.22506 Longitude: -81.88440

Severity Scale: 4.25-Moderate

County: Desoto Site Number: PI050 Reach Length: 375 ft.

Landowner: George & Jonica Lempeneau





The second second		
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (33.56)	1
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

1	Left Bank	1050 Bai	nktull D	epth Pro		ht Bank	
-1 o	20	40	60	80	100	120	140
-11 -13	Lana	•••	• • •	Thalweg	NB _{MAX}	1	
-15			Wid	th (ft)			
Additi	onal Sit	e Fea	tures				
Stream	Channe	l Woo	dv Ma	aterial:	Mode	erate	

	Severity Scale:	4.25	LB Landuse: Natural Forest
LB: Floodplain Access:	Full	0	RB Landuse: Recreation, Natural Forest
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.22419 Longitude: -81.88117

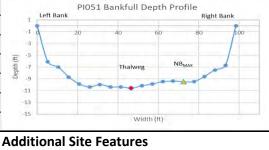
Severity Scale: 6.5-Moderate

County: Desoto Site Number: PI051 Reach Length: 191 ft. Landowner: Desoto County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.57)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75



Shoring Structures:	Present	1.5	-15 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Low
LB: Floodplain Access:	Full	0	RB Landuse: Recreation
	Severity Scale:	6.5	LB Landuse: Natural Forest
			•

Notes: Boat launch at Morgan Park - Arcadia, FL; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.22274 Longitude: -81.87601

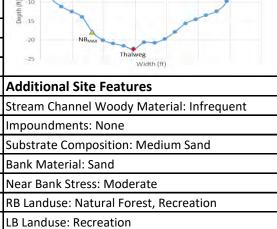
Severity Scale: 7.5-High

County: Desoto
Site Number: PI052
Reach Length: 235 ft.
Landowner: Desoto County



	T.		
H. C.			No. of the second
	(oft Pools	PI052 Bankfull Depth Profile	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (36.97)	1
Local NPSP:	Moderate Potential	1
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



Notes: Morgan Park walk-in access; Rip-rap and old bridge; 303d: Impaired - Aquatic Life

Partial

Severity Scale:

0.25

7.5

Harvesting (fecal coliform, mercury in fish tissue)

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.21470 Longitude: -81.88697

Severity Scale: 7.0-Moderate

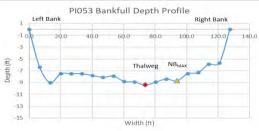
County: Desoto Site Number: PI053 Reach Length: 640 ft.

Landowner: Garner Grove & Cattle Co.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (30.76)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



Local IVI SI .	Obvious sources	1.5	
Shoring Structures:	None	0	-15 Width (ff)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	7.0	LB Landuse: Pasture

Notes: Pasture not currently active, but recently; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.20767 Longitude: -81.88840

Severity Scale: 4.75-Moderate

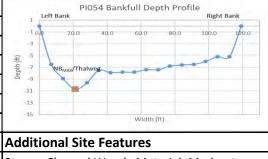
County: Desoto Site Number: Pl054 Reach Length: 125 ft.

Landowner: Garner Grove & Cattle Co.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (37.78)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Rinarian Buffer:	O ft.	0.75



Shoring Structures:	None	0	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	4.75	LB Landuse: Natural Forest

Notes: Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.20633 Longitude: -81.88983



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (45.87)	1.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

100 ft.

Full

Full

Severity Scale:

0

0

0

5.75

Restoration Option 1

LB: Riparian Buffer:

RB: Floodplain Access:

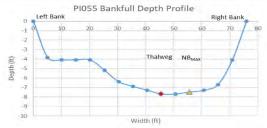
LB: Floodplain Access:

Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI055 Reach Length: 554 ft.

Landowner: Garner Grove & Cattle Co.





Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.20123 Longitude: 81.88867



County: Desoto Site Number: PI056 Reach Length: 1,439 ft. Landowner: Geraci, D.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (39.54)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	30 ft.	0.5
LB: Riparian Buffer:	100 ft.	0



PI056 Bankfull Depth Profile

Shoring Structures:	None	0	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	30 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.25	LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.19366 Longitude: -81.88152

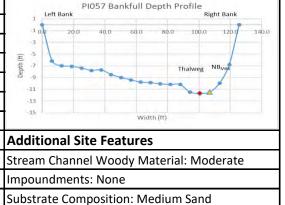
Severity Scale: 7.75-High

County: Desoto Site Number: PI057 Reach Length: 498 ft. Landowner: Geraci, D.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
ВЕНІ:	Very High (43.5)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Notes: Cattle access on left bank, opposite from PD047; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0.25

0

7.75

Partial

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17618 Longitude: -81.88769

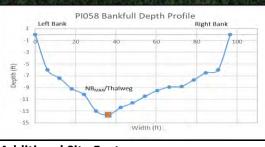
Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI058 Reach Length: 1041 ft. Landowner: Geraci, D.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High (34.53)	1	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	40 ft.	0.5	
	40.6		



Shoring Structures:	None	0	-15 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	5.5	LB Landuse: Natural Forest, Rec., Pasture

Notes: Cattle access on opposite bank; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17885 Longitude: -81.89071

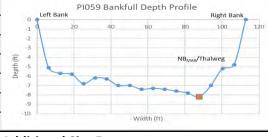
Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI059 Reach Length: 750 ft. Landowner: Geraci, D.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.19)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5

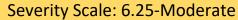


Shoring Structures:	None	0	-10 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Recreation, Natural Forest
	Severity Scale:	6.0	LB Landuse: Pasture, Natural Forest

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17322 Longitude: -81.89740

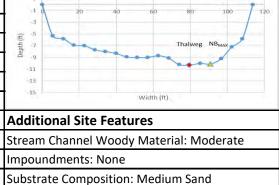


County: Desoto Site Number: PI060 Reach Length: 165 ft. Landowner: Geraci, D.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.84)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI060 Bankfll Depth Profile

Notes: Hunting property w/cattle pasture; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

0

6.25

Full

Full

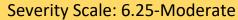
Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17461 Longitude: -81.89672

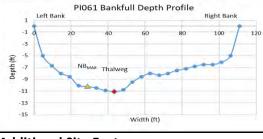


County: Desoto Site Number: PI061 Reach Length: 66 ft. Landowner: Geraci, D.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.67)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75



width (it)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture. Natural Forest

Notes: Cattle access; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

0

6.25

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17010 Longitude: -81.89662

Severity Scale: 6.25-Moderate

County: Desoto Site Number: Pl062 Reach Length: 657 ft.

Landowner: General Propeller Co.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.25)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI062 Bankfull Depth Profile

Right Bank

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Partial

Severity Scale:

0.25

6.25

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.16403 Longitude: -81.90125

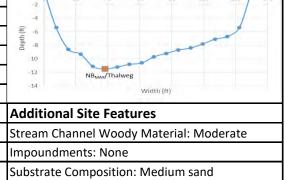
Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI063 Reach Length: 81 ft. Landowner: Geraci, D.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (35.99)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand

0

6.0

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

PI063 Bankfull Depth Profile

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.16215 Longitude: -81.90158

Severity Scale: 8.75-High

County: Desoto Site Number: PI064 Reach Length: 178.2 ft. Landowner: Desoto County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	In Recovery	1
Bank Erosion:	Active	1
BEHI:	High (32.92)	1
Local NPSP:	Moderate Potential	1
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
·		•



	Severity Scale:	8.75	LB Landuse: Recreation, Transportation
LB: Floodplain Access:	Full	0	RB Landuse: Recreation, Transportation
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: None
Pipe Discharge:	None	0	Additional Site Features
onorning our actures.	FIESEIIL	1.5	W VV

Notes: Nocatee boat launch on right bank, used as an unpaved boat launch; 303d: Impaired -

Aquatic Life Harvesting (Mercury in Fish Tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.15611 Longitude: -81.91725

Severity Scale: 6.25-Moderate

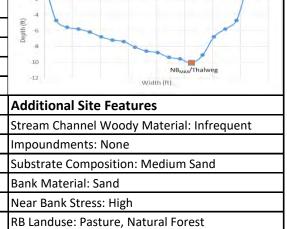
County: Desoto Site Number: PI065 Reach Length: 175 ft.

Landowner: Robertson Family LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.26)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



LB Landuse: Pasture, Natural Forest

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Full

Severity Scale:

0

6.25

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.15584 Longitude: -81.92344

Severity Scale: 6.25-Moderate

County: Desoto Site Number: Pl066 Reach Length: 440 ft.

Landowner: Robertson Family LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.94)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75

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Shoring Structures: Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	6.25	LB Landuse: Pasture, Natural Forest

Notes: No cattle seen, but may have access; Old cow patties present; 303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.14345 Longitude: -81.93594

Severity Scale: 7.0-Moderate

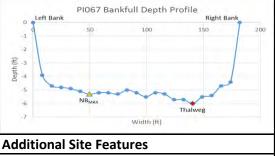
County: Desoto Site Number: Pl067 Reach Length: 153 ft.

Landowner: Susie Robertson





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.69)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Rinarian Buffer	Ω ft	0.75



	Severity Scale:	7.0	LB Landuse: Pasture
B: Floodplain Access:	Full	0	RB Landuse: Pasture
RB: Floodplain Access:	Full	0	Near Bank Stress: High
.B: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: None
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

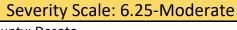
Notes: Opposite bank of Johnson Lake, no cattle seen, fencing on opposite bank; 303d:

Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Restoration Option 2 or 3

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.14241 Longitude: -81.93697



County: Desoto Site Number: PI068 Reach Length: 643 ft.

Landowner: Johnson Homestead LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (27.70)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



PI068 Bankfull Depth Profile

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Full

Severity Scale:

0

6.25

LB Landuse: Pasture

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.14044 Longitude: -81.93629

Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI069 Reach Length: 90 ft.

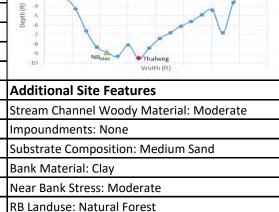
Landowner: Robertson, Susie



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PI069 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.80)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Full

Severity Scale:

0

5.75

LB Landuse: Pasture

Restoration Option 1

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.13609 Longitude: -81.94119

Severity Scale: 6.5-Moderate

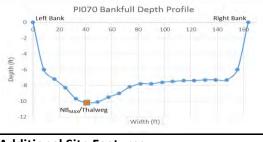
County: Desoto Site Number: Pl070 Reach Length: 303 ft.

Landowner: TIITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (29.06)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture
LB Landuse: Pasture

Notes: Backwater pond in pasture discharging into Peace River; 303d: Impaired - Aquatic Life

0

0

6.5

Full

Full

Severity Scale:

Harvesting (Mercury in Fish Tissue)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.13669 Longitude: -81.94493

Severity Scale: 7.0-Moderate

County: Desoto Site Number: PI071 Reach Length: 343 ft. Landowner: HAU II LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.93)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



Bank Material: Sand

RB Landuse: Pasture

LB Landuse: Pasture

Near Bank Stress: High

0

0

7.0

PI071 Bankfull Depth Profile

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Full

Full

Severity Scale:

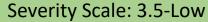
Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.13547 Longitude: -81.95009

LB: Floodplain Access:



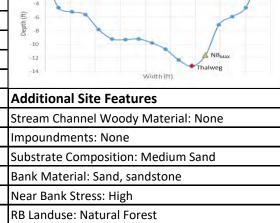
County: Desoto Site Number: PI072 Reach Length: 520 ft. Landowner: HAU II LLC





PI072 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (28.65)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



LB Landuse: Natural Forest

303d: Impaired - Aquatic Life Harvesting (Mercury in Fish Tissue)

Restoration Option 1, rocky areas may not be a good candidate for toewood

Full

Severity Scale:

0

3.5

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39067 Longitude: -81.845797



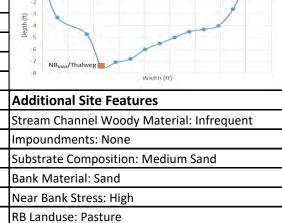
County: Hardee Site Number: Pl073 Reach Length: 296 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (26.0)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



Notes: Rapid assessment methods - BEHI estimated to be same as PI025; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

0

6.5

LB Landuse: Pasture

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39314 Longitude: -81.84804

Severity Scale: 7.0-Moderate

County: Hardee Site Number: Pl074 Reach Length: 259 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (31.19)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



Near Bank Stress: High

RB Landuse: Pasture

LB Landuse: Pasture

0

7.0

PI074 Bankfull Depth Profile

Right Bank

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.396511 Longitude: -81.846586 Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI075 Reach Length: 140 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (24.78)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI075 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.25

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.396275 Longitude: -81.846951

Severity Scale: 6.75-Moderate

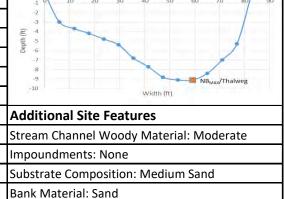
County: Hardee Site Number: Pl076 Reach Length: 385 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.0)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

0

6.75

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.398490 Longitude: -81.847507

Severity Scale: 6.0-Moderate

County: Hardee Site Number: Pl077 Reach Length: 226.2 ft.

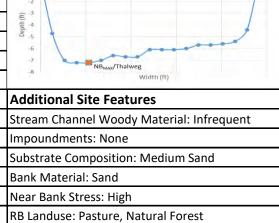
Landowner: Ben Hill Griffin Inc.





PIO77 Bankfull Depth Profile

		-
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (23.21)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40155 Longitude: -81.84864

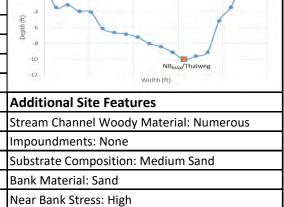
Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI078 Reach Length: 220 ft.

Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (33.30)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI078 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.5

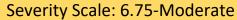
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.401817 Longitude: -81.848028



County: Hardee Site Number: Pl079 Reach Length: 550 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (30.62)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: Floodplain wetland at site; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

6.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40302 Longitude: -81.848478

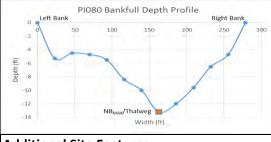
Severity Scale: 6.25-Moderate

County: Hardee Site Number: Pl080 Reach Length: 375 ft.

Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score	Left Ba
Pfankuch-Channel Stability:	Poor	1.5	o ten sa
Channel Alteration:	None	0	-4
Bank Erosion:	Mass-wasting	1.5	Depth (ft)
BEHI:	Moderate (26.43)	0.5	-io
Local NPSP:	Obvious Sources	1.5)·12
Shoring Structures:	None	0	14
Pipe Discharge:	None	0	Additiona
Water Odor:	Normal	0	Stream Cha
Fish Passage Barrier:	None	0	Impoundm
RB: Riparian Buffer:	40 ft.	0.5	Substrate (
LB: Riparian Buffer:	0 ft.	0.75	Bank Mate
RB: Floodplain Access:	Full	0	Near Bank



NB _{MAX} /Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.25

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.403325 Longitude: -81.848242

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI081 Reach Length: 200 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.84)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0

-4 -6 -8 -10 NB _{MAX} Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture

PI081 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.25

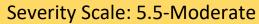
Restoration Option 1 or 2

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40534 Longitude: -81.84761



County: Hardee Site Number: Pl082 Reach Length: 100 ft.

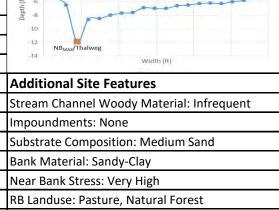
Landowner: Ben Hill Griffin Inc.



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PI082 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.18)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.5

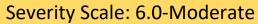
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40795 Longitude: -81.848659



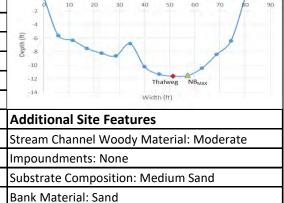
County: Hardee Site Number: Pl083 Reach Length: 550 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (25.24)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI083 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.0

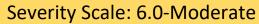
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40862 Longitude: -81.846343



County: Hardee Site Number: PI084 Reach Length: 768.1 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (27.41)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	50 ft.	0.25
RB: Floodplain Access:	Full	0



Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

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PI084 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial

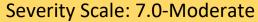
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40929 Longitude: -81.846545



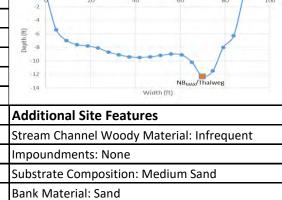
County: Hardee Site Number: Pl085 Reach Length: 317.3 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.48)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25



Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI085 Bankfull Depth Profile

Notes: Palm trees falling in water just upstream; Cattle trail above bank; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

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Full

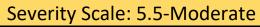
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.410885 Longitude: -81.844543



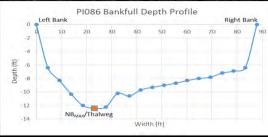
County: Hardee Site Number: PI086 Reach Length: 827.4 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.01)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



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Shoring Structures:	None	0	-14 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	5.5	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

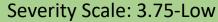
Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43001 Longitude: -81.84984

LB: Floodplain Access:



County: Hardee Site Number: Pl087 Reach Length: 723 ft.

Landowner: Ben Hill Griffin Inc.

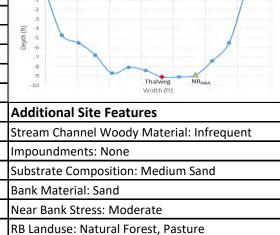




PI087 Bankfull Depth Profile

Right Bank

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (40.17)	1.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI282-288

Full

Severity Scale:

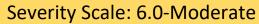
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Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.429581 Longitude: -81.850117



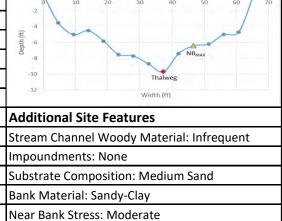
County: Hardee Site Number: PI088 Reach Length: 73 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (8.16)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI088 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43007 Longitude: -81.849297 Severity Scale: 5.75-Moderate

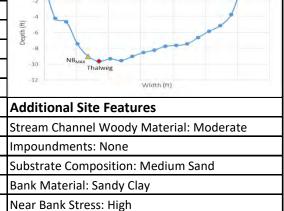
County: Hardee Site Number: PI089 Reach Length: 200 ft.

Landowner: Ben Hill Griffin Inc.





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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.67)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



PI089 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

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5.75

RB Landuse: Pasture

LB Landuse: Pasture, Natural Forest

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43086 Longitude: -81.849083

Severity Scale: 6.5-Moderate

County: Hardee Site Number: Pl090 Reach Length: 200 ft.

Landowner: Ben Hill Griffin Inc.





PI090 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (19.87)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

-4 -4 -4 -6 -8 -10 -12 -12 -12 -14 -15 -15 -16 -17 -18 -19 -18 -19 -19 -19 -19 -19 -19 -19 -19 -19 -19
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy-Clay
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.5

LB Landuse: Pasture

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.431090 Longitude: -81.847609 Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI091 Reach Length: 230 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (12.71)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Full	0

-10 Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy-Clay
Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI091 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Severity Scale:

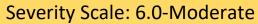
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.482316 Longitude: -81.848021



County: Hardee Site Number: Pl092 Reach Length: 332 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (18.28)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.0

LB Landuse: Pasture

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.433157 Longitude: -81.848381

Severity Scale: 5.5-Moderate

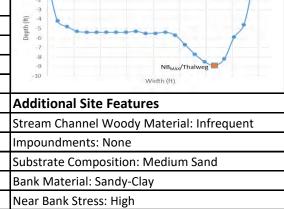
County: Hardee Site Number: Pl093 Reach Length: 266 ft.

Landowner: Ben Hill Griffin Inc.



PI093 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (15.64)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

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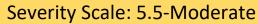
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.433606 Longitude: -81.849187



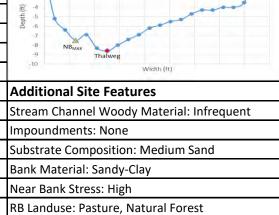
County: Hardee Site Number: Pl094 Reach Length: 147 ft.

Landowner: Ben Hill Griffin Inc.



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PIO94 Rankfull Denth Profile	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (17.56)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

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5.5

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.434376 Longitude: -81.849653

Severity Scale: 5.5-Moderate

County: Hardee Site Number: P1095 Reach Length: 58 ft.

Landowner: Ben Hill Griffin Inc.



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	PI095 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (4.65)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

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Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy-Clay
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

5.5

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.434398 Longitude: -81.850457

Severity Scale: 5.5-Moderate

County: Hardee Site Number: Pl096 Reach Length: 155 ft.

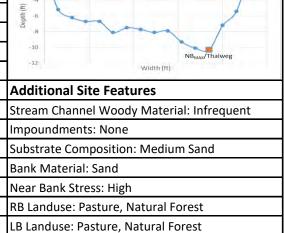
Landowner: Ben Hill Griffin Inc.



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PI096 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (10.72)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

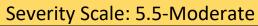
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43524 Longitude: -81.850408



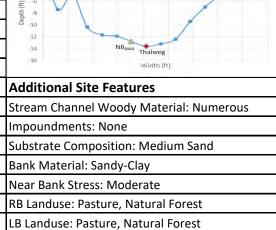
County: Hardee Site Number: Pl097 Reach Length: 175 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	Depth (ft)
BEHI:	Low (15.07)	0	De
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Ad
Water Odor:	Normal	0	Str
Fish Passage Barrier:	None	0	lm
RB: Riparian Buffer:	40 ft.	0.5	Sul
LB: Riparian Buffer:	40 ft.	0.5	Baı
RB: Floodplain Access:	Full	0	Ne



Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

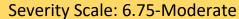
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43618 Longitude: -81.851181



County: Hardee Site Number: Pl098 Reach Length: 360 ft.

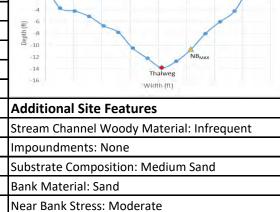
Landowner: Ben Hill Griffin Inc.





PI098 Bankfull Depth Profile

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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.43)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

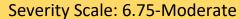
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43765 Longitude: -81.849396



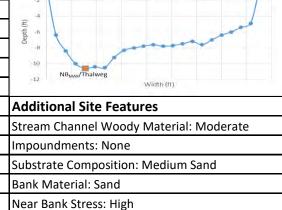
County: Hardee Site Number: Pl099 Reach Length: 215 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (30.47)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Pasure, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43953 Longitude: -81.850649

Severity Scale: 5.5-Moderate

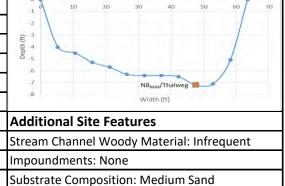
County: Hardee Site Number: PI100 Reach Length: 220 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest, Pasture

Notes: *Rapid assessment made for BEHI score. Score calculated based on similar sites in the area; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

5.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.75824 Longitude: -81.78014

Severity Scale: 2.0-Low

County: Polk

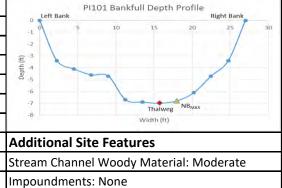
Site Number: PI101 Reach Length: 18 ft.

Landowner: Melvin Pyatt Lastinger





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.57)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



Substrate Composition: Medium Sand

Bank Material: Sand

Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (DO, fecal coliform, mercury in fish tissue)

0

0

2.0

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.75553 Longitude: -81.77912



County: Polk

Site Number: PI102 Reach Length: 43 ft. Landowner: L M Lanier





		Town Inc.
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (16.24)	0
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75

3 (i) -4 4 4 5 5 -6 -7 -8 -9 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy-Clay
Near Bank Stress: Moderate
RB Landuse: Natural Forest

LB Landuse: Access Road, Natural Forest

PI102 Bankfull Depth Profile

Notes: Mowed access road with several pole barns; 303d: Impaired - Aquatic Life Harvesting (DO, fecal coliform, mercury in fish tissue)

0

1.75

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.75451 Longitude: -81.77927

Severity Scale: 2.0-Low

County: Polk

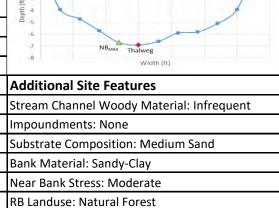
Site Number: PI103 Reach Length: 16 ft.

Landowner: Richard Truman Vaughn





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (16.92)	0
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



LB Landuse: Residential, Natural Forest

Notes: Light recreational use with grill, benches, etc.; 303d: Impaired - Aquatic Life Harvesting

0

2.0

Full

Severity Scale:

(DO, fecal coliform, mercury in fish tissue)

Restoration Option 1

Watershed: Bear Branch Subwatershed: Peace River

Latitude: 27.75436 Longitude: -81.77931

Severity Scale: 5.0-Moderate

County: Polk

Site Number: PI104 Reach Length: 155 ft.

Landowner: Lusby Properties Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low*	0
Local NPSP:	Slight Potential	0.5
Shoring Structures:	Present	1.5
Pipe Discharge:	Present	1.5
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy-Clay
Near Bank Stress: Moderate
RB Landuse: Natural Forest
LB Landuse: Residential, Natural Forest

Notes: *Rapid assessment made for BEHI score; Score calculated based on similar sites in the area; Light recreational use at residence; 303d: Impaired - Aquatic Life Harvesting (DO, fecal coliform, mercury in fish tissue)

0

5.0

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.75331 Longitude: -81.78107

Severity Scale: 3.75-Low

County: Polk

Site Number: PI105 Reach Length: 128 ft.

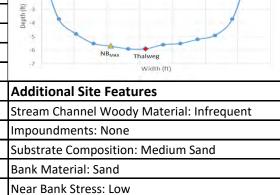
Landowner: Lusby Properties Inc.





PI105 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (33.22)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Residential, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (DO, fecal coliform, mercury in fish tissue)

0

3.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.72794 Longitude: -81.78960

Severity Scale: 3.0-Low

County: Polk

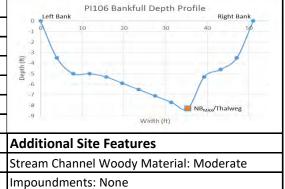
Site Number: PI106 Reach Length: 91 ft.

Landowner: Charles W Graves





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (29.61)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Substrate Composition: Medium Sand

RB Landuse: Residential, Natural Forest

Bank Material: Sand Near Bank Stress: High

LB Landuse: Natural Forest

Notes: Mowed grass up to bank, residential property with a rope swing; 303d: Impaired - Aquatic Life Harvesting (DO, fecal coliform, mercury in fish tissue)

0

3.0

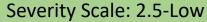
Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.71740 Longitude: -81.79385



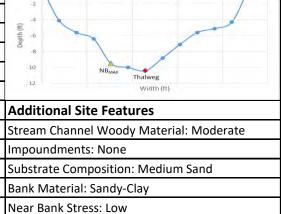
County: Polk

Site Number: PI107 Reach Length: 122 ft. Landowner: Polk County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (24.90)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



RB Landuse: Natural Forest

LB Landuse: Natural Forest, Residential

PI107 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

2.5

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Bear Branch

Latitude: 27.71584 Longitude: -81.79470

Severity Scale: 2.5-Low

County: Polk

Site Number: PI108 Reach Length: 40 ft. Landowner: Polk County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (35.22)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



LB Landuse: Natural Forest, Recreational Use

Near Bank Stress: Moderate

RB Landuse: Natural Forest

PI108 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

2.5

Restoration Option 1

RB: Floodplain Access:

Whidden Creek

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.70726 Longitude: -81.80038

Severity Scale: 2.75-Low

County: Polk

Site Number: PI109 Reach Length: 11 ft.

Landowner: Florida Rangers Inc



Risk Factor	Ranking	Score	PI109 Ba
Pfankuch-Channel Stability:	Good	0	o Left Bank
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	-5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6
BEHI:	Moderate (est*)	0.5	-6
Local NPSP:	Slight Potential	0.5	-7 -8
Shoring Structures:	None	0	-9
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non
RB: Riparian Buffer:	20 ft.	0.75	Substrate Compositi
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: M
LB: Floodplain Access:	Full	0	RB Landuse: Residen

Severity Scale:



_	-9
	Width (ft)
	Additional Site Features
	Stream Channel Woody Material: Infrequent
	Impoundments: None
	Substrate Composition: Medium Sand
	Bank Material: Sand
	Near Bank Stress: Moderate
	RB Landuse: Residential, Natural Forest
	LB Landuse: Natural Forest

Notes: *Rapid assessment made for BEHI score; Score calculated based on similar sites in the area; Spring backwater off main channel, Widden Creek; 303d: Impaired - DO, nutrients, TSS, turbidity (2002)

2.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.67304 Longitude: -81.80288

Severity Scale: 3.0-Low

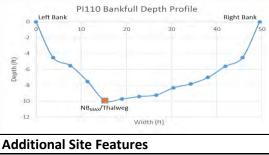
County: Polk

Site Number: PI110 Reach Length: 53 ft. Landowner: TIITF/DEP





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (37.78)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



0	Width (ft)
0	Additional Site Features
0	Stream Channel Woody Material: Moderate
0	Impoundments: None
0	Substrate Composition: Medium Sand
0.5	Bank Material: Sand
0	Near Bank Stress: High
0	RB Landuse: Natural Forest
3.0	LB Landuse: Reclaimed Field

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.65416 Longitude: -81.79932



County: Polk

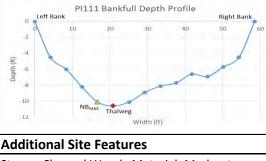
Site Number: PI111 Reach Length: 47 ft.

Landowner: Durrance & Sons LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (36.00)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



	Severity Scale:	3.5	LB Landuse: Natural Forest, Pasture	
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest	
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate	
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand	
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand	
Fish Passage Barrier:	None	0	Impoundments: None	
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate	
Pipe Discharge:	None	0	Additional Site Features	
Shoring Structures:	None	0	widit(i)	

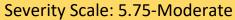
Notes: Fenced off pasture approx. 40 ft. from bank with light use; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.64626 Longitude: -81.80226

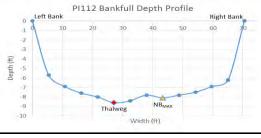


County: Polk/Hardee Site Number: PI112 Reach Length: 36 ft. Landowner: Florida DOT





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Historic	0.5
Bank Erosion:	Active	1
BEHI:	Very High (40.52)	1.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



U	25.501(1)
0	Additional Site Features
0	Stream Channel Woody Material: Moderate
0	Impoundments: None
0.75	Substrate Composition: Medium sand
0.75	Bank Material: Sand
0	Near Bank Stress: Low
0.25	RB Landuse: Recreation
5.75	LB Landuse: Recreation
	0 0 0 0.75 0.75 0

Notes: Public access point under County Line Rd. bridge; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 2

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.64386 Longitude: -81.80202

Severity Scale: 4.5-Moderate

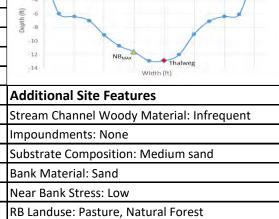
County: Hardee Site Number: PI113 Reach Length: 33 ft.

Landowner: Thomas F & Mary E Haffer



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3 90			1	
	-			
	The state			
	PI113 Bankfull	Denth Profile	1000	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.81)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



LB Landuse: Natural Forest, Pasture

Notes: Cattle access point; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0.25

4.5

Partial

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.63439 Longitude: -81.80106

Severity Scale: 2.75-Low

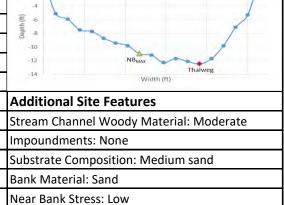
County: Hardee Site Number: PI114 Reach Length: 61 ft.

Landowner: Mosaic Fertilizer LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.41)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

PI114 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial

Severity Scale:

0.25

2.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.63149 Longitude: -81.80100 Severity Scale: 2.5-Low

County: Hardee Site Number: PI115 Reach Length: 97 ft.

Landowner: Mosaic Fertilizer LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.30)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI115 Bankfull Depth Profile

Notes: Island just below bankfull at site; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

2.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.61238 Longitude: -81.79617

Severity Scale: 4.5-Moderate

County: Hardee Site Number: PI116 Reach Length: 36 ft.

Landowner: Bernadette Albritton





		Sec. 15.654
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.22)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
	- "	_



		_	Thalweg
Shoring Structures:	None	0	-10 Width (ft).
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture, Natural Forest
_	Severity Scale:	4.5	LB Landuse: Natural Forest

Notes: Cattle access point; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.60484 Longitude: -81.79549

Severity Scale: 5.0-Moderate

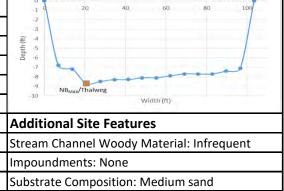
County: Hardee Site Number: PI117 Reach Length: 63 ft.

Landowner: Mosaic Fertilizer LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.98)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
LD. KIPAHAH BUHET.	o it.	0.75



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

0

0.25

5.0

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Partial

Severity Scale:

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.57612 Longitude: -81.80466

Severity Scale: 4.25-Moderate

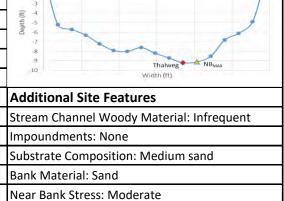
County: Hardee Site Number: PI118 Reach Length: 54 ft.

Landowner: Cynthia C. Parrish





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.37)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25
	•	



RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

PI118 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

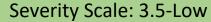
4.25

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.55495 Longitude: -81.79050



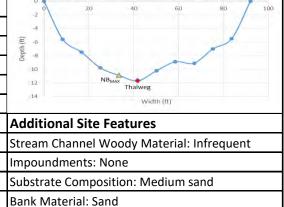
County: Hardee Site Number: PI119 Reach Length: 20 ft.

Landowner: Bagwell Plantation Florida





1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.49)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI119 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

3.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.55145 Longitude: -81.79446

Severity Scale: 3.25-Low

County: Hardee Site Number: PI120 Reach Length: 141 ft.

Landowner: City of Wauchula





Ranking	Score
Good	0
None	0
Active	1
High (33.79)	1
Slight Potential	0.5
None	0
None	0
Normal	0
None	0
0 ft.	0.75
100 ft.	0
	Good None Active High (33.79) Slight Potential None None Normal None Oft.



20001111011	0.1.6.1.0.1.1.1.1.1.1	0.0	TOMAX
Shoring Structures:	None	0	12 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Full	0	RB Landuse: Recreation
	Severity Scale:	3.25	LB Landuse: Natural Forest

Notes: At Wauchula Riverside Park: recreation area with pavillions, benches, etc.; 303d:

Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.54890 Longitude: -81.79136

Severity Scale: 5.0-Moderate

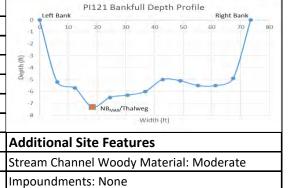
County: Hardee Site Number: PI121 Reach Length: 558 ft.

Landowner: Pamela Wiggins Garner et al





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.95)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75



Substrate Composition: Medium sand

Bank Material: Sand

Near Bank Stress: High

LB: Floodplain Access:

Partial

O.25

RB Landuse: Natural Forest

Severity Scale:

LB Landuse: Pasture

0

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

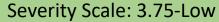
Full

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.54599 Longitude: -81.79134

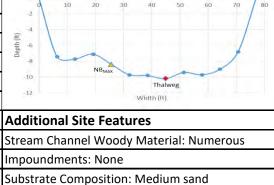


County: Hardee Site Number: PI122 Reach Length: 334 ft. Landowner: Burnett OMA





Risk Factor	Ranking	Score	PI122 Bankf
Pfankuch-Channel Stability:	Good	0	10 20 30
Channel Alteration:	None	0	4
Bank Erosion:	Active	1	Depth (ft)
BEHI:	Moderate (25.59)	0.5	NB _{MAX}
Local NPSP:	Obvious Sources	1.5	-10
Shoring Structures:	None	0	-12
Pipe Discharge:	None	0	Additional Site Featu
Water Odor:	Normal	0	Stream Channel Woody
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition:
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low



RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI122 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

3.75

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.51118 Longitude: -81.79462

Severity Scale: 1.75-Low

County: Hardee Site Number: PI123 Reach Length: 610 ft. Landowner: EIP Florida LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.70)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Partial	0.25

## ## -6					
Additional Site Features					
Stream Channel Woody Material: Moderate					
Impoundments: None					
Substrate Composition: Medium sand					
Bank Material: Sandy clay					
Near Bank Stress: Low					

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI123 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

1.75

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.50804 Longitude: -81.79772

Severity Scale: 3.5-Low

County: Hardee Site Number: PI124 Reach Length: 192 ft.

Landowner: M H C Peace River LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (21.85)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



	-9 Width (ft)
	Additional Site Features
	Stream Channel Woody Material: Infrequent
	Impoundments: None
5	Substrate Composition: Medium sand
	Bank Material: Sandstone
5	Near Bank Stress: Low
	RB Landuse: Recreation
	LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

3.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49880 Longitude: -81.81047

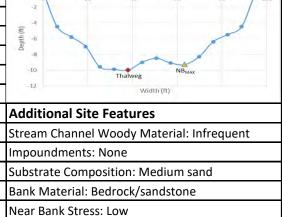


County: Hardee Site Number: PI125 Reach Length: 40 ft. Landowner: Florida DOT





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	Historic	0.5
Bank Erosion:	Active	1
BEHI:	Moderate (21.84)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



RB Landuse: Transportation, Natural Forest

LB Landuse: Transportation, Natural Forest

PI125 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

7.5

Partial

Severity Scale:

Restoration Option 2

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49041 Longitude: -81.80960

Severity Scale: 4.25-Moderate

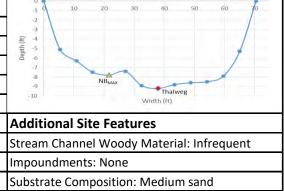
County: Hardee Site Number: PI126 Reach Length: 180 ft.

Landowner: L&J Citrus and Cattle LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.36)	1
Local NPSP:	No evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Bank Material: Sand Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0.25

4.25

PI126 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48925 Longitude: -81.81301

LB: Floodplain Access:

Severity Scale: 7.0-Moderate

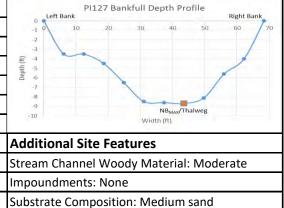
County: Hardee Site Number: PI127 Reach Length: 85 ft.

Landowner: M&R Cattle Co LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (40.33)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand

Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

7.0

Full

Severity Scale:

Restoration Option 1, best to restore along with PI28, PI129 and PI183

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48799 Longitude: -81.81319

Severity Scale: 6.5-Moderate

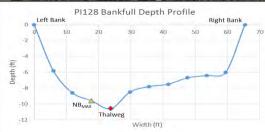
County: Hardee Site Number: PI128 Reach Length: 155 ft.

Landowner: L&J Citrus and Cattle LLC





		A CONTRACTOR OF THE PARTY OF TH
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.51)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



Local IVI SI .	Obvious sources	1.5	Thalweg
Shoring Structures:	None	0	-12 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	6.5	LB Landuse: Pasture

Notes: Cattle trail on top of bank with no fencing; Split up downstream site and this site b/c of large change in bank height; Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1, best to restore along with PI27, PI129 and PI183

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48812 Longitude: -81.81322

LB: Floodplain Access:

Severity Scale: 4.25-Moderate

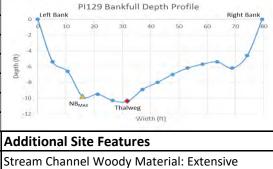
County: Hardee Site Number: PI129 Reach Length: 115 ft.

Landowner: L&J Citrus and Cattle LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.12)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Additional Site Features

Stream Channel Woody Material: Extensive
Impoundments: None

Substrate Composition: Medium sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

0.25

4.25

Restoration Option 1, best to restore along with PI27, PI128 and PI183

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49135 Longitude: -81.81748

Severity Scale: 6.0-Moderate

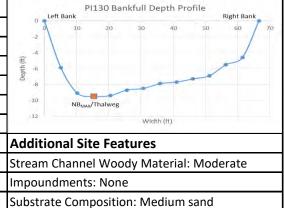
County: Hardee
Site Number: PI130
Reach Length: 35 ft.

Landowner: L&J Citrus and Cattle LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.41)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand Near Bank Stress: High

RB Landuse: Pasture

LB Landuse: Natural Forest, Pasture

0.25

6.0

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49175 Longitude: -81.82163

Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI131 Reach Length: 60 ft.

Landowner: Lucille Crawford





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.23)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



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Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
ish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium sand
B: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
B: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	4.25	LB Landuse: Residential, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47944 Longitude: -81.82955

LB: Floodplain Access:

Severity Scale: 5.5-Moderate

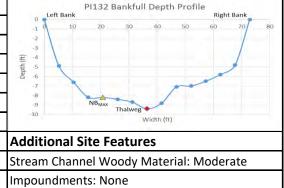
County: Hardee Site Number: PI132 Reach Length: 420 ft.

Landowner: Frederick Willard D Jr Trustee





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (25.98)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Substrate Composition: Medium sand

LB Landuse: Natural Forest, Pasture

Bank Material: Sand

Near Bank Stress: Moderate

RB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Severity Scale:

Restoration Option 1, the Peace River is cutting a new channel and forming an oxbow, in this case the best option would be to cut the channel for the river and stabilize with toewood. This should be done in conjunction with sites PI196 and PI197

0

5.5

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47492 Longitude: -81.83322 Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI133 Reach Length: 300 ft.

Landowner: Frederick Willard D Jr Trustee





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.52)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

-4 -4 -5 -6 -8 -10 NB _{MAW} /Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium sand
Bank Material: Sand

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

PI133 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Severity Scale:

6.25

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47526 Longitude: -81.83175

Severity Scale: 6.75-Moderate

County: Hardee Site Number: PI134 Reach Length: 50 ft.

Landowner: Frederick Willard D Jr Trustee





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (40.35)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

-2 -3 (I) 4 4 4 4 4 4 5 -6 -7 -8 -9 -10 NB _{MAX} /Thalweg Width (ft).
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium sand
Bank Material: Sand
Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI134 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

6.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47164 Longitude: -81.83285

Severity Scale: 6.5-Moderate

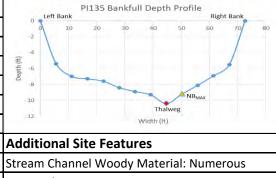
County: Hardee Site Number: PI135 Reach Length: 120 ft.

Landowner: Frederick Willard D Jr





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.50)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



oring off actures.	110110	U	
oe Discharge:	None	0	Additional Site Features
ater Odor:	Normal	0	Stream Channel Woody Material: Numerous
h Passage Barrier:	None	0	Impoundments: None
: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium sand
: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.5	LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1

LB:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47189 Longitude: -81.83989

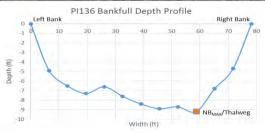
Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI136 Reach Length: 300 ft.

Landowner: Frederick Willard D Jr



Risk Factor	Ranking	Score	PI136 Ba
Pfankuch-Channel Stability:	Poor	1.5	10 20
Channel Alteration:	None	0	-3
Bank Erosion:	Active	1	-6 -6 -6 -6
BEHI:	Moderate (27.13)	0.5	-7
Local NPSP:	Obvious Sources	1.5	-8
Shoring Structures:	None	0	-10
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Nor
RB: Riparian Buffer:	100 ft.	0	Substrate Compositi
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Hi
LB: Floodplain Access:	Full	0	RB Landuse: Natural



-10 Width (ft).
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

5.0

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46087 Longitude: -81.84898

Severity Scale: 5.75-Moderate

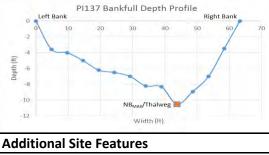
County: Hardee Site Number: PI137 Reach Length: 100 ft.

Landowner: 3-C Ranch Limited





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.12)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



0	Width (ft)
0	Additional Site Features
0	Stream Channel Woody Material: Moderate
0	Impoundments: None
0.5	Substrate Composition: Medium sand
0	Bank Material: Sand
0.25	Near Bank Stress: High
0	RB Landuse: Pasture, Natural Forest
5.75	LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

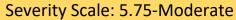
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45183 Longitude: -81.84489



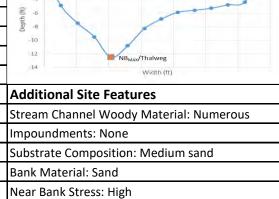
County: Hardee Site Number: PI138 Reach Length: 230 ft.

Landowner: Ben Hill Griffin Inc



PI138 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.67)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

5.75

Partial

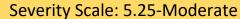
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45022 Longitude: -81.84930



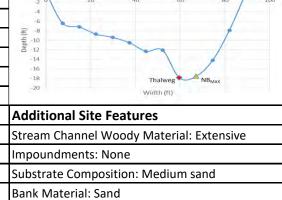
County: Hardee Site Number: PI139 Reach Length: 100 ft.

Landowner: Ben Hill Griffin Inc





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.65)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Near Bank Stress: High

LB Landuse: Natural Forest

RB Landuse: Natural Forest, Pasture

PI139 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.25

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44865 Longitude: -81.84810

Severity Scale: 3.75-Low

County: Hardee Site Number: PI140 Reach Length: 150 ft.

Landowner: Ben Hill Griffin Inc





Ranking	Score
Poor	1.5
None	0
Active	1
Moderate (27.04)	0.5
Slight Potential	0.5
None	0
None	0
Normal	0
None	0
100 ft.	0
60 ft.	0.25
	Poor None Active Moderate (27.04) Slight Potential None None Normal None 100 ft.



RB Landuse: Natural Forest

Severity Scale: 3.75 LB Landuse: Natural Forest, Pasture

0

0

Notes: Cattle fence approx. 73 yds from river; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44617 Longitude: -81.85040

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI141 Reach Length: 270 ft.

Landowner: Mosaic Fertilizer LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (20.89)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



-16 Width (ft).
With this
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium sand
Bank Material: Sandy clay
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest

Notes: Wood house on river, probably not used; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

0

5.75

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44409 Longitude: -81.84810

Severity Scale: 3.75-Low

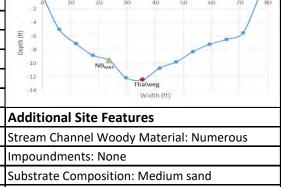
County: Hardee Site Number: PI142 Reach Length: 230 ft.

Landowner: Ben Hill Griffin Inc





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (23.86)	0.5
Local NPSP:	No evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Bank Material: Sandy clay
Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI142 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial

Severity Scale:

0.25

3.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44213 Longitude: -81.84900

Severity Scale: 5.5-Moderate

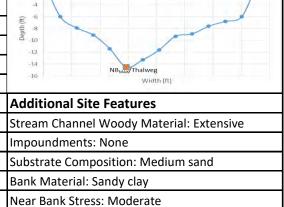
County: Hardee Site Number: PI143 Reach Length: 150 ft.

Landowner: Ben Hill Griffin Inc





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (22.27)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI143 Bankfull Depth Profile

Notes: Fenced out cattle; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

5.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44179 Longitude: -81.85090

Severity Scale: 6.0-Moderate

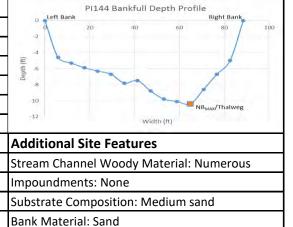
County: Hardee Site Number: PI144 Reach Length: 140 ft.

Landowner: Ben Hill Griffin Inc/Mosaic





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
ВЕНІ:	High (31.35)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Near Bank Stress: High

LB Landuse: Natural Forest

RB Landuse: Pasture, Natural Forest

Notes: Fenced out cattle; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

6.0

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44098 Longitude: -81.85070

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI145 Reach Length: 340 ft.

Landowner: Ben Hill Griffin Inc





		(E. 1)
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.06)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Clay

Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

0

0

5.5

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

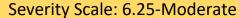
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.43816 Longitude: -81.85160



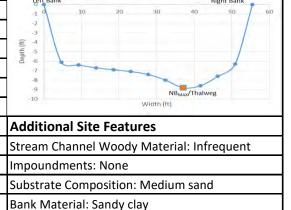
County: Hardee Site Number: PI146 Reach Length: 200 ft.

Landowner: Ben Hill Griffin Inc





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (23.76)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



PI146 Bankfull Depth Profile

Notes: Right bank of right fork (looking DS) around island; Fenced out cattle; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

0

6.25

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.43961 Longitude: -81.85090

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI147 Reach Length: 100 ft.

Landowner: Ben Hill Griffin Inc



Risk Factor	Ranking	Score	Left
Pfankuch-Channel Stability:	Poor	1.5	0
Channel Alteration:	None	0	-4
Bank Erosion:	Mass-wasting	1.5	Depth (ft)
BEHI:	High (35.74)	1	-8
Local NPSP:	Obvious Sources	1.5	-10
Shoring Structures:	None	0	/12
Pipe Discharge:	None	0	Addition
Water Odor:	Normal	0	Stream Cl
Fish Passage Barrier:	None	0	Impound
RB: Riparian Buffer:	40 ft.	0.5	Substrate
LB: Riparian Buffer:	40 ft.	0.5	Bank Mat
RB: Floodplain Access:	Full	0	Near Ban

Full

Severity Scale:



12 Width (It)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest Pasture

Notes: Left bank of right fork (looking DS) around island; 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

0

6.5

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39033 Longitude: -81.84560 Severity Scale: 7.25-Moderate

County: Hardee Site Number: PI148 Reach Length: 100 ft.

Landowner: Ben Hill Griffin Inc





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (41.79)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Substrate Composition: Medium sand

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Bank Material: Sand

0

7.25

Near Bank Stress: Moderate

PI148 Bankfull Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Horse Creek

Latitude: 27.15109 Longitude: -81.96756

Severity Scale: 2.25-Low

County: Desoto Site Number: PI149 Reach Length: 64 ft.

Landowner: TITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (33.32)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

2.25



Near Bank Stress: Moderate

RB Landuse: Natural forest

LB Landuse: Natural forest

PI149 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (BOD, DO)

Restoration Option 1

Watershed: Peace River Subwatershed: Horse Creek

Latitude: 27.14805 Longitude: -81.96825

Severity Scale: 2.25-Low

County: Desoto Site Number: PI150 Reach Length: 48 ft.

Landowner: TITF/State of Florida





		CONTRACTOR OF THE LABOUR OF TH
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (37.91)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI150 Bankfull Depth Profile

Notes: Some clay in bank, freshly burned right bank on Forest Service land; 303d: Impaired - Public water supply (BOD, DO)

0.25

0

2.25

Partial

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Horse Creek

Latitude: 27.14731 Longitude: -81.96651

Severity Scale: 2.25-Low

County: Desoto Site Number: PI151 Reach Length: 94 ft.

Landowner: TITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.59)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



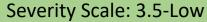
	Severity Scale:	2.25	LB Landuse: Natural Forest
B: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
.B: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

Notes: Some sand stone and clay in bank; 303d: Impaired - Public Water Supply (BOD, DO)

Restoration Option 1

Watershed: Peace River Subwatershed: Horse Creek

Latitude: 27.12882 Longitude: -81.97503

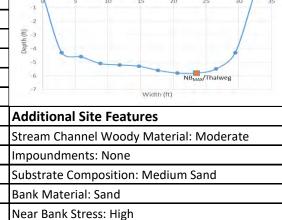


County: Desoto Site Number: PI152 Reach Length: 58 ft. Landowner: Janene Cline





Ranking	Score
Good	0
None	0
Active	1
Moderate (21.35)	0.5
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
40 ft.	0.5
100 ft.	0
	Good None Active Moderate (21.35) Obvious Sources None None Normal None 40 ft.



RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

Notes: Cattle pasture on right bank-cattle fenced out of creek; 303d: Impaired - Public Water Supply (BOD, DO)

0

0

3.5

Full

Full

Severity Scale:

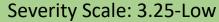
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.16516 Longitude: -81.89936



County: Desoto Site Number: PI153 Reach Length: 53 ft. Landowner: D Geraci





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	N/A	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.43)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	70 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Additional Site Features

Stream Channel Woody Material: Extensive
Impoundments: Woody material jams

Substrate Composition: Fine sand

Bank Material: Sand

Near Bank Stress: Moderate

RB Landuse: Natural forest, pasture

LB Landuse: Natural forest

Notes: Debris jam above site; Cattle fenced out of area; 303d: Impaired-Aquatic Life Harvesting (DO)

0

3.25

Full

Severity Scale:

Restoration Option 1 or 2

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.16509 Longitude: -81.89852

Severity Scale: 3.0-Low

County: Desoto Site Number: PI154 Reach Length: 15 ft.

Landowner: Daniel C & Karry L Voss





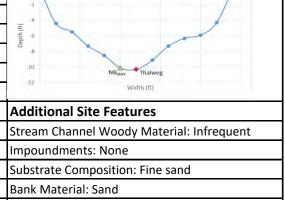
		1000
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (21.90)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.0



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI154 Bankfull Depth Profile

303d: Impaired - Aquatic Life Harvesting (DO)

Restoration Option 1 or 2

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.16502 Longitude: -81.89826

Severity Scale: 3.0-Low

County: Desoto Site Number: PI155 Reach Length: 75 ft.

Landowner: Daniel C. & Karry L. Voss





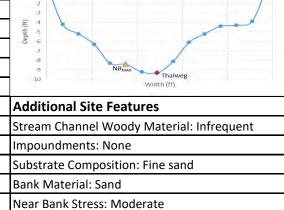
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.64)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.0



RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI155 Bankfull Depth Profile

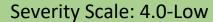
303d: Impaired - Aquatic Life Harvesting (DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.17074 Longitude: -81.89489



County: Desoto Site Number: PI156 Reach Length: 37 ft.

Landowner: D D & TR Geraci





PI156 Bankfull Depth Profile

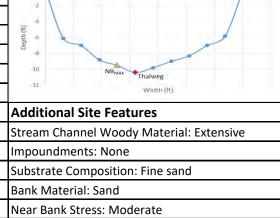
		The state of the s
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (33.07)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	None	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

4.0



RB Landuse: Natural Forest

LB Landuse: Natural Forest

303d: Impaired - Aquatic Life Harvesting (DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.16977 Longitude: -81.89349

Severity Scale: 3.5-Low

County: Desoto Site Number: PI157 Reach Length: 102 ft.

Landowner: Daniel C. & Karry L. Voss





		THE RESERVE
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.81)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.5



RB Landuse: Natural forest

LB Landuse: Pasture, Natural forest

PI157 Bankfull Depth Profile

303d: Impaired - Aquatic Life Harvesting (DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.16935 Longitude: -81.88608

Severity Scale: 4.25-Moderate

County: Desoto Site Number: PI158 Reach Length: 85 ft.

Landowner: Desoto Co. Block Plant LLC

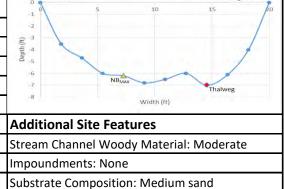


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Section 1	PI158 Bankfull Depth Profile
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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.37)	1
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Partial

Severity Scale:



Bank Material: Sand with a clay layer

LB Landuse: Natural forest, Pasture

Near Bank Stress: Low

RB Landuse: Natural Forest

0.25

4.25

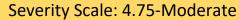
303d: Impaired - Aquatic Life Harvesting (DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Joshua Creek

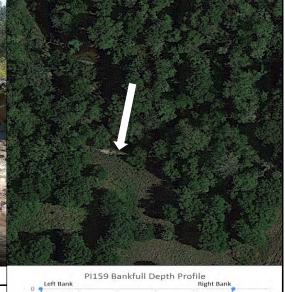
Latitude: 27.16794 Longitude: -81.88448



County: Desoto Site Number: PI159 Reach Length: 90 ft.

Landowner: Desoto Co. Block Plant LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (39.50)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Partial

Severity Scale:

0.25

4.75



RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

303d: Impaired - Aquatic Life Harvesting (DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.34915 Longitude: -81.82518

Severity Scale: 3.5-Low

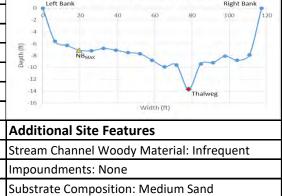
County: Hardee Site Number: PI160 Reach Length: 150 ft.

Landowner: Limestone Ranch, LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.10)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	50 ft.	0.25
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI160 Bankfull Depth Profile

Notes: Cattle fenced out; Site is located at the confluence of the Peace River and Charlie Creek;

0

3.5

303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

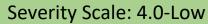
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.35010 Longitude: -81.82582



County: Hardee
Site Number: PI161
Reach Length: 95 ft.

Landowner: Limestone Ranch, LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.20)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

4.0



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

PI161 Bankfull Depth Profile

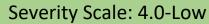
303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.35389 Longitude: -81.82513



County: Hardee Site Number: PI162 Reach Length: 78 ft.

Landowner: Limestone Ranch, LLC



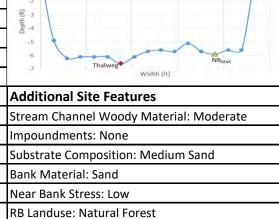


PI162 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (27.20)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	50 ft.	0.25
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

Severity Scale:

4.0



LB Landuse: Natural Forest, Pasture

303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.35803 Longitude: -81.81849

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI163 Reach Length: 78 ft.

Landowner: Ben Hill Griffin Inc.





PI163 Bankfull Depth Profile

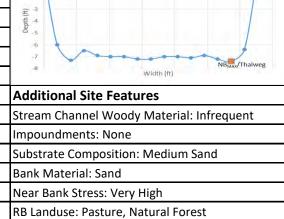
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.90)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

5.0



LB Landuse: Pasture, Natural Forest

303d: Impaired - Fecal Coliform

Restoration Option 2

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.35789 Longitude: -81.81869

Severity Scale: 5.5-Moderate

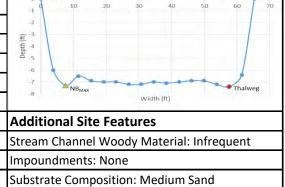
County: Hardee Site Number: PI164 Reach Length: 50 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Extreme (47.10)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



Bank Material: Sand

RB Landuse: Pasture

Near Bank Stress: Very High

LB Landuse: Pasture, Natural forest

0

0

5.5

PI164 Bankfull Depth Profile

Notes: Cattle access point; Cow patties present; 303d: Impaired - Fecal Coliform

Full

Full

Severity Scale:

Restoration Option 2

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.62053 Longitude: -81.84277

Severity Scale: 3.25-Low

County: Hardee Site Number: PI165 Reach Length: 13 ft.

Landowner: MOSAIC FERTILIZER LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.83)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0

Full

Severity Scale:



Substrate Composition: Fine Sand/Gravel

Bank Material: Sand Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Recreational

0

3.25

PI165 Bankfull Depth Profile

Notes: Road crossing just upstream; 303d: NA

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.61997 Longitude: -81.84184

Severity Scale: 3.75-Low

County: Hardee Site Number: PI166 Reach Length: 41 ft.

Landowner: Hardee County BBC





PI166 Bankfull Depth Profile

Right Bank

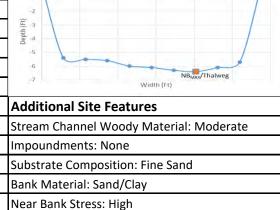
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (23.47)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

3.75



RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

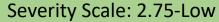
Notes: 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Payne Creek

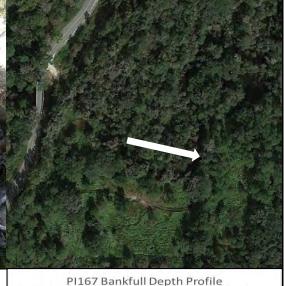
Latitude: 27.62005 Longitude: -81.84152



County: Hardee Site Number: PI167 Reach Length: 20 ft.

Landowner: Hardee County BBC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (18.59)	0
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

2.75



RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Right Bank

Notes: 303d: Impaired - coliforms, nutrients

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.62031 Longitude: -81.82484

Severity Scale: 3.25-Low

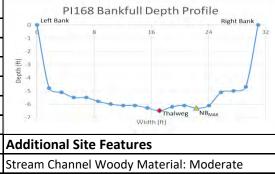
County: Hardee Site Number: PI168 Reach Length: 28 ft.

Landowner: Wilder Corporation of DE





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.75)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Normal	0	Stream Channel Woody Material: Moderate
None	0	Impoundments: None
100 ft.	0	Substrate Composition: Medium Sand
40 ft.	0.5	Bank Material: Sand
Full	0	Near Bank Stress: Moderate
Partial	0.25	RB Landuse: Natural Forest
Severity Scale:	3.25	LB Landuse: Residential, Natural Forest

Notes: 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.61895 Longitude: -81.82192

Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI169 Reach Length: 30 ft.

Landowner: Gary Delatorre





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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (31.44)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

5.25



-9 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture Natural Forest

Notes: Cattle fencing falling into stream; 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.61920 Longitude: -81.82048

Severity Scale: 4.75-Moderate

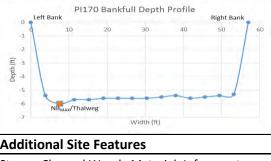
County: Hardee Site Number: PI170 Reach Length: 55 ft.

Landowner: Loyd M & Jane F Larramore





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.76)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RR: Floodolain Access:	Full	0



	Severity Scale:	4.75	LB Landuse: Pasture. Natural Forest
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Very High
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Limestone
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

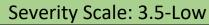
Notes: 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.61920 Longitude: -81.82048



County: Hardee Site Number: PI171 Reach Length: 55 ft.

Landowner: TIITF/ DIV REC & PARKS





PI171 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.86)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5

Full

Full

Severity Scale:

0

0

3.5



LB Landuse: State Park, Natural Forest

Notes: 303d: NA

RB: Floodplain Access:

LB: Floodplain Access:

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.35881 Longitude: -81.81635

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI172 Reach Length: 48 ft.

Landowner: Ben Hill Griffin Inc.





PI172 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (42.06)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

Partial

Severity Scale:

0.25

5.0

-6 -8 -10 NB _{MAX} /Thalweg Width (ft).
ditional Site Features
eam Channel Woody Material: Infrequent
ooundments: None
strate Composition: Medium Sand
k Material: Sand
ar Bank Stress: High
Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.36011 Longitude: -81.81487

Severity Scale: 4.75-Moderate

County: Hardee Site Number: PI173 Reach Length: 173 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.78)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	20 ft.	0.75

Partial

Partial
Severity Scale:



PI173 Bankfull Depth Profile

0	Additional Site Features	
0	Stream Channel Woody Material: Moderate	
0	Impoundments: None	
0	Substrate Composition: Medium Sand	
0.75	Bank Material: Sand	
0.25	Near Bank Stress: High	
0.25	RB Landuse: Natural Forest	
4.75	LB Landuse: Pasture, Natural Forest	

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.36153 Longitude: -81.81394

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI174 Reach Length: 19 ft.

Landowner: Ben Hill Griffin Inc.





PI174 Bankfull Depth Profile

Right Bank

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (41.75)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25

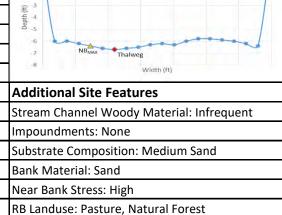
Partial

Severity Scale:

0.25

5.75

LB Landuse: Pasture



303d: Impaired - Fecal Coliform

Restoration Option 1 or 2

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.36371 Longitude: -81.81294

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI175 Reach Length: 88 ft.

Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score	Pl175 Bankfull Depth Profile
Pfankuch-Channel Stability:	Good	0	0 10.0 20.0 30.0 40.0 50.0 60.0
Channel Alteration:	None	0	-4
Bank Frasion:	Active	1	(E)

Kanking	Score	PI175 Bankfull Depth Profile Left Bank Right Bank
Good	0	00 10.0 20.0 30.0 40.0 50.0 60.0 70.0 80.0
None	0	-4
Active	1	0-6pth (f)
High (37.73)	1	Ö -8
Obvious Sources	1.5	10. NB _{MAX} Thalweg
None	0	-12 Width (ft)
None	0	Additional Site Features
Normal	0	Stream Channel Woody Material: Infrequent
None	0	Impoundments: None
0 ft.	0.75	Substrate Composition: Silt/Medium Sand
0 ft.	0.75	Bank Material: Sand
Full	0	Near Bank Stress: Low
Full	0	RB Landuse: Pasture, Natural Forest
Severity Scale:	5.0	LB Landuse: Pasture
	Good None Active High (37.73) Obvious Sources None None Normal None 0 ft. 0 ft. Full Full	Good 0 None 0 Active 1 High (37.73) 1 Obvious Sources 1.5 None 0 None 0 Normal 0 None 0 0 ft. 0.75 0 ft. 0.75 Full 0 Full 0

303d: Impaired - Fecal Coliform

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.36729 Longitude: -81.81027

Severity Scale: 4.75-Moderate

County: Hardee Site Number: PI176 Reach Length: 352 ft.

Landowner: Ben Hill Griffin Inc.





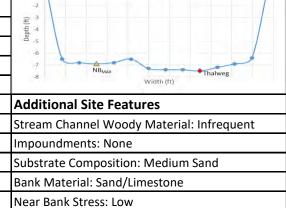
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.12)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Partial

Severity Scale:

0.25

4.75



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI176 Bankfull Depth Profile

303d: Impaired - Fecal Coliform

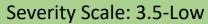
Restoration Option 2 or 3

Prairie Creek

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 26.99107 Longitude: -81.89481



County: Charlotte Site Number: PI177 Reach Length: 20 ft.

Landowner: Scott B Weinberg



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PI177 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.49)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

Severity Scale:

3.5

## -8			
Additional Site Features			
Stream Channel Woody Material: Moderate			
Impoundments: None	_		
Substrate Composition: Medium Sand			
Bank Material: Sand			
Near Bank Stress: Moderate			
RB Landuse: Residential			

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public water supply (DO, TDS)

Restoration Option 1

Prairie Creek

Watershed:Peace River

Subwatershed: Lower Prairie Creek

Latitude: 26.99524 Longitude: -81.89378

Severity Scale: 2.0-Low

County: Charlotte
Site Number: PI178
Reach Length: 24 ft.

Landowner: OTTOCARS LLC





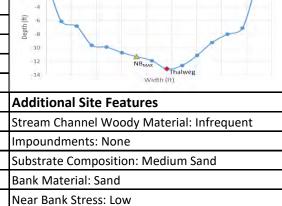
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.39)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

2.0



RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public water supply (DO, TDS)

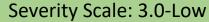
Restoration Option 1

Prairie Creek

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 26.99965 Longitude: -81.88410



County: Charlotte Site Number: PI179 Reach Length: 40 ft.

Landowner: Prairie Creek Park





Right Bank

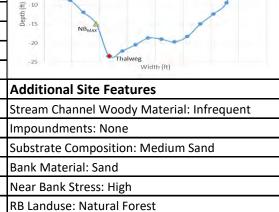
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (32.97)	1
Local NPSP:	No evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.0



LB Landuse: Natural Forest, Recreation

Notes: 303d: Impaired - Public water supply (DO, TDS)

Restoration Option 1

Myrtle Slough

Watershed: Peace River Subwatershed: Myrtle Slough

Latitude: 26.97209 Longitude: -81.94208

Severity Scale: 4.75-Moderate

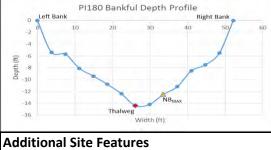
County: Charlotte Site Number: PI180 Reach Length: 90 ft.

Landowner: Hooijkaas Frank & AH TRS





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (25.48)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	Present	1.5
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



	Severity Scale:	4.75	LB Landuse: Residential
B: Floodplain Access:	Full	0	RB Landuse: Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
.B: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Pipe Discharge:	Present	1.5	Additional Site Features
Shoring Structures:	None	0	-16 Width (ft)

Notes: Tidally influenced; 303d: Impaired - Aquatic life harvesting (DO, fecal, coliform, iron, mercury in fish tissue)

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49326 Longitude: -81.80888 Severity Scale: 5.25-Moderate

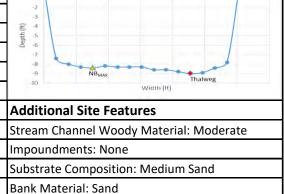
County: Hardee Site Number: PI181 Reach Length: 110 ft.

Landowner: Kalhil Faryt as Trustee





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.58)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
EB. Riparian Barier.	40 10.	0.5



Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

PI181 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Partial

Severity Scale:

0

0.25

5.25

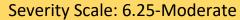
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48955 Longitude: -81.81084



County: Hardee Site Number: PI182 Reach Length: 440 ft.

Landowner: L & J Citrus and Cattle LLC





	MARK TO SERVICE STATES	
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (33.67)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75



	Severity Scale:	6.25	LB Landuse: Pasture, Natural Forest	
B: Floodplain Access:	Full	0	RB Landuse: Natural Forest	
RB: Floodplain Access:	Full	0	Near Bank Stress: High	
B: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand	
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand	
ish Passage Barrier:	None	0	Impoundments: None	
Vater Odor:	Normal	0	Stream Channel Woody Material: Infrequent	
Pipe Discharge:	None	0	Additional Site Features	
horing Structures:	None	0	Width (ft)	

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48875 Longitude: -81.81387

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI183 Reach Length: 570 ft.

Landowner: M & R Cattle Co. LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.49)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
DD. Elas dalais Assass	rII	^



	Severity Scale:	6.0	LB Landuse: Natural Forest
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

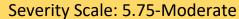
Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1, best to restore along with sites PI27, PI128 and PI129

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49222 Longitude: -81.81722



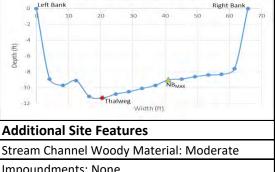
County: Hardee Site Number: PI184 Reach Length: 860 ft.

Landowner: M & R Cattle Co. LLC



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Section 2	
PI184 Bankfull Depth Profile	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.54)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	60 ft.	0.25



Fish Passage Barrier:

None

O
Impoundments: None

RB: Riparian Buffer:

O ft.

O.75
Substrate Composition: Medium Sand

LB: Riparian Buffer:

60 ft.

O.25
Bank Material: Sand

RB: Floodplain Access:
Full

Near Bank Stress: Low

LB: Floodplain Access:
Partial

O.25
RB Landuse: Pasture

Severity Scale:
5.75
LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1, best to restored along with site PI278

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.49405 Longitude: -81.81743 Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI185 Reach Length: 410 ft.

Landowner: M & R Cattle Co. LLC



Risk Factor	Ranking	Score	1-6-0
Pfankuch-Channel Stability:	Poor	1.5	O Left B
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	Depth (ft)
BEHI:	Moderate (28.94)	0.5	-10
Local NPSP:	Obvious Sources	1.5	12
Shoring Structures:	None	0	-14
Pipe Discharge:	None	0	Addition
Water Odor:	Normal	0	Stream Ch
Fish Passage Barrier:	None	0	Impoundr
RB: Riparian Buffer:	40 ft.	0.5	Substrate
LB: Riparian Buffer:	0 ft.	0.75	Bank Mat
RB: Floodplain Access:	Full	0	Near Bank



-14 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48674 Longitude: -81.82354

Severity Scale: 4.0-Low

County: Hardee Site Number: PI186 Reach Length: 200 ft.

Landowner: L & J Citrus and Cattle LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
вені:	High (34.68)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0



Bank Material: Sand Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Residential

0.25

4.0

PI186 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48634 Longitude: -81.82451 Severity Scale: 3.25-Low

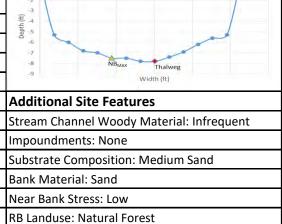
County: Hardee Site Number: PI187 Reach Length: 115 ft.

Landowner: Griffin Fannie Race & Others





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.27)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0



LB Landuse: Natural Forest, Residential

PI187 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

3.25

Full

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48640 Longitude: -81.82580

Severity Scale: 3.25-Low

County: Hardee Site Number: PI188 Reach Length: 525 ft.

Landowner: Clarence Wendell Cole





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.04)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

-4 (# # 16					
Additional Site Features					
Stream Channel Woody Material: Numerous					
Impoundments: None					
Substrate Composition: Medium Sand					
Bank Material: Sand					
Near Bank Stress: High					
RB Landuse: Natural Forest					

LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

3.25

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48732 Longitude: -81.82758

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI189 Reach Length: 125 ft.

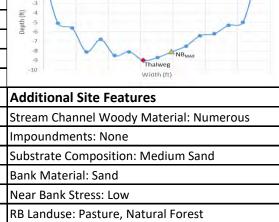
Landowner: Clarence Wendell Cole





PI189 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.31)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

5.5

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48574 Longitude: -81.82845 Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI190 Reach Length: 175 ft.

Landowner: Clarence Wendell Cole





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.20)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

(1) 46 (1) 46 (1) 48 (1
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.25

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48396 Longitude: -81.82889

Severity Scale: 3.0-Low

County: Hardee Site Number: PI191 Reach Length: 675 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
NISK FACTOI	Natikitig	30016
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.67)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

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				a day	9			
Addit	ional	Site I	eatu	res				
Strear	n Chan	nel W	/oody	Mate	erial: ſ	Nume	rous	

Water Odor:Normal0Stream Channel Woody Material: NumerousFish Passage Barrier:None0Impoundments: NoneRB: Riparian Buffer:100 ft.0Substrate Composition: Medium SandLB: Riparian Buffer:100 ft.0Bank Material: SandRB: Floodplain Access:Full0Near Bank Stress: HighLB: Floodplain Access:Full0RB Landuse: Natural ForestSeverity Scale:3.0LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48372 Longitude: -81.82909



County: Hardee Site Number: PI192 Reach Length: 245 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (31.44)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

2 -4 -4 -4 -6 -8 -10 -12 -12 Width (ft)				
Additional Site Features				
Stream Channel Woody Material: Numerous				
Impoundments: None				
Substrate Composition: Medium Sand				
Bank Material: Sand				
Near Bank Stress: Moderate				

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI192 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

3.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48186 Longitude: -81.83077

Severity Scale: 3.75-Low

County: Hardee Site Number: PI193 Reach Length: 580 ft.

Landowner: Frederick Willard D Jr.





PI193 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.16)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

0.25

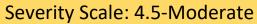
3.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48113 Longitude: -81.83076



County: Hardee Site Number: PI194 Reach Length: 500 ft.

Landowner: Frederick Willard D Jr.



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	PI194 Bankful	Denth Profi	le	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.38)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25
LP: Floodalaia Assass:	Cull	Λ



	Severity Scale:	4.5	LB Landuse: Natural Forest, Pasture
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Recreation
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Low
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.48042 Longitude: -81.83052

Severity Scale: 5.5-Moderate

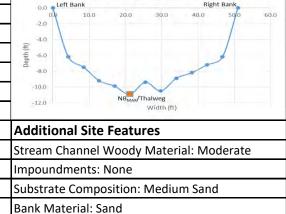
County: Hardee Site Number: PI195 Reach Length: 180 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.83)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Near Bank Stress: Moderate

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47971 Longitude: -81.83095

LB: Floodplain Access:

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI196 Reach Length: 390 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.55)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI196 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Severity Scale:

Restoration Option 1, the Peace River is cutting a new channel and forming an oxbow, in this case the best option would be to cut the channel for the river and stabilize with toewood. This should be done in conjunction with sites PI132 and PI197

0

5.0

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47883 Longitude: -81.83163

LB: Floodplain Access:

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI197 Reach Length: 280 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.85)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Severity Scale:

Restoration Option 1, the Peace River is cutting a new channel and forming an oxbow, in this case the best option would be to cut the channel for the river and stabilize with toewood. This should be done in conjunction with sites PI132 and PI196

0

5.0

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47731 Longitude: -81.83303

Severity Scale: 9.25-High

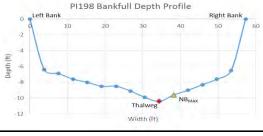
County: Hardee Site Number: PI198 Reach Length: 300 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.33)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	Present	1.5
Pipe Discharge:	Present	1.5
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25



-12 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Residential, Natural Forest
LB Landuse: Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

9.25

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47634 Longitude: -81.83235 Severity Scale: 6.25-Moderate

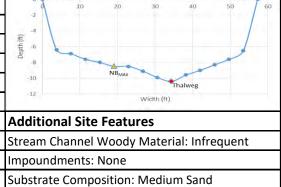
County: Hardee Site Number: PI199 Reach Length: 500 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.77)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0



RB Landuse: Residential, Natural Forest

Bank Material: Sand Near Bank Stress: Low

LB Landuse: Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

6.25

Severity Scale:

Restoration Option 3

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47624 Longitude: -81.83244

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI200 Reach Length: 370 ft.

Landowner: Frederick Willard D Jr.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (30.59)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	0 ft.	0.75	
LB: Riparian Buffer:	40 ft.	0.5	
RB: Floodplain Access:	Partial	0.25	



Shoring Structures:	None	0	Width (ft)	
Pipe Discharge:	None	0	Additional Site Features	
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive	
Fish Passage Barrier:	None	0	Impoundments: None	
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand	
LB: Riparian Buffer: 40 ft. 0.5 Bank Material: Sand		Bank Material: Sand		
RB: Floodplain Access: Partial 0.25		Near Bank Stress: Moderate		
LB: Floodplain Access:	Full	0	RB Landuse: Residential, Natural Forest	
	Severity Scale:	6.5	LB Landuse: Pasture	

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47472 Longitude: -81.83076 Severity Scale: 5.75-Moderate

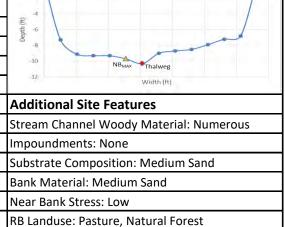
County: Hardee Site Number: PI201 Reach Length: 1300 ft.

Landowner: Frederick Willard D Jr.





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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.49)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46955 Longitude: -81.83663

Severity Scale: 5.0-Moderate

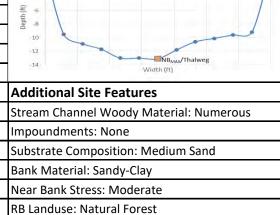
County: Hardee Site Number: PI202 Reach Length: 280 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (17.80)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Full	0



LB Landuse: Pasture, Road, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

5.0

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.47041 Longitude: -81.84447

Severity Scale: 6.0-Moderate

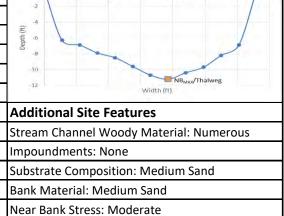
County: Hardee Site Number: PI203 Reach Length: 340 ft.

Landowner: 3-C Ranch Limited





Marthall Comment		
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.46)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	No	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest, Pasture

PI203 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Severity Scale:

6.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46877 Longitude: -81.84647

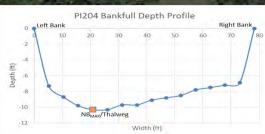
Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI204 Reach Length: 330 ft.

Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	0 3
Channel Alteration:	None	0	-4
Bank Erosion:	Mass-wasting	1.5	Depth (ft)
BEHI:	Moderate (24.28)	0.5	D 8
Local NPSP:	Obvious Sources	1.5	-10
Shoring Structures:	None	0	-12
Pipe Discharge:	None	0	Additi
Water Odor:	Normal	0	Stream
Fish Passage Barrier:	None	0	Impou
RB: Riparian Buffer:	100 ft.	0	Substra
LB: Riparian Buffer:	20 ft.	0.75	Bank N
RB: Floodplain Access:	Full	0	Near B



NB _{MAX} /Thalweg -12 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy-Clay
Near Bank Stress: High
RB Landuse: Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial Severity Scale:

0.25

6.0

Restoration Option 1 or 2

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46925 Longitude: -81.84528

LB: Floodplain Access:

Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI205 Reach Length: 115 ft.

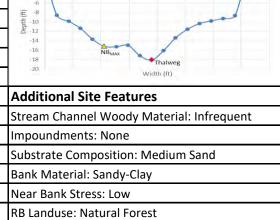
Landowner: Ben Hill Griffin Inc.





PI205 Bankfull Depth Profile

		-
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (26.02)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

Restoration Option 2, low erosion rates due to clay and bedrock for the majority of the site, however beach area with rope swing should be stablilized on the upstream section

0.25

5.25

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46711 Longitude: -81.84932

Severity Scale: 5.25-Moderate

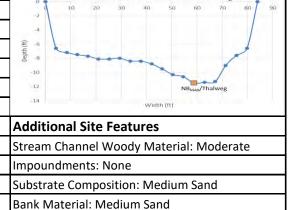
County: Hardee Site Number: PI206 Reach Length: 440 ft.

Landowner: 3-C Ranch Limited





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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	Moderate (26.84)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

PI206 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.25

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46292 Longitude: -81.84989

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI207 Reach Length: 100 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (24.91)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

-4 44 44 -6 -8 -10 NB _{MAX} Thalweg Width (ft).
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: Low

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI207 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

6.25

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46318 Longitude: -81.85001

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI208 Reach Length: 500 ft.

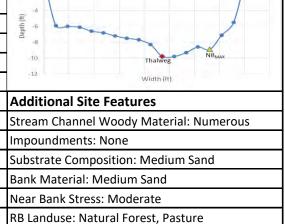
Landowner: 3-C Ranch Limited





PI208 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.80)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.5

Full

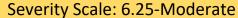
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.46065 Longitude: -81.84869



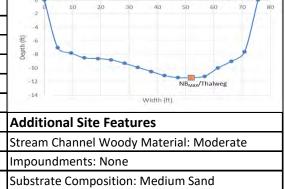
County: Hardee Site Number: PI209 Reach Length: 575 ft.

Landowner: 3-C Ranch Limited*





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.03)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25



Bank Material: Medium Sand Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI209 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

6.25

Full

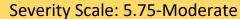
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.4595 Longitude: -81.84586



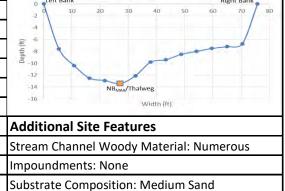
County: Hardee Site Number: PI210 Reach Length: 310 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.80)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	60 ft.	0.25



Bank Material: Medium Sand

Near Bank Stress: Moderate

LB Landuse: Natural Forest, Pasture

RB Landuse: Pasture

PI210 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Partial

Severity Scale:

0

0.25

5.75

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45958 Longitude: -81.84621

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI211 Reach Length: 240 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.60)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	60 ft.	0.25



Pipe Discharge: None 0 Additional Site Features

Water Odor: Normal 0 Stream Channel Woody Material: Numerous

Fish Passage Barrier: None 0 Impoundments: None

RB: Riparian Buffer: 0 ft. 0.75 Substrate Composition: Medium Sand

LB: Riparian Buffer: 60 ft. 0.25 Bank Material: Medium Sand

RB: Floodplain Access: Full 0 Near Bank Stress: Low

LB: Floodplain Access: Partial 0.25 RB Landuse: Pasture

Severity Scale: 5.75 LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45934 Longitude: -81.84586

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI212 Reach Length: 470 ft.

Landowner: Ben Hill Griffin Inc.





		43.00
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.50)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25



RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Right Ban

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.4603 Longitude: -81.84536

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI213 Reach Length: 310 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.99)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

-4 -4 -4 -6 -4 -6 -10 -12 -14 NBMAX Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Dominating
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: Moderate

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

6.25

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45781 Longitude: -81.84464

Severity Scale: 5.5-Moderate

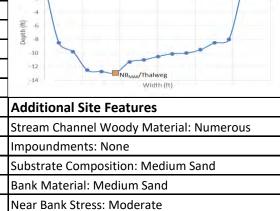
County: Hardee Site Number: PI214 Reach Length: 1300 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.07)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI214 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45677 Longitude: -81.84559

Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI215 Reach Length: 270 ft.

Landowner: Ben Hill Griffin Inc.*





The Market Control of the Control of			
Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate (28.21)	0.5	
Local NPSP:	Obvious Sources 1.5		
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Α
Water Odor:	Normal	0	St
Fish Passage Barrier:	None	0	Ir
RB: Riparian Buffer:	40 ft.	0.5	S
LB: Riparian Buffer:	60 ft.	0.25	В
RB: Floodplain Access:	Full	0	N



LB Landuse: Natural Forest, Pasture

Right Ban

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.25

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.45237 Longitude: -81.84543

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI216 Reach Length: 310 ft.

Landowner: Mosaic Fertilizer LLC





200 4 200				
Risk Factor	Ranking	Score	PI216 Bankfull Depth Profile	
Pfankuch-Channel Stability:	Poor	1.5	10 20 30 40	
Channel Alteration:	None	0	4	
Bank Erosion:	Mass-wasting	1.5	-6	
BEHI:	High (34.21)	1	.8	
Local NPSP:	Obvious Sources	1.5	-10 -12 NBMAX	
Shoring Structures:	None	0	-14 Thalweg	
Pipe Discharge:	None	0	Additional Site Features	
Water Odor:	Normal	0	Stream Channel Woody Material: Mo	
Fish Passage Barrier:	None	0	Impoundments: None	
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand	
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Medium Sand	
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate	
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest	



LB Landuse: Natural Forest, Pasture

Right Bank

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

6.5

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublsome Creek

Latitude: 27.44989 Longitude: -81.8479

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI217 Reach Length: 480 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.93)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



-12 Width (ft)
Additional Site Features
Stream Channel Woody Material: Extensive
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: Low
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest. Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

5.5

Full

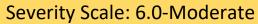
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44898 Longitude: -81.84872



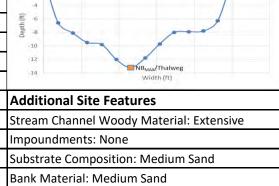
County: Hardee Site Number: PI218 Reach Length: 163 ft.

Landowner: Mosaic Fertilizer LLC





		1
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.81)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Near Bank Stress: Moderate

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI218 Bankfull Depth Profile

Right Bank

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44765 Longitude: -81.84893

Severity Scale: 5.0-Moderate

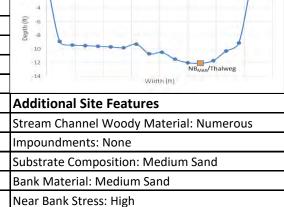
County: Hardee Site Number: PI219 Reach Length: 110 ft.

Landowner: Mosaic Fertilizer LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (18.34)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
Water Odor: Fish Passage Barrier: RB: Riparian Buffer:	Normal None 40 ft.	0.5



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44713 Longitude: -81.84915

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI220 Reach Length: 500 ft.

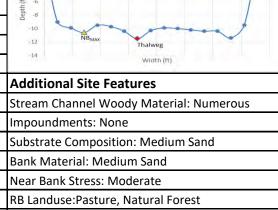
Landowner: Ben Hill Griffin Inc.





PI220 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.02)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

5.5

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44525 Longitude: -81.84908

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI221 Reach Length: 95 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (21.98)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Medium Sand

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

Near Bank Stress: High

PI221 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.5

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44486 Longitude: -81.84874 Severity Scale: 5.75-Moderate

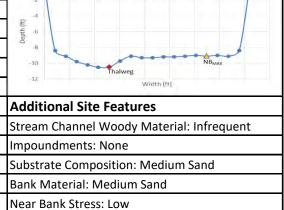
County: Hardee Site Number: PI222 Reach Length: 103 ft.

Landowner: Mosaic Fertilizer LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.26)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.75

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44345 Longitude: -81.84898

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI223 Reach Length: 340 ft.

Landowner: Mosaic Fertilizer LLC





	Score
Poor	1.5
None	0
Mass-wasting	1.5
Moderate (26.70)	0.5
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
40 ft.	0.5
40 ft.	0.5
	None Mass-wasting Moderate (26.70) Obvious Sources None None Normal None 40 ft.



Bank Material: Medium Sand

Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI223 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44236 Longitude: -81.84879

Severity Scale: 6.0-Moderate

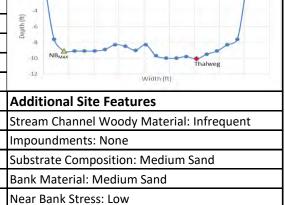
County: Hardee Site Number: PI224 Reach Length: 110 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (22.93)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI224 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.0

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.44063 Longitude: -81.85172

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI225 Reach Length: 400 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.69)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



PI225 Bankfull Depth Profile

Pipe Discharge: None 0 Additional Site Features

Water Odor: Normal 0 Stream Channel Woody Material: Dominating

Fish Passage Barrier: None 0 Impoundments: Woody Material Jams

RB: Riparian Buffer: 40 ft. 0.5 Substrate Composition: Medium Sand

LB: Riparian Buffer: 40 ft. 0.5 Bank Material: Medium Sand

RB: Floodplain Access: Full 0 Near Bank Stress: High

LB: Floodplain Access: Full 0 RB Landuse: Natural Forest, Pasture

Severity Scale: 5.5 LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, due to a recent river avulsion, the best course of action would be to stabilize one channel (would need to increase bankfull cross-sectional area) and create wetland habitat with the other channel

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43903 Longitude: -81.85005

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI226 Reach Length: 180 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (25.83)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

-4 -4 -10 -12 -10 -12 -12 -10 -12 -12 -10 -12 -12 -10 -12 -10 -12 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI226 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43796 Longitude: -81.84948

Severity Scale: 5.75-Moderate

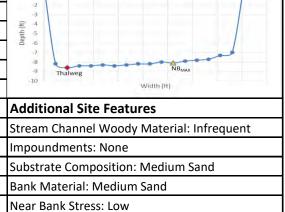
County: Hardee Site Number: PI227 Reach Length: 250 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.45)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI227 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

5.75

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43678 Longitude: -81.85035

Severity Scale: 6.0-Moderate

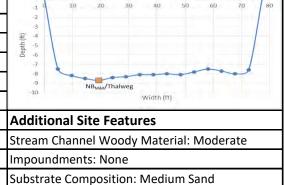
County: Hardee Site Number: PI228 Reach Length: 115 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.82)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	20 ft.	0.75



Bank Material: Medium Sand

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Near Bank Stress: High

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43516 Longitude: -81.85123

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI229 Reach Length: 240 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.69)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Full	0



RB: Riparian Buffer: 40 ft. 0.5 Substrate Composition: Medium Sand

LB: Riparian Buffer: 20 ft. 0.75 Bank Material: Medium Sand

RB: Floodplain Access: Full 0 Near Bank Stress: High

LB: Floodplain Access: Full 0 RB Landuse: Natural Forest, Pasture

Severity Scale: 5.75 LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.43205 Longitude: -81.84804

Severity Scale: 6.0-Moderate

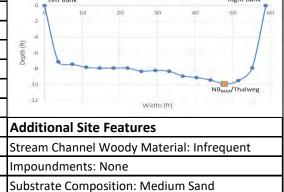
County: Hardee Site Number: PI230 Reach Length: 215 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.52)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	20 ft.	0.75
·	·	



Bank Material: Medium Sand

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Near Bank Stress: High

PI230 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.0

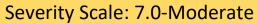
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42975 Longitude: -81.85018



County: Hardee Site Number: PI231 Reach Length: 80 ft.

Landowner: Ben Hill Griffin Inc.



1.4.2	
	DI221 Bankfull Donth Brofile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (30.90)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25

## 4		
Additional Site Features		
Stream Channel Woody Material: Moderate		
Impoundments: None		
Substrate Composition: Medium Sand		
Bank Material: Medium Sand		
Near Bank Stress: Moderate		
RB Landuse: Natural Forest, Pasture		
LB Landuse: Pasture, Natural Forest		

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

7.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02671 Longitude: -81.87023

Severity Scale: 5.5-Moderate

County: Charlotte Site Number: PI232 Reach Length: 361 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.25)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5

Full

Partial

Severity Scale:

0

0.25

5.5



Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI232 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02689 Longitude: -81.87008

Severity Scale: 6.0-Moderate

County: Charlotte
Site Number: PI233
Reach Length: 57 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.63)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	20 ft.	0.75

Full

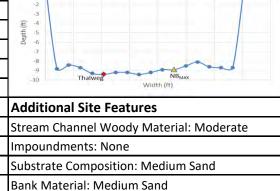
Full

Severity Scale:

0

0

6.0



Near Bank Stress: Low

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI233 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02649 Longitude: -81.87019 Severity Scale: 5.25-Moderate

County: Charlotte
Site Number: PI234
Reach Length: 38 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score	Left
Pfankuch-Channel Stability:	Fair	1	2
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	8 -10
BEHI:	High (32.09)	1	-10 -12
Local NPSP:	Obvious Sources	1.5	-14
Shoring Structures:	None	0	-16
Pipe Discharge:	None	0	Addition
Water Odor:	Normal	0	Stream Ch
Fish Passage Barrier:	None	0	Impound
RB: Riparian Buffer:	60 ft.	0.25	Substrate
LB: Riparian Buffer:	40 ft.	0.5	Bank Mat
RB: Floodplain Access:	Full	0	Near Banl

Full

Severity Scale:

0

5.25



-16 Width (ft).
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest. Pasture

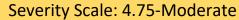
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02637 Longitude: -81.8706



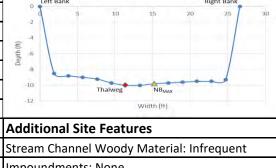
County: Charlotte Site Number: PI235 Reach Length: 56 ft.

Landowner: Charlotte County





Risk Factor	actor Ranking	
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.39)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	Barrier: None	
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	ss: Full	
LB: Floodplain Access:	Partial	0.25



PI235 Bankfull Depth Profile

0 Stream Channel Woody Material: Infrequent
0 Impoundments: None
0.5 Substrate Composition: Medium Sand
0 Bank Material: Medium Sand
0 Near Bank Stress: Low
0.25 RB Landuse: Natural Forest, Pasture
4.75 LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Severity Scale:

Restoration Option 2 or 3

Prairie Creek Severity Scale: 3.0-Low Watershed: Peace River County: Charlotte Site Number: PI236 Subwatershed: Lower Prairie Creek Latitude: 27.02628 Reach Length: 167 ft. Landowner: Charlotte County Longitude: -81.87071

*NO PHOTOS



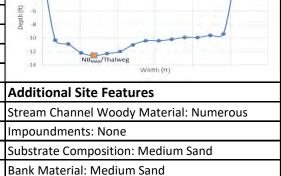
Risk Factor	Ranking	Score	PI236 Bankfull Depth Profile
Pfankuch-Channel Stability:	Fair	1	O Left Bank Rig
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	8- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6-
BEHI:	Moderate (27.91)	0.5	-10
Local NPSP:	Slight Potential	0.5	-12 NB _{MAX} /Thalweg
Shoring Structures:	None	0	-14 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Nur
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Medium Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High

Full

Severity Scale:

0

3.0



RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

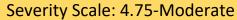
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02512 Longitude: -81.87305



County: Charlotte Site Number: PI237 Reach Length: 544 ft.

Landowner: Charlotte County

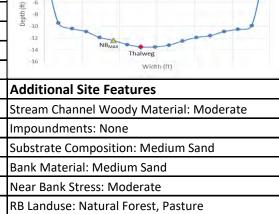


PI237 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (40.07)	1.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Partial

Severity Scale:



LB Landuse: Natural Forest

0.25

4.75

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02537 Longitude: -81.87377

Severity Scale: 5.0-Moderate

County: Charlotte Site Number: PI238 Reach Length: 163 ft.

Landowner: Charlotte County





	ALCONOMIC CONTRACTOR C	
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.80)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0

Full

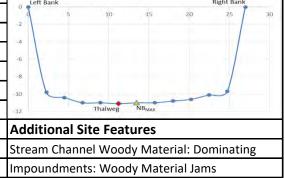
Full

Severity Scale:

0

0

5.0



Impoundments: Woody Material Jams
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: Low
RB Landuse:Natural Forest, Pasture
LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02525 Longitude: -81.87362

Severity Scale: 5.0-Moderate

County: Charlotte Site Number: PI239 Reach Length: 324 ft.

Landowner: Charlotte County





PI239 Bankfull Depth Profile

Ranking Fair	Score
Fair	
	1
None	0
Active	1
High (31.23)	1
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
40 ft.	0.5
100 ft.	0
	None Active High (31.23) Obvious Sources None None Normal None 40 ft.

Full

Full

Severity Scale:

0

0

5.0



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02578 Longitude: -81.87451

Severity Scale: 5.25-Moderate

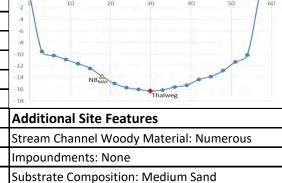
County: Charlotte Site Number: PI240 Reach Length: 168 ft.

Landowner: Charlotte County





	The state of the s		
Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (29.59)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	40 ft.	0.5	
LB: Riparian Buffer:	100 ft.	0	
RB: Floodplain Access:	Full	0	



Bank Material: Medium Sand

LB Landuse: Natural Forest

RB Landuse: Natural Forest, Pasture

Near Bank Stress: Low

0.25

5.25

PI240 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Partial

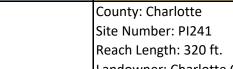
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02535 Longitude: -81.8748



Landowner: Charlotte County



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.99)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Full

Full

Severity Scale:

0

0

5.0



Severity Scale: 5.0-Moderate

-8 -8
-10 NB _{MAN} /Thalweg
-12 Width (ft),
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02417 Longitude: -81.87665

Severity Scale: 5.0-Moderate

County: Charlotte Site Number: PI242 Reach Length: 86 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (38.22)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

5.0



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02417 Longitude: -81.87665

Severity Scale: 3.5-Low

County: Charlotte Site Number: PI243 Reach Length: 61 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.66)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:



Near Bank Stress: High

0

3.5

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI243 Bankfull Depth Profile

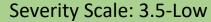
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02369 Longitude: -81.87673



County: Charlotte Site Number: PI244 Reach Length: 205 ft.

Landowner: Charlotte County





PI244 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.5)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0

Full

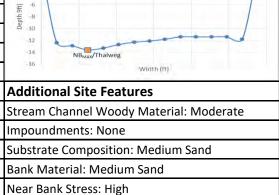
Full

Severity Scale:

0

0

3.5



RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02447 Longitude: -81.87859

Severity Scale: 4.0-Low

County: Charlotte Site Number: PI245 Reach Length: 414 ft.

Landowner: Charlotte County





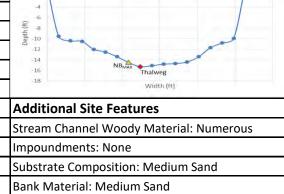
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.27)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

4.0



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI245 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.0231 Longitude: -81.87903

Severity Scale: 4.0-Low

County: Charlotte Site Number: PI246 Reach Length: 460 ft.

Landowner: Charlotte County





LED PORTS AL		
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.55)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:



Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0

4.0

PI246 Bankfull Depth Profile

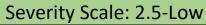
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02211 Longitude: -81.88142



County: Charlotte Site Number: PI247 Reach Length: 393 ft.

Landowner: Charlotte County



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PI247 Bankfull Profile

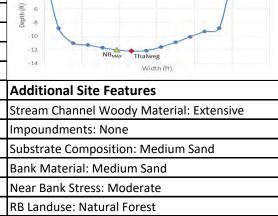
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.36)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

2.5



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02118 Longitude: -81.88196

Severity Scale: 3.0-Low

County: Charlotte Site Number: PI248 Reach Length: 57 ft.

Landowner: Charlotte County





PI248 Bankfull Depth Profile

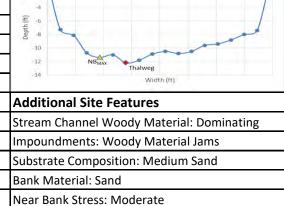
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (33.60)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.0



RB Landuse: Natural Forest

LB Landuse: Pasture

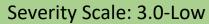
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.02103 Longitude: -81.8821



County: Charlotte Site Number: PI249 Reach Length: 210 ft.

Landowner: Charlotte County



A LONG TO SERVICE AND A SERVIC				
	12.00	PI249 Bank	full Depth Profile	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (35.89)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Full	0
	Severity Scale:	3.0

6. Popul (4)
-14 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest

LB Landuse: Natural Forest

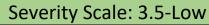
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.0203 Longitude: -81.88099



County: Charlotte Site Number: PI250 Reach Length: 264 ft.

Landowner: Charlotte County



PI250 Rankfull Donth Brofile

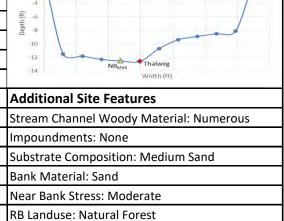
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.69)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.5



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.01931 Longitude: -81.88133

Severity Scale: 3.0-Low

County: Charlotte
Site Number: PI251
Reach Length: 36 ft.

Landowner: Charlotte County

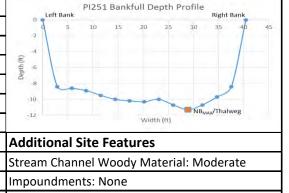




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.05)	1
Local NPSP:	No evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:



Substrate Composition: Medium Sand

Bank Material: Sand Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0

3.0

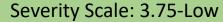
Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.01929 Longitude: -81.88097



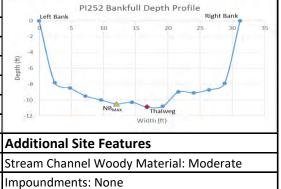
County: Charlotte Site Number: PI252 Reach Length: 165 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (35.10)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



RB: Riparian Buffer: 100 ft. 0 Substrate Composition: Medium Sand

LB: Riparian Buffer: 100 ft. 0 Bank Material: Sandstone, Shell Aggregate

RB: Floodplain Access: Full 0 Near Bank Stress: Low

LB: Floodplain Access: Partial 0.25 RB Landuse: Natural Forest

Severity Scale: 3.75 LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

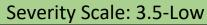
Restoration Option 1

Prairie Creek

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.01786 Longitude: -81.8841



County: Charlotte Site Number: PI253 Reach Length: 41 ft.

Landowner: Charlotte County



DI253 Bankful	Denth Profile	15.70

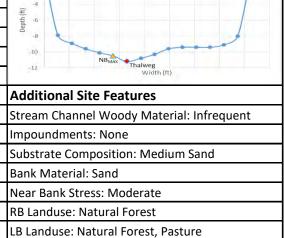
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (41.84)	1.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.5



Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Prairie Creek

Watershed: Peace River

Subwatershed: Lower Prarie Creek

Latitude: -81.88432 Longitude: 27.0167



County: Charlotte Site Number: PI254 Reach Length: 105 ft.

Landowner: Charlotte County



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	一个大概是	E big
		Empe
Left Back	PI254 Bankfull Depth Profile	Pight Bank

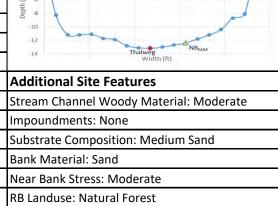
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (41.65)	1.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

4.0



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Prairie Creek

Watershed: Peace River

Subwatershed: Lower Prarie Creek

Latitude: 27.01337 Longitude: -81.8848

Severity Scale: 4.25-Moderate

County: Charlotte Site Number: PI255 Reach Length: 156 ft.

Landowner: Charlotte County





PI255 Bankfull Depth Profile

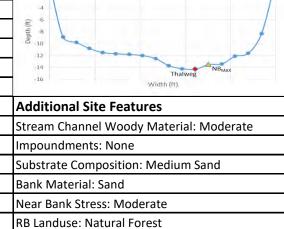
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.41)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

4.25



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & TDS)

Restoration Option 1

Shell Creek

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.96852 Longitude: -81.87551

Severity Scale: 4.0-Low

County: Charlotte Site Number: PI256 Reach Length: 104 ft.

Landowner: Maria Tibol & MAZ TRS & MT





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.28)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



Fish Passage Barrier:

None

O
Impoundments: None

RB: Riparian Buffer:

40 ft.

0.5
Substrate Composition: Medium Sand

LB: Riparian Buffer:

40 ft.

0.5
Bank Material: Sand

RB: Floodplain Access:
Full

Near Bank Stress: Moderate

LB: Floodplain Access:
Full

RB Landuse: Natural Forest, Pasture

Severity Scale:

4.0
LB Landuse: Power Lines

Notes: 303d: Impaired – Chloride, DO, Specific Conductivity and TDS

Restoration Option 2 or 3

Shell Creek

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.96332 Longitude: -81.86494

Severity Scale: 2.5-Low

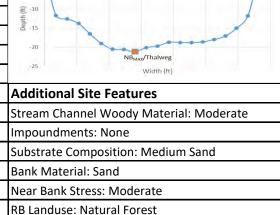
County: Charlotte Site Number: PI257 Reach Length: 9 ft.

Landowner: Brian & Mary M Presley





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
ВЕНІ:	High (32.93)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



LB Landuse: Natural Forest

Notes: 303d: Impaired - Chloride, DO, Specific Conductivity and TDS

Full

Severity Scale:

0

2.5

Restoration Option 1

Shell Creek

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.97573 Longitude: -81.88478

Severity Scale: 4.25-Moderate

County: Charlotte Site Number: PI258 Reach Length: 60 ft.

Landowner: Robert W Hall Sr





		No. of the last
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.08)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand

0

4.25

Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Residential, Natural Forest

Notes: 303d: Impaired – Chloride, DO, Specific Conductivity and TDS

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.30646 Longitude: -81.84203



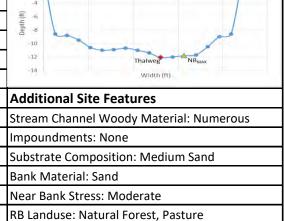
County: DeSoto Site Number: PI259 Reach Length:

Landowner: E & D Ranch LLP





	THE RESERVE AND ADDRESS OF THE PARTY OF THE	
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.20)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Partial	0.25



LB Landuse: Natural Forest, Pasture

PI259 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

4.0

Full

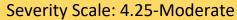
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.3222 Longitude: -81.83658



County: DeSoto Site Number: PI260 Reach Length: 270 ft.

Landowner: E & D Ranch LLP





PI260 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (43.01)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



LB Landuse:Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Partial

Full

Severity Scale:

0.25

0

4.25

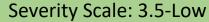
Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.33465 Longitude: -81.83554



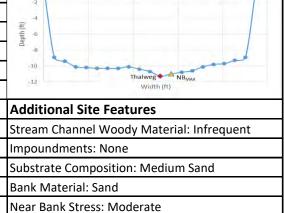
County: DeSoto Site Number: PI261 Reach Length: 100 ft.

Landowner: E & D Ranch LLP





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.52)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

PI261 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

3.5

Full

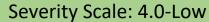
Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.35728 Longitude: -81.82603



County: Hardee Site Number: PI262 Reach Length: 285 ft.

Landowner: Ben Hill Griffin Inc.





PI262 Bankfull Depth Profile

The second secon		STATE OF THE STATE
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.66)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

4.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.36113 Longitude: -81.82877

Severity Scale: 5.0-Moderate

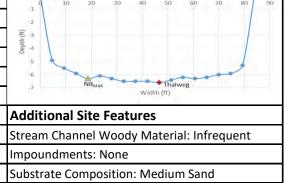
County: Hardee Site Number: PI263 Reach Length: 150 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.16)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Sand

Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

0

0

5.0

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.36189 Longitude: -81.8299

Severity Scale: 4.5-Moderate

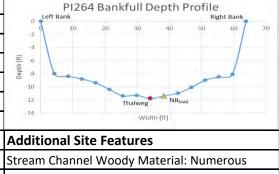
County: Hardee Site Number: PI264 Reach Length: 132 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.07)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0



None 0 Impoundments: None
60 ft. 0.25 Substrate Composition: Medium Sand
40 ft. 0.5 Bank Material: Sand
Partial 0.25 Near Bank Stress: Moderate
Full 0 RB Landuse: Pasture, Natural Forest
Severity Scale: 4.5 LB Landuse: Pasture, Natural Forest

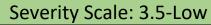
Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.36525 Longitude: -81.82954



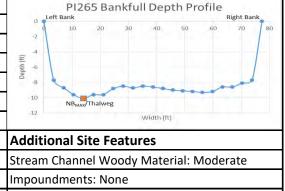
County: Hardee Site Number: PI265 Reach Length: 84 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.41)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Substrate Composition: Medium Sand

LB Landuse: Pasture, Natural Forest

Bank Material: Sand

0

3.5

Near Bank Stress: High

RB Landuse: Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.3664 Longitude: -81.8320

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI266 Reach Length: 223 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.56)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



width (it)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial Severity Scale:

0.25

5.0

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38165 Longitude: -81.84265 Severity Scale: 4.0-Low

County: Hardee Site Number: PI267 Reach Length: 133 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.98)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

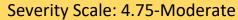
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Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38308 Longitude: -81.84419



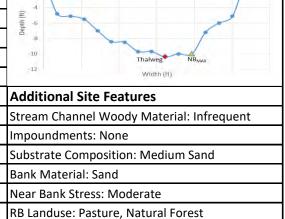
County: Hardee Site Number: PI268 Reach Length: 41 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.22)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

PI268 Bankfull Depth Profile

Right Bank

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Severity Scale:

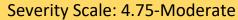
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38308 Longitude: -81.84419



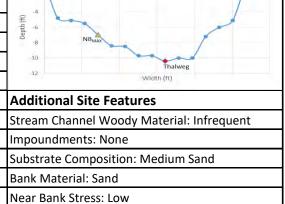
County: Hardee Site Number: PI269 Reach Length: 15 ft.

Landowner: Ben Hill Griffin Inc.



PI269 Bankfull Depth Profile	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.48)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

4.75

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38608 Longitude: -81.84283

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI270 Reach Length: 62 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.45)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
	·	



Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture
LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Partial

Severity Scale:

0.25

6.5

Restoration Option 1

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38706 Longitude: -81.84448

Severity Scale: 7.0-Moderate

County: Hardee Site Number: PI271 Reach Length: 120 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.65)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

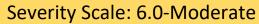
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38725 Longitude: -81.8442



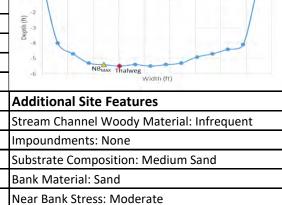
County: Hardee Site Number: PI272 Reach Length: 215 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.27)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.0

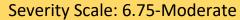
Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.38901 Longitude: -81.84394



County: Hardee Site Number: PI273 Reach Length: 590 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (35.96)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



-8 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

6.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39185 Longitude: -81.84601

Severity Scale: 6.25-Moderate

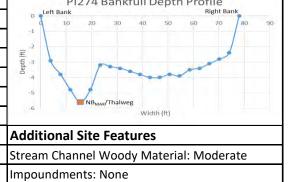
County: Hardee Site Number: PI274 Reach Length: 174 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (28.81)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



Substrate Composition: Medium Sand

LB Landuse: Natural Forest, Pasture

Bank Material: Sandy-clay

Near Bank Stress: High

RB Landuse: Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

6.25

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39462 Longitude: -81.84632

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI275 Reach Length: 257 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.25)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



None	Ü	width (ti)
None	0	Additional Site Features
Normal	0	Stream Channel Woody Material: Infrequent
None	0	Impoundments: None
20 ft.	0.75	Substrate Composition: Medium Sand
0 ft.	0.75	Bank Material: Sand
Full	0	Near Bank Stress: Moderate
Full	0	RB Landuse: Pasture, Natural Forest
Severity Scale:	6.0	LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39579 Longitude: -81.84644

Severity Scale: 6.0-Moderate

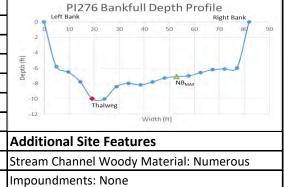
County: Hardee Site Number: PI276 Reach Length: 134 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.49)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	20 ft.	0.75



RB: Riparian Buffer: 0 ft. 0.75 Substrate Composition: Medium Sand

LB: Riparian Buffer: 20 ft. 0.75 Bank Material: Sand

RB: Floodplain Access: Full 0 Near Bank Stress: Low

LB: Floodplain Access: Full 0 RB Landuse: Pasture, Natural Forest

Severity Scale: 6.0 LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39664 Longitude: -81.8479 Severity Scale: 5.75-Moderate

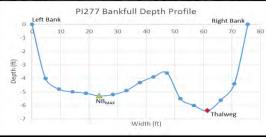
County: Hardee Site Number: PI277 Reach Length: 97 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.31)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



width (rt)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

5.75

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.49305 Longitude: -81.81644 Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI278 Reach Length: 62 ft.

Landowner: M & R Cattle Co. LLC



Risk Factor Ranking Score Pfankuch-Channel Stability: Poor 1.5				
Pfankuch-Channel Stability: Poor 1.5	Risk Factor	Ranking	Score	PI27
				U

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.00)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



-6 NB _{MA} /Thalweg Width (tt)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest, Residential

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Severity Scale:

0

5.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42937 Longitude: -81.84982 Severity Scale: 5.75-Moderate

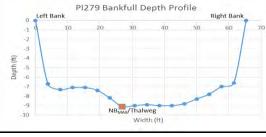
County: Hardee Site Number: PI279 Reach Length: 325 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.72)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	20 ft.	0.75



Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.75

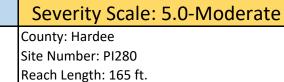
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42822 Longitude: -81.84991

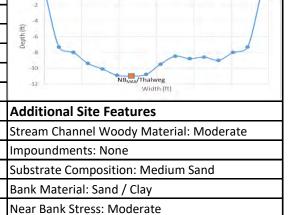


Landowner: Ben Hill Griffin Inc.



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	Loft Bank	PI280 Bankfull Depth Profile	23.27

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (18.84)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

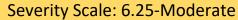
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Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42861 Longitude: -81.84974



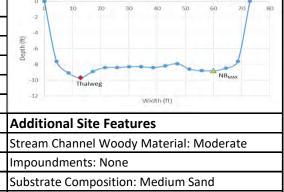
County: Hardee Site Number: PI281 Reach Length: 16 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.76)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand

0

6.25

Near Bank Stress: Low

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI281 Bankfull Depth Profile

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42174 Longitude: -81.85343

RB: Floodplain Access:

LB: Floodplain Access:

Severity Scale: 3.5-Low

County: Hardee Site Number: PI282 Reach Length: 85 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.30)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

PI282 Bankfull Depth Profile

Right Bank

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI283-288

0

0

3.5

Full

Full

Severity Scale:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42173 Longitude: -81.85307

LB: Floodplain Access:

Severity Scale: 3.25-Low

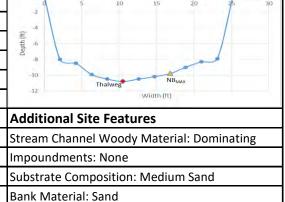
County: Hardee Site Number: PI283 Reach Length: 135 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.84)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Near Bank Stress: Low

LB Landuse: Natural Forest

RB Landuse: Natural Forest, Pasture

PI283 Bankfull Depth Profile

Right Ban

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI282-288

Partial

Severity Scale:

0.25

3.25

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42171 Longitude: -81.85235

Severity Scale: 3.5-Low

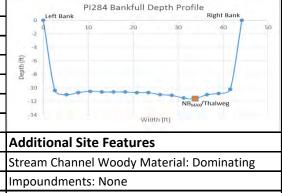
County: Hardee Site Number: PI284 Reach Length: 450 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.60)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	60 ft.	0.25
		_



Pipe Discharge:

None

Normal

Stream Channel Woody Material: Dominating

Fish Passage Barrier:

None

RB: Riparian Buffer:

60 ft.

0.25

Substrate Composition: Medium Sand

LB: Riparian Buffer:

60 ft.

0.25

Bank Material: Sand

RB: Floodplain Access:

Full

Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

Severity Scale:

3.5

LB Landuse: Natural Forest, Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI282-288

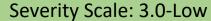
Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42206 Longitude: -81.85304

RB: Floodplain Access:

LB: Floodplain Access:



County: Hardee Site Number: PI285 Reach Length: 120 ft.

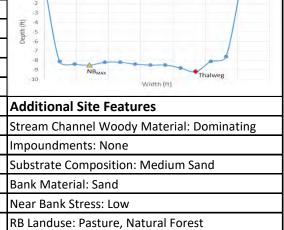
Landowner: Ben Hill Griffin Inc.





PI285 Bankfull Depth Profile

Ranking	Score
Good	0
None	0
Active	1
Moderate (22.53)	0.5
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
100 ft.	0
100 ft.	0
	Good None Active Moderate (22.53) Obvious Sources None None Normal None 100 ft.



LB Landuse: Natural Forest, Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI282-288

0

0

3.0

Full

Full

Severity Scale:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42178 Longitude: -81.85225

Severity Scale: 4.25-Moderate

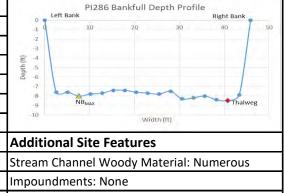
County: Hardee Site Number: PI286 Reach Length: 170 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.41)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	80 ft.	0.25



Fish Passage Barrier:

None

RB: Riparian Buffer:

Boft.

RB: Riparian Buffer:

Boft.

Color Bank Material: None

RB: Riparian Buffer:

Boft.

Color Bank Material: Sand

RB: Floodplain Access:

Full

RB: Floodplain Access:

Partial

Color Bank Material: Sand

RB: Landuse: Natural Forest, Pasture

Severity Scale:

LB: Landuse: Natural Forest, Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI282-288

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42199 Longitude: -81.85188

RB: Floodplain Access:

LB: Floodplain Access:

Severity Scale: 4.5-Moderate

County: Hardee Site Number: PI287 Reach Length: 335 ft.

Landowner: Ben Hill Griffin Inc.





PI287 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.76)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



LB Landuse: Natural Forest, Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI282-288

Full

Full

Severity Scale:

0

0

4.5

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.42139 Longitude: -81.85374

Severity Scale: 4.5-Moderate

County: Hardee Site Number: PI288 Reach Length: 160 ft.

Landowner: Ben Hill Griffin Inc.





		1900
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (24.99)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	80 ft.	0.25



	Severity Scale:	4.5	LB Landuse: Natural Forest, Pasture
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Riparian Buffer:	80 ft.	0.25	Bank Material: Sandy Clay
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Pipe Discharge:	None	0	Additional Site Features
onoring offuctures.	None	U	

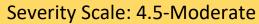
Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with sites PI087, PI282-288

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41963 Longitude: -81.84834



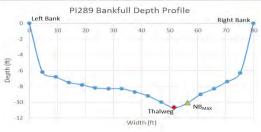
County: Hardee Site Number: PI289 Reach Length: 250 ft.

Landowner: Ben Hill Griffin Inc.



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Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (35.64)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	60 ft.	0.25	
LB: Riparian Buffer:	40 ft.	0.5	
RB: Floodplain Access:	Partial	0.25	



-12 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest Pasture

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

0

4.5

Restoration Option 2

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41915 Longitude: -81.84752



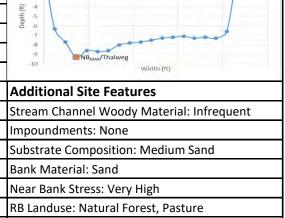
County: Hardee Site Number: PI290 Reach Length: 165 ft.

Landowner: Ben Hill Griffin Inc.



	NA.	
		N.
PI290 Bankfull	Denth Profile	

Risk Factor	actor Ranking	
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.66)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Full	0



LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Severity Scale:

4.0

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41553 Longitude: -81.84734

Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI291 Reach Length: 95 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (33.70)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	40 ft.	0.5	
LB: Riparian Buffer:	60 ft.	0.25	



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

4.25

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41813 Longitude: -81.84702

Severity Scale: 4.75-Moderate

County: Hardee Site Number: Pl292 Reach Length: 170 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High (34.02)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	Not Present	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	100 ft.	0	
LB: Riparian Buffer:	40 ft.	0.5	



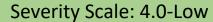
onoring off actures.	None	U		
Pipe Discharge:	Not Present	0	Additional Site Features	
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate	
Fish Passage Barrier:	None	0	Impoundments: None	
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand	
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand	
RB: Floodplain Access:	Full	0	Near Bank Stress: High	
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture, Natural Forest	
	Severity Scale:	4.75	LB Landuse: Natural Forest, Pasture	

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue), private unpaved road crossing downstream of site, some woody debris build up on bridge pilings, no major issues with structure

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41535 Longitude: -81.8476



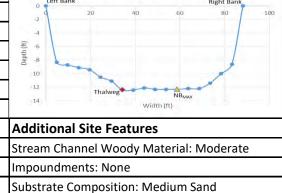
County: Hardee Site Number: PI293 Reach Length: 125 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.98)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand Near Bank Stress: Low

0

4.0

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

PI293 Bankfull Depth Profile

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.4119 Longitude: -81.84659

LB: Floodplain Access:

Severity Scale: 6.25-Moderate

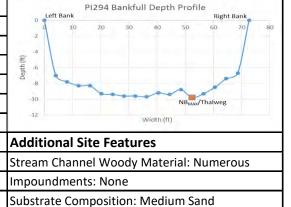
County: Hardee Site Number: PI294 Reach Length: 240 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.35)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand Near Bank Stress: High

0

6.25

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with site PI296

Full

Severity Scale:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41229 Longitude: -81.84668

Severity Scale: 5.75-Moderate

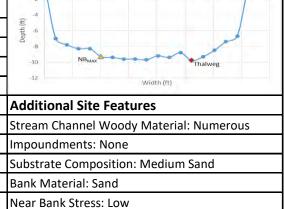
County: Hardee Site Number: PI295 Reach Length: 105 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate (28.55)	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	40 ft.	0.5	
LB: Riparian Buffer:	40 ft.	0.5	



RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Pl295 Bankfull Depth Profile

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial

Full

Severity Scale:

0.25

0

5.75

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41189 Longitude: -81.84596

RB: Floodplain Access:

LB: Floodplain Access:

Severity Scale: 5.75-Moderate

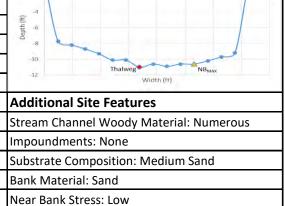
County: Hardee Site Number: PI296 Reach Length: 220 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate (24.09)	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	20 ft.	0.75	
LB: Riparian Buffer:	40 ft.	0.5	



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI296 Bankfull Depth Profile

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 1, restoration should be done in conjunction with site PI294

Full

Full

Severity Scale:

0

0

5.75

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.41197 Longitude: -81.84557 Severity Scale: 5.75-Moderate

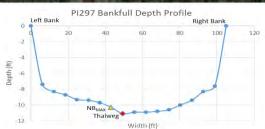
County: Hardee Site Number: PI297 Reach Length: 50 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.95)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



-12 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Partial Severity Scale:

0

0.25

5.75

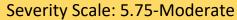
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40609 Longitude: -81.84827



County: Hardee Site Number: PI298 Reach Length: 100 ft.

Landowner: Ben Hill Griffin Inc.



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379.	
	Service Control
	(1)

	Score
Poor	1.5
None	0
Active	1
Moderate (24.00)	0.5
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
20 ft.	0.75
40 ft.	0.5
	None Active Moderate (24.00) Obvious Sources None None Normal None 20 ft.



LB Landuse: Pasture, Natural Forest

PI298 Bankfull Depth Profile

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.75

Restoration Option 2

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40453 Longitude: -81.84779

Severity Scale: 6.0-Moderate

County: Hardee Site Number: Pl299 Reach Length: 205 ft.

Landowner: Ben Hill Griffin Inc.





Pl299 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Low (19.41)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial

Severity Scale:

0.25

6.0

RB Landuse: Pasture

LB Landuse: Pasture, Natural Forest

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.40042 Longitude: -81.84801

Severity Scale: 6.5-Moderate

County: Hardee Site Number: Pl300 Reach Length: 235 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (19.72)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
I.D. Dimenian Duffern	20 ft	0.75



	Severity Scale:	6.5	LB Landuse: Pasture, Natural Forest
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Sand / Clay
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River

Subwatershed: Peace River Branch

Latitude: 27.39897 Longitude: -81.8477

Severity Scale: 6.0-Moderate

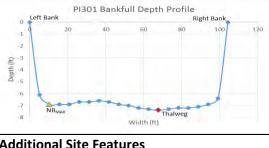
County: Hardee Site Number: PI301 Reach Length: 345 ft.

Landowner: Ben Hill Griffin INC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.93)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
I.B. Rinarian Ruffer	∩ ft	0.75



			Thalweg
Shoring Structures:	None	0	-8 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
ish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
B: Riparian Buffer:	0 ft.	0.75	Bank Material: Medium Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
B: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	6.0	LB Landuse: Pasture, Natural Forest

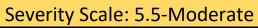
Notes: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19967 Longitude: -81.98788



County: Desoto Site Number: PI302 Reach Length: 63 ft.

Landowner: CWP Properties LLC



Pfankuch-Channel Stability:	Fair	1	-1
Risk Factor	Ranking	Score	
	M. Comment M. Comment		

Risk Factor	Ranking	Score	PI302 Bankfull Depth Profile Left Bank Right Bank	
Pfankuch-Channel Stability:	Fair	1	5 10 15 20 25 30 39 40	
Channel Alteration:	None	0	-2	
Bank Erosion:	Active	1	Oberth (f)	
BEHI:	High (36.94)	1	-5	
Local NPSP:	Slight Potential	0.5	-6. Thalweg NB _{MAX}	
Shoring Structures:	None	0	-7 Width (ft)	
Pipe Discharge:	None	0	Additional Site Features	
Water Odor:	Normal	0	Stream Channel Woody Material: None	
Fish Passage Barrier:	None	0	Impoundments: None	
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand	
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Medium Sand	
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Low	
LB: Floodplain Access:	Partial	0.25	RB Landuse: Transportation	
_	Severity Scale:	5.5	LB Landuse: Transportation	

Notes: Hwy 72 bridge; 303d: Impaired - Public Water Supply (DO & BOD)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19765 Longitude: -81.98725

Severity Scale: 4.0-Low

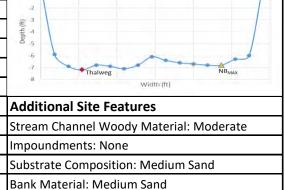
County: Desoto Site Number: PI303 Reach Length: 89 ft.

Landowner: CWP Properties LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.12)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	10 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



Near Bank Stress: Low

LB Landuse: Natural Forest

RB Landuse: Natural Forest, Recreation

PI303 Bankfull Depth Profile

Notes: Trail at top of bank 10' wide - grass; 303d: Impaired - Public Water Supply (DO & BOD)

0.25

0

4.0

Partial

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.1955 Longitude: -81.98689

Severity Scale: 3.5-Low

County: Desoto Site Number: PI304 Reach Length: 50 ft.

Landowner: CWP Properties LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.08)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0



RB Landuse: Recreational, Natural Forest

Near Bank Stress: High

LB Landuse: Natural Forest

Notes: 4x4 trail next to top of bank; 303d: Impaired - Public Water Supply (DO & BOD)

0

0

3.5

Full

Full

Severity Scale:

Restoration Option 2

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19475 Longitude: -81.98682

Severity Scale: 3.5-Low

County: Desoto Site Number: PI305 Reach Length: 100 ft.

Landowner: CWP Properties LLC

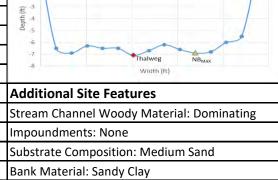




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.49)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:



RB Landuse: Recreational, Natural Forest

Near Bank Stress: Low

LB Landuse: Natural Forest

0

3.5

PI305 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19433 Longitude: -81.98509

Severity Scale: 3.25-Low

County: Desoto Site Number: PI306 Reach Length: 64 ft.

Landowner: CWP Properties LLC



-	Pl306 Bankfull Depth Profile

Risk Factor	Ranking	Score	PI306 Left Bank
Pfankuch-Channel Stability:	Fair	1	5 10
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	-5 Depth (#)
BEHI:	Moderate (29.26)	0.5	-6
Local NPSP:	No Evidence	0	-7 -8 Thalweg
Shoring Structures:	None	0	9
Pipe Discharge:	None	0	Additional Site F
Water Odor:	Normal	0	Stream Channel W
Fish Passage Barrier:	None	0	Impoundments: No
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composi
LB: Riparian Buffer:	100 ft.	0	Bank Material: Me
RB: Floodplain Access:	Full	0	Near Bank Stress: L
LB: Floodplain Access:	Full	0	RB Landuse: Natura

Severity Scale:

3.25

4 15 -5 -7 -8 -9 Width (ft)
Additional Site Features
Stream Channel Woody Material: Dominating
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: Low
RB Landuse: Natural Forest, Recreational

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19412 Longitude: -81.9842



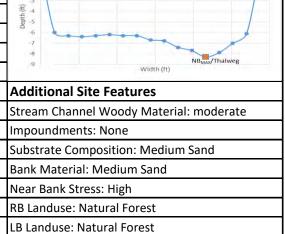
County: Desoto Site Number: PI307 Reach Length: 33 ft.

Landowner: CWP Properties LLC



PI307 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.18)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

Severity Scale:

0

3.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19376 Longitude: -81.98295

Severity Scale: 2.75-Low

County: Desoto Site Number: PI308 Reach Length: 82 ft.

Landowner: CWP Properties LLC



Left Dank	PI308 Bankfull Depth Profile

		CHARLES AND
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.22)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

Severity Scale:

0

2.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.18919 Longitude: -81.98335

Severity Scale: 2.5-Low

County: Desoto Site Number: PI309 Reach Length: 75 ft.

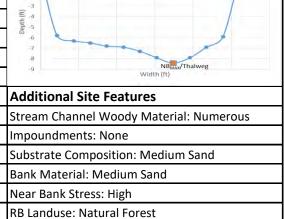
Landowner: Martha G Shunn





PI309 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.42)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

Severity Scale:

0

2.5

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.18629 Longitude: -81.98191



County: Desoto Site Number: PI310 Reach Length: 100 ft. Landowner: Scott L Profitt





PI310 Bankfull Depth Profile

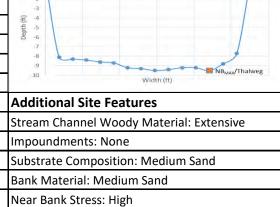
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (30.50)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

3.25



RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.179 Longitude: -81.9821



County: Desoto Site Number: PI311 Reach Length: 65 ft.

Landowner: Marie Ellen Drymon

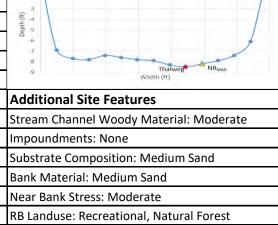




PI311 Bankfull Depth Profile

Right Bank

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.06)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Full	0



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Severity Scale:

3.25

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.17804 Longitude: -81.9829

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI312 Reach Length: 90 ft.

Landowner: Harry M Drymon III



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1

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Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (31.85)	1	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	Present	1.5	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	0 ft.	0.75	
LB: Riparian Buffer:	100 ft.	0	
RB: Floodplain Access:	Partial	0.25	
LB: Floodplain Access:	Full	0	

-8 -9 -10 NB _{MAW} /Thair Width (ft)	weg
Additional Site Features	
Stream Channel Woody Material: I	Moderate
Impoundments: None	
Substrate Composition: Medium S	and
Bank Material: Medium Sand	
Near Bank Stress: Moderate	
RB Landuse: Residential	
LB Landuse: Natural Forest	

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Severity Scale:

6.0

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.17357 Longitude: -81.98167

Severity Scale: 3.25-Low

County: Desoto Site Number: PI313 Reach Length: 85 ft.

Landowner: Brent A Garrod





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
вені:	High (34.61)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Partial	0.25



Substrate Composition: Medium Sand

Bank Material: Medium Sand

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Near Bank Stress: High

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Severity Scale:

3.25

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.17176 Longitude: -81.98217

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI314 Reach Length: 89 ft.

Landowner: Marie Ellen Drymon





PI314 Bankfull Depth Profile

Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
ВЕНІ:	High (36.82)	1	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	Present	1.5	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	0 ft.	0.75	
LB: Riparian Buffer:	100 ft.	0	
RB: Floodplain Access:	Partial	0.25	
LB: Floodplain Access:	Full	0	



RB Landuse: Residential

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Severity Scale:

6.0

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.19967 Longitude: -81.98788

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI315 Reach Length: 51 ft.

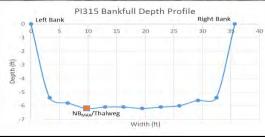
Landowner: Robert Griffiths V







Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.02)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25



NB _{MAX} /Thalweg
Width (ft)
Additional Site Features
Stream Channel Woody Material: None
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Medium Sand
Near Bank Stress: High
RB Landuse: Transportation
LB Landuse: Transportation

Notes: Hwy 72 bridge; 303d: Impaired - Public Water Supply (DO & BOD)

Partial

Severity Scale:

0.25

5.5

Restoration Option 2 or 3

RB: Floodplain Access: LB: Floodplain Access:

Shell Creek

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.96845 Longitude: -81.8754

Severity Scale: 1.75-Low

County: Charlotte Site Number: PI317 Reach Length: 24 ft.

Landowner: Miles Walker Hall





Risk Factor	Ranking	
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.54)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0



Notes: 303d: Impaired – Chloride, DO, Specific Conductivity and TDS

100 ft.

Full

Partial

Severity Scale:

0

0

0.25

1.75

Bank Material: Sand

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Restoration Option 2 or 3

LB: Riparian Buffer:

RB: Floodplain Access:

Shell Creek

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.96905 Longitude: -81.84633

Severity Scale: 2.25-Low

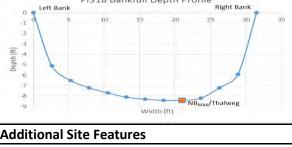
County: Charlotte Site Number: PI318 Reach Length: 55 ft.

Landowner: Charlotte County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.65)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



	Severity Scale:	2.25	LB Landuse: Natural Forest
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: High
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Mdoerate
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)

Notes: 303d: Impaired – Chloride, DO, Specific Conductivity and TDS

Restoration Option 2 or 3

Shell Creek

Watershed: Peace River

Subwatershed: Upper Shell Creek

Latitude: 26.96946 Longitude: -81.84399

Severity Scale: 2.25-Low

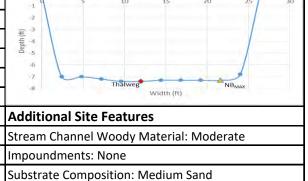
County: Charlotte Site Number: PI319 Reach Length: 50 ft.

Landowner: Charlotte County





Ranking	Score	
Good	0	
None	0	
Active	1	
High (34.79)	1	
No Evidence	0	
None	0	
None	0	
Normal	0	
None	0	
100 ft.	0	
100 ft.	0	
	Good None Active High (34.79) No Evidence None None None 100 ft.	



Bank Material: Sand

Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0.25

0

2.25

PI319 Bankfull Depth Profile

Notes: 303d: Impaired – Chloride, DO, Specific Conductivity and TDS

Partial

Full

Severity Scale:

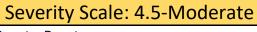
Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.17159 Longitude: -81.98177



County: Desoto Site Number: PI320 Reach Length: 121 ft.

Landowner: Hector R Moran





		Edition of the same
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.62)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

Severity Scale:

0

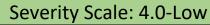
4.5

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.17174 Longitude: -81.98080



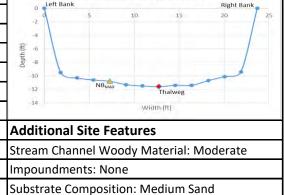
County: Desoto Site Number: PI321 Reach Length: 250 ft.







Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.97)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0

4.0

PI321 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.17002 Longitude: -81.98142



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (21.77)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	Present	1.5
Pipe Discharge:	Present	1.5
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

6.75

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Restoration Option 1

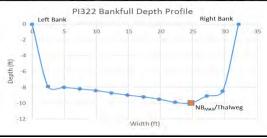
LB: Floodplain Access:

Severity Scale: 6.75-Moderate

County: Desoto Site Number: PI322 Reach Length: 580 ft.

Landowner: Ely William Brewster Jr





Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Residential
LB Landuse: Natural Forest

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.16805 Longitude: -81.98046

Severity Scale: 5.0-Moderate

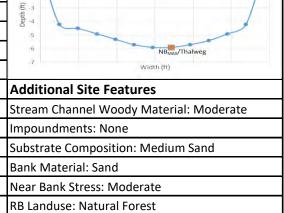
County: Desoto Site Number: Pl323 Reach Length: 200 ft.

Landowner: Martin D and Susan E Raskie





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.59)	1
Local NPSP:	No Evidence	0
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0
LB: Floodplain Access:	Partial	0.25



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Severity Scale:

5.0

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.16690 Longitude: -81.97968

Severity Scale: 2.75-Low

County: Desoto Site Number: PI324 Reach Length: 150 ft.

Landowner: Stephen John Krogel





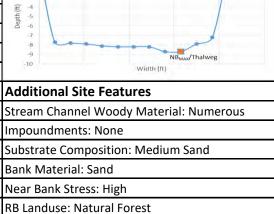
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.91)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100	0
LB: Riparian Buffer:	100	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

2.75



LB Landuse: Natural Forest

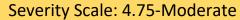
Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.16521 Longitude: -81.97775



County: Desoto Site Number: PI325 Reach Length: 158 ft.

Landowner: Spanish Trail Land and Cattle



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.09)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

1
Additional Site Features
Stream Channel Woody Material: Extensive
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Severity Scale:

4.75

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.16491 Longitude: -81.97659

Severity Scale: 3.25-Low

County: Desoto Site Number: Pl326 Reach Length: 160 ft.

Landowner: Douglas M & Sandra D Page

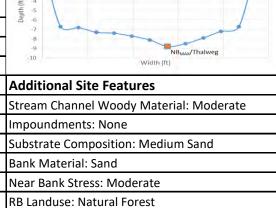




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.07)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Partial

Severity Scale:



LB Landuse: Natural Forest

0.25

3.25

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.16105 Longitude: -81.97516

Severity Scale: 4.5-Moderate

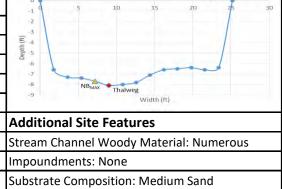
County: Desoto Site Number: PI327 Reach Length: 215 ft.

Landowner: TIITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.40)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Bank Material: Sand

0

4.5

Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

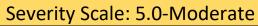
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.15953 Longitude: -81.97331



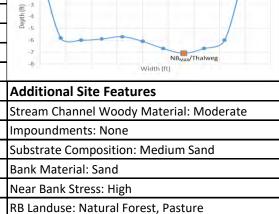
County: Desoto Site Number: PI328 Reach Length: 175 ft.

Landowner: TIITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.93)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



LB Landuse: Natural Forest

0.25

5.0

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.16038 Longitude: -81.96816

Severity Scale: 3.25-Low

County: Desoto Site Number: PI329 Reach Length: 190 ft.

Landowner: TIITF/State of Florida





The state of the s		Control of the Contro
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (31.93)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0

Full

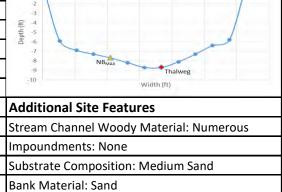
Partial

Severity Scale:

0

0.25

3.25



Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI329 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.15924 Longitude: -81.96779 Severity Scale: 4.25-Moderate

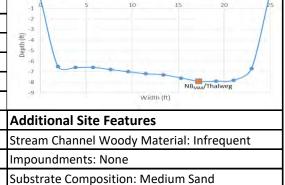
County: Desoto Site Number: PI330 Reach Length: 315 ft.

Landowner: TIITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
ВЕНІ:	High (35.74)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand Near Bank Stress: High

0

4.25

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI330 Bankfull Depth Profile

Notes: 303d: Impaired - Public Water Supply (DO & BOD)

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.50454 Longitude: -81.80436

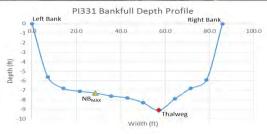
Severity Scale: 3.25-Low

County: Hardee Site Number: PI331 Reach Length: 265

Landowner: Hardee County BCC



Risk Factor	Ranking	Score	Left Ban
Pfankuch-Channel Stability:	Poor	1.5	-1 0.0
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	-5 -6 (f)
BEHI:	Moderate (23.16)	0.5	ĕ -6 -7
Local NPSP:	No Evidence	0	-8 -9
Shoring Structures:	None	0	-10
Pipe Discharge:	None	0	Additiona
Water Odor:	Normal	0	Stream Cha
Fish Passage Barrier:	None	0	Impoundm
RB: Riparian Buffer:	100 ft.	0	Substrate C
LB: Riparian Buffer:	60 ft.	0.25	Bank Mate
RB: Floodplain Access:	Full	0	Near Bank



-9 -10 Thalweg Width (rt.)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Natural forest
LB Landuse: Natural forest, Recreation

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

3.25

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.50903 Longitude: -81.79713

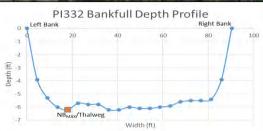


County: Hardee Site Number: PI332 Reach Length: 264 ft. Landowner: EIP Florida LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (13.76)	0
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



-7 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: High
RB Landuse: Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Severity Scale:

0.25

1.25

Restoration Option 1

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.51109 Longitude: -81.79532

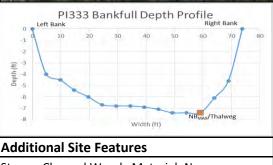
Severity Scale: 1.75-Low

County: Hardee Site Number: PI333 Reach Length: 138 ft. Landowner: EIP Florida LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (29.33)	0.5
Local NPSP:	No evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Partial

Full

Severity Scale:

0.25

0

1.75

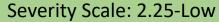
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.51372 Longitude: -81.79198



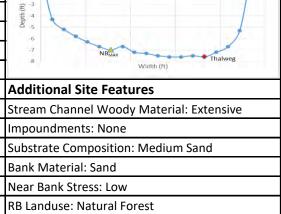
County: Hardee Site Number: PI334 Reach Length: 114 ft. Landowner: EIP Florida LLC





PI334 Bankfull Depth Profile

Ranking	Score
Good	0
None	0
Active	1
High (30.74)	1
No Evidence	0
None	0
None	0
Normal	0
None	0
100 ft.	0
100 ft.	0
	Good None Active High (30.74) No Evidence None None None 100 ft.



LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Full

Partial

Severity Scale:

0

0.25

2.25

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.51630 Longitude: -81.79236

Severity Scale: 1.5-Low

County: Hardee Site Number: PI335 Reach Length: 185 ft. Landowner: EIP Florida LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.97)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0

(j) 4 -6 -6 -10 NB _{MM} /Thalweg		
-12 Width (ft)		
Additional Site Features		
Stream Channel Woody Material: Numerous		
Impoundments: None		
Substrate Composition: Medium Sand		
Bank Material: Sand		
Near Bank Stress: High		

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0

1.5

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.54300 Longitude: -81.79153

Severity Scale: 4.5-Moderate

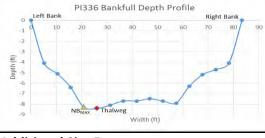
County: Hardee Site Number: PI336 Reach Length: 101 ft.

Landowner: Eason, J W Jr. and Betty Ann





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.16)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



-9 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest
LB Landuse: Pasture. Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

0.25

4.5

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.57229 Longitude: -81.80223

Severity Scale: 4.0-Low

County: Hardee Site Number: PI337 Reach Length: 85 ft.

Landowner: Cynthia C. Parrish



Risk Factor	Ranking	Score	PI337 Bankfull Depth Profile Left Bank Right Bank	
Pfankuch-Channel Stability:	Good	0	-1 0 10 20 30 40 50 60 0 80	
Channel Alteration:	None	0	-2	
Bank Erosion:	Active	1	14 (g) 44 -5 -6 -6	
BEHI:	High (33.93)	1	-7	
Local NPSP:	Obvious Sources	1.5	-9 NB _{MAX}	
Shoring Structures:	None	0	-10 Width (ft)	
Pipe Discharge:	None	0	Additional Site Features	
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate	
Fish Passage Barrier:	None	0	Impoundments: None	
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand	
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand	
RB: Floodplain Access:	Full	0	Near Bank Stress: Low	
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest	
	Severity Scale:	4.0	LB Landuse: Pasture, Natural Forest	

Notes: Short floodplain or bankfull bench; Cattle fenced out; Inside meander; 303d: Impaired -

Aquatic Life Harvesting (mercury in fish tissue), Chlorophyll-A

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.61982 Longitude: -81.80216

Severity Scale: 2.5-Low

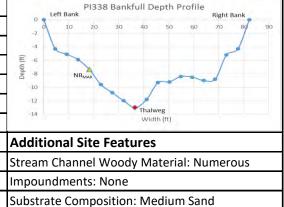
County: Hardee Site Number: PI338 Reach Length: 169 ft.

Landowner: TIITF/State of Florida





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.18)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand

0.25

2.5

Near Bank Stress: Moderate

LB Landuse: Natural Forest

RB Landuse: Recreation, Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (mercury in fish tissue)

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.29383 Longitude: -81.85000

LB: Floodplain Access:

Restoration Option 1

Severity Scale: 3.75-Low

County: Desoto Site Number: PI339 Reach Length: 290 ft. Landowner: PARAISO LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (15.29)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	10 ft.	0.75
RB: Floodplain Access:	Full	0



Impoundments: None

Near Bank Stress: Low

Bank Material: Sandy Clay

Substrate Composition: Medium Sand

RB Landuse: Residential, Natural Forest

Severity Scale:	3.75	LB Landuse: Natural Forest, Pasture
Notes: Little rock debris - trash; cattle or horse	pasture; fenced	out; 303d - Impaired: Aquatic Life
Harvesting (fecal coliform, mercury in fish tissue	2)	

0.25

Partial

Watershed: Peace River

Subwatershed: McBride Branch

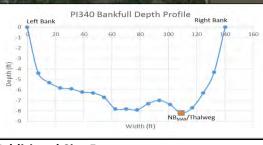
Latitude: 27.29331 Longitude: -81.85373

Severity Scale: 3.25-Low

County: Desoto Site Number: PI340 Reach Length: 282 ft.



Risk Factor	Ranking	Score	PI340 Ba
Pfankuch-Channel Stability:	Good	0	20 40
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	Depth (f)
BEHI:	Low (10.55)	0	-6 -7
Local NPSP:	Obvious Sources	1.5	-8
Shoring Structures:	None	0	-9
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Nor
RB: Riparian Buffer:	40 ft.	0.5	Substrate Compositi
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Hi
LB: Floodplain Access:	Full	0	RB Landuse: Natural



eatures oody Material: Numerous tion: Medium Sand dy Clay igh al Forest, Pasture LB Landuse: Natural Forest, Residential

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

3.25

Severity Scale:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.27829 Longitude: -81.85983



County: Desoto Site Number: PI341 Reach Length: 108 ft.

Landowner: Anthony and Dorothy Werner





STATE OF THE PARTY		
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.29)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0



Near Bank Stress: Low

RB Landuse: Residential

LB Landuse: Natural Forest, Recreation

PI341 Bankfull Depth Profile

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

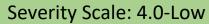
3.5

Severity Scale:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.26422 Longitude: -81.86738



County: Desoto Site Number: PI342 Reach Length: 80 ft.

Landowner: Charlotte A Bragg



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Dank Fracians	Activo	1

RISK Factor	Kanking	Score	PI342 Bankfull Depth Profile Left Bank Right Bank
Pfankuch-Channel Stability:	Good	0	0 20 40 60 80 100 / 120
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	9- pr h (r)
BEHI:	Very High (40.59)	1.5	å .8
Local NPSP:	Slight Potential	0.5	-10 NB _{MAX}
Shoring Structures:	None	0	-12 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Low
LB: Floodplain Access:	Full	0	RB Landuse: Recreation, Natural Forest
	Severity Scale:	4.0	LB Landuse: Natural Forest

Notes: Campsite; 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.25359 Longitude: -81.87567 Severity Scale: 4.25-Moderate

County: Desoto Site Number: PI343 Reach Length:

Landowner: Constructora Limonar LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.23)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

4.25

Full

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.24648 Longitude: -81.88428

Severity Scale: 3.75-Low

County: Desoto Site Number: PI344 Reach Length: 612 ft.

Landowner: Daniel E Lambert





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (16.38)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Partial

Severity Scale:

0.25

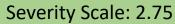
3.75

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.24312 Longitude: -81.88570



County: Desoto Site Number: Pl345 Reach Length: 656 ft.

Landowner: COLLINS CARY B TR &





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (15.28)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



-12	NB _{MAX} /Thalweg Width (ft)
Additional S	Site Features
Stream Chan	nel Woody Material: Infrequent
Impoundmer	nts: None
Substrate Co	mposition: Medium Sand
Bank Materia	al: Sandy Clay
Near Bank St	ress: Moderate
RB Landuse:	Natural Forest
LB Landuse: I	Natural Forest, Pasture

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Partial Severity Scale:

0.25

2.75

Restoration Option 1

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.23797 Longitude: -81.88751

Severity Scale: 2.25-Low

County: Desoto Site Number: PI346 Reach Length: 322 ft.

Landowner: Parker, John W. Sr. & Sue





PI346 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (27.85)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

-6
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Transportation

LB Landuse: Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue); Train track runs approx. 75 ft. from top of bank - cleared riparian vegetation

0

2.25

Full

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.23198 Longitude: -81.88816

Severity Scale: 5.0-Moderate

County: Desoto Site Number: PI347 Reach Length: 644 ft.

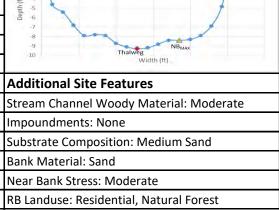
Landowner: Four Marnan Inc.





PI347 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.31)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



LB Landuse: Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

5.0

Full

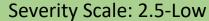
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.23411 Longitude: -81.88760



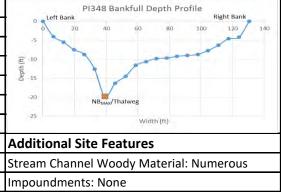
County: Desoto Site Number: PI348 Reach Length: 385 ft.

Landowner: Neal Roy Jr. Estate





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
вені:	High (30.27)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Substrate Composition: Medium Sand

RB Landuse: Natural Forest, Recreation

Bank Material: Sand

0.25

2.5

Near Bank Stress: High

LB Landuse: Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Partial

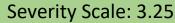
Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.23021 Longitude: -81.88251



County: Desoto Site Number: PI349 Reach Length: 1,650 ft. Landowner: DeSoto County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (35.27)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0



Near Bank Stress: Moderate

LB Landuse: Natural Forest

RB Landuse: Recreation, Natural Forest

PI349 Bankfull Depth Profile

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue);

Partial

Severity Scale:

0.25

3.25

Long reach - some sections with good willows and cypress

Restoration Option 1

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.22926 Longitude: -81.88292

Severity Scale: 3.25-Low

County: Desoto Site Number: PI350 Reach Length:

Landowner: George & Jonica Lempeneau





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	0
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	Width (ft)
BEHI:	High (31.93)	1	≥ -8
Local NPSP:	Slight Potential	0.5	12
Shoring Structures:	None	0	-14
Pipe Discharge:	None	0	Additio
Water Odor:	Normal	0	Stream
Fish Passage Barrier:	None	0	Impour
RB: Riparian Buffer:	40 ft.	0.5	Substra
LB: Riparian Buffer:	100 ft.	0	Bank M
RB: Floodplain Access:	Full	0	Near Ba



RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0.25

3.25

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.22382 Longitude: -81.87945

Severity Scale: 4.0-Low

County: Desoto Site Number: PI351 Reach Length: 355 ft. Landowner: Desoto County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.91)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0



NB _{MAX} / Inalweg
-14 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Commercial
LB Landuse: Natural Forest, Recreation

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Partial Severity Scale:

0.25

4.0

Restoration Option 1

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.21610 Longitude: -81.88634

Severity Scale: 5.0-Moderate

County: Desoto Site Number: PI352 Reach Length: 510 ft.

Landowner: Garner Grove and Cattle Co



A PARTY OF	监控影响	
	Sa Milki	
		15
PI352 Bankfull De	enth Profile	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.08)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	70 ft.	0.25



LB Landuse: Pasture, Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.0

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.21837 Longitude: -81.87807

Severity Scale: 2.25-Low

County: Desoto Site Number: PI353 Reach Length: 128 ft.

Landowner: Garner Grove & Cattle Co Inc





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (31.84)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



PI342 Bankfull Depth Profile

Fish Passage Barrier:

None

O Impoundments: None

RB: Riparian Buffer:

100 ft.

O Substrate Composition: Medium Sand

LB: Riparian Buffer:

100 ft.

O Bank Material: Sand

RB: Floodplain Access:

Full

O Near Bank Stress: Low

LB: Floodplain Access:

Partial

O.25

RB Landuse: Natural Forest

Severity Scale:

LB Landuse: Natural Forest

Notes: 303d - Impaired: Aquatic Life Harvesting (fecal coliform, mercury in fish tissue); just downstream of PI342 - used same data.

Restoration Option 2 or 3

Watershed: Peace River

Subwatershed: Johnson Lake - Peace River

Latitude: 27.21837 Longitude: -81.87807

Severity Scale: 3.75-Low

County: Desoto Site Number: PI354 Reach Length: 128 ft.

Landowner: Susie Robertson





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
ВЕНІ:	High (31.84)	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	100 ft.	0	
LB: Riparian Buffer:	100 ft.	0	



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest

0

0.25

3.75

PI354 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Partial

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.22602 Longitude: -81.99317

Severity Scale: 7.25-Moderate

County: Desoto Site Number: PI355 Reach Length: 180 ft.

Landowner: VHC Management Co.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.65)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Partial	0.25



Near Bank Stress: High

RB Landuse: Pasture

LB Landuse: Pasture

PI355 Bankfull Depth Profile

Notes: Cattle fence present but not preventing cattle from accessing stream; 303d: Impaired -

0

7.25

Full

Severity Scale:

Public Water Supply (BOD & DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.22587 Longitude: -81.99220

Severity Scale: 6.0-Moderate

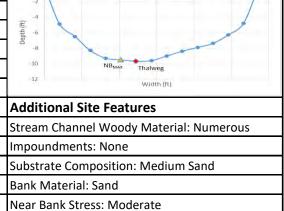
County: Desoto Site Number: PI356 Reach Length: 136 ft.

Landowner: VHC Management Co.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.16)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0



RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI356 Bankfull Depth Profile

Notes: Farm road near bank; 303d: Impaired - Public Water Supply (BOD & DO)

Full

Severity Scale:

0

6.0

Restoration Option 1

Watershed: PI357

Subwatershed: Lower Horse Creek

Latitude: 27.22359 Longitude: -81.99275

Severity Scale: 6.5-Moderate

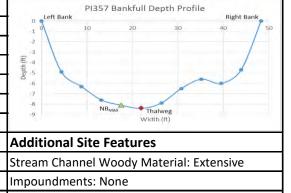
County: Desoto Site Number: PI357 Reach Length: 193 ft.

Landowner: VHC Management Co.





7.50	The state of the s	THE RESERVE OF THE PERSON NAMED IN COLUMN 1
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.08)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75



Substrate Composition: Medium Sand

RB Landuse: Pasture, Natural Forest

Bank Material: Sandy Clay

LB Landuse: Pasture

Near Bank Stress: Moderate

Notes: Fence present but cattle able to access creek; 303d: Impaired - Public Water Supply (BOD & DO)

0

0

6.5

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.22258 Longitude: -81.99321

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI358 Reach Length: 215 ft.

Landowner: VHC Management Co.





		Viv. Talk
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.42)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75



Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Pasture

PI358 Bankfull Depth Profile

Notes: Cattle fence near bank; 303d: Impaired - Public Water Supply (BOD & DO)

Full

Partial

Severity Scale:

0

0.25

5.5

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.22135 Longitude: -81.99448

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI359 Reach Length: 55 ft.

Landowner: VHC Management Co.





PI359 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.45)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
	•	

Full

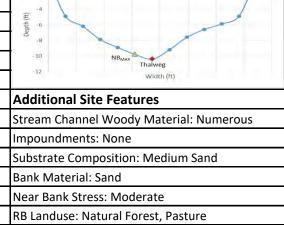
Full

Severity Scale:

0

0

5.5



LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.22148 Longitude: -81.99496

Severity Scale: 6.75-Moderate

County: Desoto Site Number: PI360 Reach Length: 131 ft.

Landowner: VHC Management Co.





PI360 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (39.97)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0

Full

Full

Severity Scale:

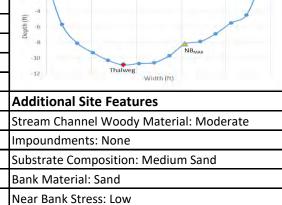
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0

6.75

RB Landuse: Pasture

LB Landuse: Natural Forest



Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21999 Longitude: -81.99406

Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI361 Reach Length: 245 ft.

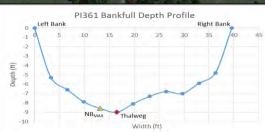
Landowner: VHC Management Co.



5.75

Risk Factor	Ranking	Score	PI361 Ba
Pfankuch-Channel Stability:	Poor	1.5	0 Left Bank 5 10 19
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	6 - 6 (f)
BEHI:	High (33.52)	1	å -6 -7
Local NPSP:	Obvious Sources	1.5	-8 -9 NB _{MAX}
Shoring Structures:	None	0	-10.
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non
RB: Riparian Buffer:	100 ft.	0	Substrate Composition
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Mo
LB: Floodplain Access:	Full	0	RB Landuse: Natural

Severity Scale:



-10 NB _{MAX} Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Extensive
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21886 Longitude: -81.99551

Severity Scale: 6.25-Moderate

County: Desoto Site Number: PI362 Reach Length: 200 ft.

Landowner: VHC Management Co.



Risk Factor	Ranking	Score		PI362	Bankfull D	epth Profil	e all the second	1
Pfankuch-Channel Stability:	Poor	1.5	O Left	ank 10	20	30	Right Bank 40	50
Channel Alteration:	None	0	-2				1	
Bank Erosion:	Mass-wasting	1.5	Depth (ft)					
BEHI:	High (37.40)	1	ag -4				1	

Local NPSP:	Obvious Sources	1.5	-6 NB _{Max} /Thalweg
Shoring Structures:	None	0	-7 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	80 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.25	LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21812 Longitude: -81.99457

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI363 Reach Length: 37 ft.

Landowner: VHC Management Co.





PI363 Bankfull Depth Profile

Right Bank

	Marketon and the second
Ranking	Score
Poor	1.5
None	0
Active	1
Moderate (26.47)	0.5
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
40 ft.	0.5
	Poor None Active Moderate (26.47) Obvious Sources None None Normal None

40 ft.

Full

Full

Severity Scale:

0.5

0

0

5.5



LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

LB: Riparian Buffer:

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21802 Longitude: -81.99496

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI364 Reach Length: 22 ft.

Landowner: VHC Management Co.





PI364 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.22)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Full

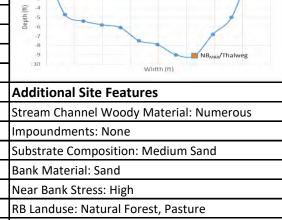
Full

Severity Scale:

0

0

5.5



LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21653 Longitude: -81.99493

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI365 Reach Length: 90 ft.

Landowner: VHC Management Co.





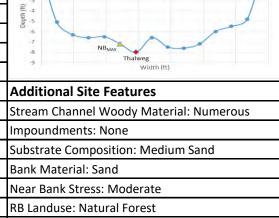
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (31.62)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

6.0



LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21620 Longitude: -81.99537

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI366 Reach Length: 100 ft.

Landowner: VHC Management Co.





PI366 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.98)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Full

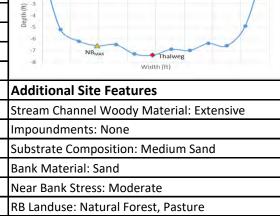
Full

Severity Scale:

0

0

5.5



LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Public Water Supply (BOD & DO)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37002 Longitude: -81.81011

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI367 Reach Length: 250 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.98)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

Full

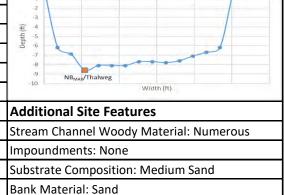
Full

Severity Scale:

0

0

6.5



Near Bank Stress: High

LB Landuse: Pasture, Natural Forest

RB Landuse: Pasture

PI367 Bankfull Depth Profile

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37004 Longitude: -81.81023

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI368 Reach Length: 155 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
	Kuliking	
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.45)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	10 ft.	0.75



Fish Passage Barrier:

None

O Impoundments: None

RB: Riparian Buffer:

40 ft.

0.5 Substrate Composition: Medium Sand

LB: Riparian Buffer:

10 ft.

0.75 Bank Material: Sand

RB: Floodplain Access:

Full

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

Severity Scale:

6.25 LB Landuse: Pasture

303d: Impaired - Fecal Coliform

Restoration Option 1, restore along with PI369

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37024 Longitude: -81.81100

Severity Scale: 6.25-Moderate

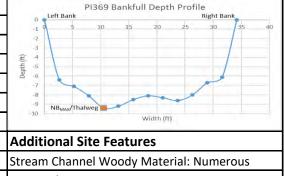
County: Hardee Site Number: PI369 Reach Length: 165 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (26.35)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
I.D. Dinarian Buffor	O ft	0.75



	Severity Scale:	6.25	LB Landuse: Pasture
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Clay
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Pipe Discharge:	None	Ü	Additional Site Features

303d: Impaired - Fecal Coliform

Restoration Option 1, restore along with PI368

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37088 Longitude: -81.81065 Severity Scale: 7.25-Moderate

County: Hardee Site Number: PI370 Reach Length: 580 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (40.35)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

Full

Partial

Severity Scale:

0 Left	Bank	Bankruli De	epth Profile	Right Bank	
-2	10	20	30	40	50
€ 4					
8 - 9 - 6 - 9-	1			-	
-10	NB _M	AX Thalweg Widt	h (ft)		
Addition	al Site F	eatures			
Stream Cl	hannel W	oody Ma	terial: Ir	frequen	t
Impound	ments: No	ne			

Substrate Composition: Medium Sand

Bank Material: Sand

RB Landuse: Pasture

LB Landuse: Pasture

Near Bank Stress: Moderate

0

0.25

7.25

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37210 Longitude: -81.81020

Severity Scale: 7.0-Moderate

County: Hardee Site Number: PI371 Reach Length: 250 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (37.35)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75



Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	7.0	LB Landuse: Pasture

303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37226 Longitude: -81.80072

Severity Scale: 6.75-Moderate

County: Hardee Site Number: Pl372 Reach Length: 250 ft.

Landowner: Ben Hill Griffin Inc.





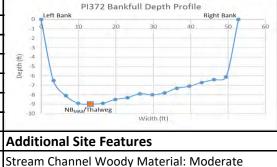
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (29.72)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	0 ft.	0.75

Full

0

0

6.75



LB: Floodplain Access:	Full
	Severity Scale:

Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture

Restoration Option 1

RB: Floodplain Access:

303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37299 Longitude: -81.81113

Severity Scale: 6.75-Moderate

County: Hardee Site Number: PI373 Reach Length: 270 ft.

Landowner: Ben Hill Griffin Inc.





Ranking	Score
Poor	1.5
None	0
Mass-wasting	1.5
High (34.76)	1
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
0 ft.	0.75
40 ft.	0.5
	Poor None Mass-wasting High (34.76) Obvious Sources None None Normal None 0 ft.

Full

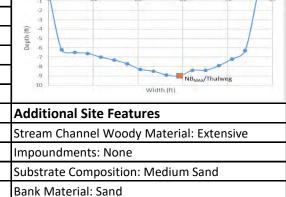
Full

Severity Scale:

0

0

6.75



Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

PI373 Bankfull Depth Profile

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37350 Longitude: -81.81121

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI374 Reach Length: 95 ft.

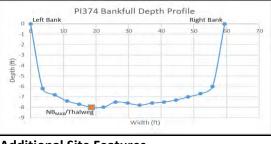
Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score	PI374 Ba
Pfankuch-Channel Stability:	Poor	1.5	0 Left Bank
Channel Alteration:	None	0	-2
Bank Erosion:	Mass-wasting	1.5	-4 -5 -5
BEHI:	High (36.09)	1	-6
Local NPSP:	Obvious Sources	1.5	7 -8 NB _{MAX} /Thalweg
Shoring Structures:	None	0	-9
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Hig
LB: Floodplain Access:	Full	0	RB Landuse: Natural

Severity Scale:

6.5



Additional Site Features

Stream Channel Woody Material: Infrequent
Impoundments: None

Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Pasture
LB Landuse: Pasture, Natural Forest

Notes: Tractor/cattle crossing; 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37406 Longitude: -81.81055

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI375 Reach Length: 45 ft.

Landowner: Ben Hill Griffin Inc.

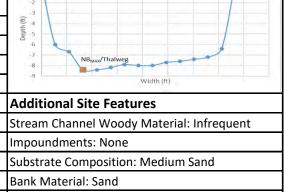


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	PI375 Bankfull Depth Profile
┨	Left Bank Right Bank

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.29)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Full	0

Full

Severity Scale:



Near Bank Stress: High

RB Landuse: Pasture

LB Landuse: Pasture

0

6.5

303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37435 Longitude: -81.81062

Severity Scale: 6.5-Moderate

County: Hardee Site Number: Pl376 Reach Length: 130 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (26.57)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	20 ft.	0.75

0 Left	PI Bank	376 Bar	kfull De	epth Pro		t Bank	
-2	5	10	15	20	25	30	35
4							
Depth (ft)						1	
-8	-	-		4	*		
-10		1	halweg	NB _{MAX}			
-12			Widt	h (ft)			
Addition	nal Sit	e Fea	tures				
Stream C	hanne	l Woo	dy Ma	terial	Num	erous	

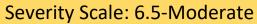
None	0	Additional Site Features
Normal	0	Stream Channel Woody Material: Numerous
None	0	Impoundments: None
40 ft.	0.5	Substrate Composition: Medium Sand
20 ft.	0.75	Bank Material: Sandstone + Clay
Partial	0.25	Near Bank Stress: Low
Full	0	RB Landuse: Pasture, Natural Forest, Farm Rd
Severity Scale:	6.5	LB Landuse: Pasture, Natural forest
	Normal None 40 ft. 20 ft. Partial Full	Normal 0 None 0 40 ft. 0.5 20 ft. 0.75 Partial 0.25 Full 0

303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37501 Longitude: -81.81022



County: Hardee Site Number: PI377 Reach Length: 190 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.26)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

Full

Full

Severity Scale:

0

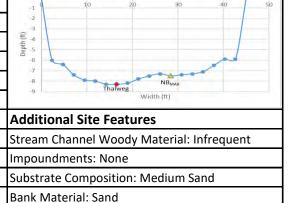
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6.5

Near Bank Stress: Low

RB Landuse: Pastre, Natural Forest

LB Landuse: Pasture, Natural Forest



PI377 Bankfull Depth Profile

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37481 Longitude: -81.80946

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI378 Reach Length: 95 ft.

Landowner: Ben Hill Griffin Inc.



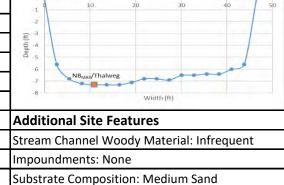


Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.04)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

Full

Full

Severity Scale:



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural forest

0

0

6.5

PI378 Bankfull Depth Profile

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37475 Longitude: -81.80927

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI379 Reach Length: 240 ft.

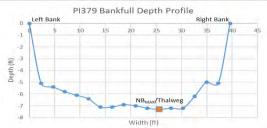
Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score	PI379 I
Pfankuch-Channel Stability:	Poor	1.5	5 10
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	-4 -4 -4 -5 -5
BEHI:	High (36.31)	1	a .5
Local NPSP:	Obvious Sources	1.5	-7
Shoring Structures:	None	0	-8
Pipe Discharge:	None	0	Additional Site Fo
Water Odor:	Normal	0	Stream Channel Wo
Fish Passage Barrier:	None	0	Impoundments: No
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composi
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: San
RB: Floodplain Access:	Full	0	Near Bank Stress: N
LB: Floodplain Access:	Full	0	RB Landuse: Pastur

Severity Scale:

6.5



-8 Width (ff)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture, Natural Forest

303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37440 Longitude: -81.80907

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI380 Reach Length: 160 ft.

Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.17)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Full

Full

Severity Scale:

0

0

6.0



-9 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest, Pasture

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 29.37396 Longitude: -81.80944

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI381 Reach Length: 65 ft.

Landowner: Ben Hill Griffin Inc.



Risk Factor	Ranking	Score	PI381 Bankfull Depth Profile
Pfankuch-Channel Stability:	Poor	1.5	10 20 30 40
Channel Alteration:	None	0	-2
Bank Erosion:	Mass-wasting	1.5	Depth (ft)
BEHI:	High (33.71)	1	.8
Local NPSP:	Obvious Sources	1.5	Thalweg
Shoring Structures:	None	0	-12 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: ext
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Meedium Sar
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture

Severity Scale:

6.5

the state of the s				
-12 Width (ft)				
Additional Site Features				
Stream Channel Woody Material: extensive				
Impoundments: None				
Substrate Composition: Meedium Sand				
Bank Material: Sand				

LB Landuse: Pasture, Natural Forest

303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37347 Longitude: -81.80971

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI382 Reach Length: 165 ft.

Landowner: Ben Hill Griffin Inc.





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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (28.04)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
I.D. Dia - si D. ff	0.4	0.75



ripe Discharge.	None	U	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pature, Natural Forest
	Severity Scale:	6.5	LB Landuse: Pature, Natural Forest

303d: Impaired - Fecal Coliform

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.21186 Longitude: -81.88622

Severity Scale: 6.5-Moderate

County: Desoto Site Number: PI383 Reach Length: 345 ft.

Landowner: Garner Grove & Cattle Co





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.70)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

0

0

6.5

PI383 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.21015 Longitude: -81.88668

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI384 Reach Length: 475 ft.

Landowner: Garner Grove & Cattle Co



Risk Factor	Ranking	Score	PI384
Pfankuch-Channel Stability:	Poor	1.5	0 LEIT BAINK 20 40
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	-5 Pepth (ft)
BEHI:	High (31.52)	1	-6 -7
Local NPSP:	Obvious Sources	1.5	-8
Shoring Structures:	None	0	-9 1
Pipe Discharge:	None	0	Additional Site F
Water Odor:	Normal	0	Stream Channel W
Fish Passage Barrier:	None	0	Impoundments: No
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composi
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: San
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: H
LB: Floodplain Access:	Full	0	RB Landuse: Pastur



Additional Site Features

Stream Channel Woody Material: Moderate
Impoundments: None

Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

6.0

Severity Scale:

Restoration Option 2 or 3

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.20726 Longitude: -81.88878

RB: Floodplain Access:

LB: Floodplain Access:

Severity Scale: 7.25-Moderate

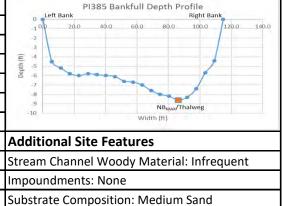
County: Desoto Site Number: PI385 Reach Length: 200 ft.

Landowner: Garner Grove & Cattle Co





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (41.95)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 1, restoration should be done in conjunction with sites PI386 and PI055.

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7.25

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.20687 Longitude: -81.88928

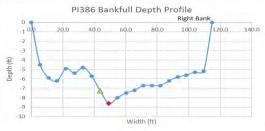
Severity Scale: 6.5-Moderate

County: Desoto Site Number: PI386 Reach Length: 245 ft.

Landowner: Garner Grove & Cattle Co



Risk Factor	Ranking	Score	PI386 Ba
Pfankuch-Channel Stability:	Poor	1.5	1 0 0 20,0 40.0
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	6. 6. 4. (ft)
BEHI:	High (37.72)	1	-7
Local NPSP:	Obvious Sources	1.5	-8
Shoring Structures:	None	0	-10
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Mo
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture,



-10 Width (ff)
Additional Site Features
Stream Channel Woody Material: Extensive
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Severity Scale:

Restoration Option 2, restoration should be done in conjunction with sites PI385 and PI055.

6.5

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.20307 Longitude: -81.88953

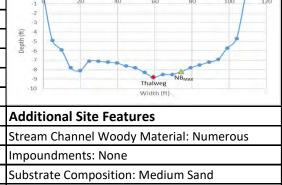
Severity Scale: 6.5-Moderate

County: Desoto Site Number: PI387 Reach Length: 315 ft. Landowner: GERACI D D TR





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (43.07)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	80 ft.	0.25
RB: Floodplain Access:	Partial	0.25



Bank Material: Sand

0

6.5

Near Bank Stress: Moderate

LB Landuse: Natural Forest

RB Landuse: Natural Forest, Pasture

PI387 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

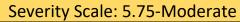
Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.18323 Longitude: -81.88690



County: Desoto Site Number: PI388 Reach Length: 160 ft. Landowner: GERACI D D TR





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.93)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



-14 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest. Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

5.75

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17935 Longitude: -81.88579

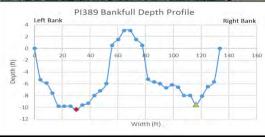
Severity Scale: 6.5-Moderate

County: Desoto Site Number: PI389 Reach Length: 180 ft. Landowner: GERACI D D TR





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (41.94)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Partial	0.25



-12 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: Woody Material Jams
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest, Pasture

Notes: Island; 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

0

6.5

Full

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17918 Longitude: -81.88514

Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI390 Reach Length: 210 ft.

Landowner: PULLING JOHN A JR



0

0

5.75

Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	Depth (ft)
BEHI:	High (35.89)	1	De
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Add
Water Odor:	Normal	0	Stre
Fish Passage Barrier:	None	0	Imp
RB: Riparian Buffer:	100 ft.	0	Sub
LB: Riparian Buffer:	0 ft.	0.75	Ban



-12
Width (ft)
Additional Site Features
Stream Channel Woody Material: Extensive
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Pasture
LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

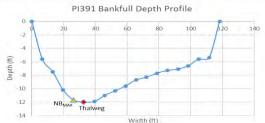
Latitude: 27.17879 Longitude: -81.89433

Severity Scale: 5.0-Moderate

County: Desoto Site Number: PI391 Reach Length: 210 ft. Landowner: GERACI D D TR



Risk Factor	Ranking	Score	PI391 B
Pfankuch-Channel Stability:	Poor	1.5	20 40
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	-6 (f) -6
BEHI:	Moderate (27.21)	0.5	-10
Local NPSP:	Obvious Sources	1.5	12 NB _{MAX} Thalweg
Shoring Structures:	None	0	-14
Pipe Discharge:	None	0	Additional Site Fe
Water Odor:	Normal	0	Stream Channel Wo
Fish Passage Barrier:	None	0	Impoundments: Nor
RB: Riparian Buffer:	100 ft.	0	Substrate Compositi
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Hi
LB: Floodplain Access:	Full	0	RB Landuse: Pasture



-14 Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue)

5.0

Severity Scale:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.17912 Longitude: -81.89562

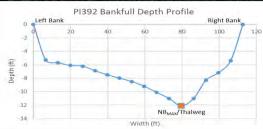
Severity Scale: 6.75-Moderate

County: Desoto Site Number: PI392 Reach Length: 320 ft. Landowner: GERACI D D TR





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (39.39)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LD. Dinarian Duffor	40 ft	0.5



LOCUITY OF I	C D T T C C C C C C C C C C C C C C C C		NB _{Max} / Inalweg
Shoring Structures:	None	0	-14 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.75	LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Aquatic Life Harvesting (fecal coliform, mercury in fish tissue); Tall fence along bank w/parts broken down and second fence built along gaps.

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.16909 Longitude: -81.90128

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI393 Reach Length: 90 ft. Landowner: GERACI D D TR



Ranking	Score	PI393 Bankfull Depth Profile Left Bank Right Bank		
Poor	1.5	20 40 60 80 100 120 140		
None	0	-4		
Active	1	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0		
High (31.01)	1	3 -10 -12		
Obvious Sources	1.5	-14		
None	0	-16 Width (ft)		
None	0	Additional Site Features		
Normal	0	Stream Channel Woody Material: Extensive		
None	0	Impoundments: None		
40 ft.	0.5	Substrate Composition: Medium Sand		
100 ft.	0	Bank Material: Sand		
Full	0	Near Bank Stress: Moderate		
Full	0	RB Landuse: Natural Forest, Pasture		
Severity Scale:	5.5	LB Landuse: Natural Forest, Pasture		
	Poor None Active High (31.01) Obvious Sources None None Normal None 40 ft. 100 ft. Full Full	Poor 1.5 None 0 Active 1 High (31.01) 1 Obvious Sources 1.5 None 0 None 0 Normal 0 None 0 40 ft. 0.5 100 ft. 0 Full 0 Full 0		

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.16624 Longitude: -81.90263

Severity Scale: 5.25-Moderate

County: Desoto Site Number: PI394 Reach Length: 700 ft. Landowner: GERACI D D TR





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.31)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

-2	20	40	60	80	100	120	140
8 9 4	4						
-10 Dep	1			-			
-12 -14		NB _{MAX} /Tha					
			Widt	h (ft)			

•	
0	Additional Site Features
0	Stream Channel Woody Material: Numerous
0	Impoundments: None
0	Substrate Composition: Medium Sand
0	Bank Material: Sand
0	Near Bank Stress: Moderate
0.25	RB Landuse: Natural Forest, Pasture
5.25	LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Partial

Severity Scale:

Restoration Option 1

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.16504 Longitude: -81.90207

Severity Scale: 2.75-Low

County: Desoto Site Number: PI395 Reach Length: 450 ft.

Landowner: PEACE RIVER CHARTERS LLC





		SECURIOR STATES
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	Low (13.15)	0
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0

-6 ## -8 -10 -12 -14 NB _{MM} /Thalweg Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Clay
Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

2.75

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.1550 Longitude: -81.92175

Severity Scale: 3.25-Low

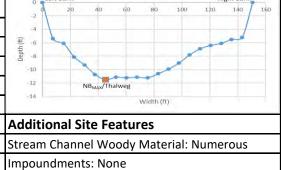
County: Desoto Site Number: PI396 Reach Length: 780 ft.

Landowner: ROBERTSON SUSIE TR





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.01)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
	-	



Substrate Composition: Medium Sand

Bank Material: Sand

0.25

3.25

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Partial

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.15582 Longitude: -81.92352

Severity Scale: 4.25-Moderate

County: Desoto Site Number: PI397 Reach Length: 600 ft.

Landowner: ROBERTSON FAMILY LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (37.04)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	70 ft.	0.25
LB: Riparian Buffer:	100 ft.	0



Substrate Composition: Medium Sand

RB Landuse: Natural Forest, Pasture

Bank Material: Sand

Near Bank Stress: Moderate

LB Landuse: Natural Forest

0

0

4.25

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.14689 Longitude: -81.93165

Severity Scale: 4.25-Moderate

County: Desoto Site Number: PI398 Reach Length: 575 ft.

Landowner: JOHNSON HOMESTEAD LLC



Risk Factor	Ranking	Score	PI398 Bankfull Depth Profile Right Bank	
Pfankuch-Channel Stability:	Poor	1.5	0 20 40 60 80 100 120 140 16	
Channel Alteration:	None	0	-4	
Bank Erosion:	Active	1	8	
BEHI:	Low (10.69)	0	-10 -12 NB _{Max}	
Local NPSP:	Obvious Sources	1.5	-14 Thalweg	
Shoring Structures:	None	0	-16 Width (ft)	
Pipe Discharge:	None	0	Additional Site Features	
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous	
Fish Passage Barrier:	None	0	Impoundments: None	
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand	
LB: Riparian Buffer:	100 ft.	0	Bank Material: Clay	
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate	
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture	
	Severity Scale:	4.25	LB Landuse: Natural Forest, Pasture	

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River Subwatershed: Johnson Lake

Latitude: 27.14033 Longitude: -81.93670

Severity Scale: 4.5-Moderate

County: Desoto Site Number: PI399 Reach Length: 550 ft.

Landowner: ROBERTSON SUSIE TR





		20 mg / 10 mg
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (12.95)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	60 ft.	0.25



Local IVI SI .	Obvious Sources	1.5	, in the second
Shoring Structures:	None	0	-14 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	4.5	LB Landuse: Natural Forest

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.13781 Longitude: -81.94142

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI400 Reach Length: 130 ft. Landowner: HAU II LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (21.95)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

Right Bank

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

0

0

5.5

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.13738 Longitude: -81.94576

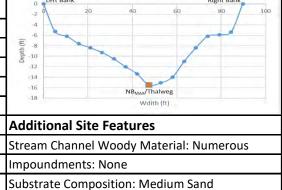
Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI401 Reach Length: 115 ft. Landowner: HAU II LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (21.75)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



Bank Material: Sandy Clay

RB Landuse: Pasture

Near Bank Stress: Moderate

LB Landuse: Natural Forest

0

0

5.75

PI401 Bankfull Depth Profile

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Full

Full

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.13329 Longitude: -81.95090

Severity Scale: 2.75-Low

County: Desoto Site Number: PI402 Reach Length: 370 ft. Landowner: HAU II LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (16.33)	0
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
	400 (



	Severity Scale:	2.75	LB Landuse: Natural Forest
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Riparian Buffer:	100 ft.	0	Bank Material: Clay
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	-14 Width (ft)
Local NPSP:	No Evidence	0	NB _{MAX} /Thalweg

Notes: 303d: Impaired - Aquatic Life Harvesting (mercury in fish tissue)

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37563 Longitude: -81.79790

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI403 Reach Length: 115 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.32)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:



Substrate Composition: Medium Sand

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

Bank Material: Sand

0

6.25

Near Bank Stress: Low

PI403 Bankfull Depth Profile

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37623 Longitude: -81.79944

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI404 Reach Length: 520 ft.

Left Bank

Landowner: Ben Hill Griffin Inc.





PI404 Bankfull Depth Profile

Right Bank

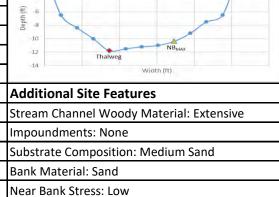
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.35)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	20 ft.	0.75
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

6.5



RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

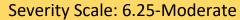
Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37329 Longitude: -81.80103



County: Hardee Site Number: PI405 Reach Length: 350 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (35.97)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Partial

Full

Severity Scale:

0.25

0

6.25



Width (ft)
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Pasture
LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

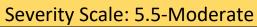
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37253 Longitude: -81.80000



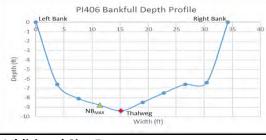
County: Hardee Site Number: PI406 Reach Length: 400 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.92)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25



	Severity Scale:	5.5	LB Landuse: Natural Forest, Pasture	
B: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture	
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate	
.B: Riparian Buffer:	60 ft.	0.25	Bank Material: Sandy Clay	
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand	
Fish Passage Barrier:	None	0	Impoundments: None	
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent	
Pipe Discharge:	None	0	Additional Site Features	
Shoring Structures:	None	0	Width (ft)	

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37171 Longitude: -81.80099

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI408 Reach Length: 420 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very Low (7.69)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75



Shoring Structures:	None	0	-9 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	5.0	LB Landuse: Commercial

Notes: 303d: Impaired - Fecal Coliform; Land adjacent to bank has been cleared and excavated by DOT to create wetland habitat, but is producing high runoff since it was not stabilized.

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37136 Longitude: -81.80219

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI408 Reach Length: 250 ft.

Landowner: Ben Hill Griffin Inc.





PI408 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.80)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

-5 -5 -6 -7 -8 -9 -10 NB _{MA} /Thalweg Width (ft)		
Additional Site Features		
Stream Channel Woody Material: Extensive		
Impoundments: None		
Substrate Composition: Medium Sand		
Bank Material: Sandy Clay		
Near Bank Stress: High		
RB Landuse: Pasture, Natural Forest		

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

RB: Floodplain Access:

LB: Floodplain Access:

Restoration Option 1, restoration should be done in conjunction with site PI407

Full Partial

Severity Scale:

0

0.25

5.75

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: -27.37016 Longitude: -81.80403

Severity Scale: 7.0-Moderate

County: Hardee Site Number: PI409 Reach Length: 500 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (41.30)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75

Full

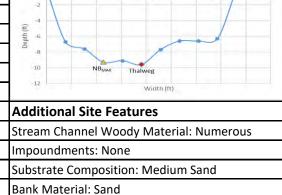
Full

Severity Scale:

0

0

7.0



Near Bank Stress: Moderate

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

PI409 Bankfull Depth Profile

Right Bank

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37150 Longitude: -81.80498

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI410 Reach Length: 210 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.64)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5

40 ft.

Full

Full

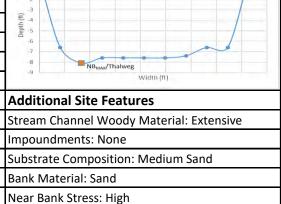
Severity Scale:

0.5

0

0

5.5



RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

LB: Riparian Buffer:

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37194 Longitude: -81.80422

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI411 Reach Length: 1,120 ft.

Landowner: Ben Hill Griffin Inc.





PI411 Bankfull Depth Profile

Right Bank

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.36)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Full

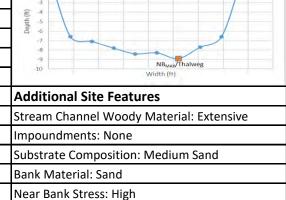
Full

Severity Scale:

0

0

6.0



RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37230 Longitude: -81.80470

Severity Scale: 6.75-Moderate

County: Hardee Site Number: PI412 Reach Length: 680 ft.

Landowner: Ben Hill Griffin Inc.



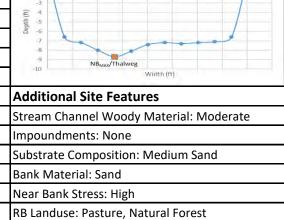


Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (37.42)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5

Full

Full

Severity Scale:



LB Landuse: Pasture, Natural Forest

0

0

6.75

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37194 Longitude: -81.80422

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI411 Reach Length: 530 ft.

Landowner: Ben Hill Griffin Inc.



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E TO GEN	PM13 Bankfu	Il Denth Profi	le	

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.54)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

6.25

- Opth		
-10		
-12	NB _{MAX} /Thalweg Width (ft)	
	width (it)	
Additional Site Fe	atures	
Stream Channel Woody Material: Numerous		
Impoundments: None		
Substrate Composition: Medium Sand		
Bank Material: Sand		
Near Bank Stress: Moderate		
RB Landuse: Pasture	e, Natural Forest	
LB Landuse: Pasture	, Natural Forest	

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.27312 Longitude: -81.80613

Severity Scale: 6.75-Moderate

County: Hardee Site Number: PI414 Reach Length: 370 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (35.50)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0



Bank Material: Sand

Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

Severity Scale: 6.75 LB Landuse: Pasture, Natural Forest

Partial

0.25

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37299 Longitude: -81.80750

Severity Scale: 6.5-Moderate

County: Hardee Site Number: PI415 Reach Length: 465 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.79)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75



			- NB _{MAX} /Inalweg
Shoring Structures:	None	0	-9 Width (ff)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	6.5	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform; Middle section of reach not as bad as upper/lower reach - greater root depth and surface protection in middle.

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37402 Longitude: -81.80852

Severity Scale: 7.0-Moderate

County: Hardee Site Number: PI416 Reach Length: 310 ft.

Landowner: Ben Hill Griffin Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (38.95)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

Full

Full

Severity Scale:



Substrate Composition: Medium Sand

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Bank Material: Sand

Near Bank Stress: Moderate

0

0

7.0

PI416 Bankfull Depth Profile

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.37353 Longitude: -81.80897

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI417 Reach Length: 65 ft.

Landowner: Ben Hill Griffin Inc.



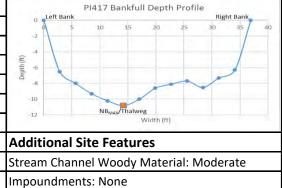


Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.28)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5

Full

Full

Severity Scale:



Substrate Composition: Medium Sand

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Bank Material: Clay

Near Bank Stress: Moderate

0

0

5.5

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40631 Longitude: -81.74516



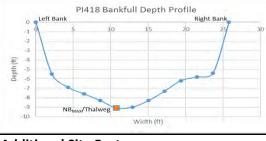
County: Hardee Site Number: PI418 Reach Length: 360 ft.

Landowner: The Property LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (39.83)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25



horing Structures:	Present	1.5	-10 Width (ff)
Pipe Discharge:	None	0	Additional Site Features
Vater Odor:	Normal	0	Stream Channel Woody Material: Moderate
ish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium sand
B: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
B: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture
	Severity Scale:	8.0	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40536 Longitude: -81.74487

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI419 Reach Length: 100 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
ВЕНІ:	High (35.22)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	60 ft.	0.25

Full

Partial

Severity Scale:

0

0.25

5.5



-9 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Pasture. Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40471 Longitude: -81.74500

Severity Scale: 4.75-Moderate

County: Hardee Site Number: PI420 Reach Length: 215 ft.

Landowner: The Property LLC

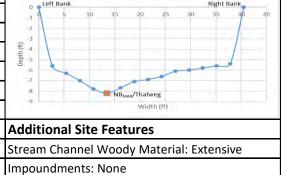




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.28)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0

Partial

Severity Scale:



Substrate Composition: Medium Sand

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

Bank Material: Sand

0.25

4.75

Near Bank Stress: High

PI420 Bankfull Depth Profile

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40448 Longitude: -81.74642

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI421 Reach Length: 140 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (30.36)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5

Partial

Full

Severity Scale:

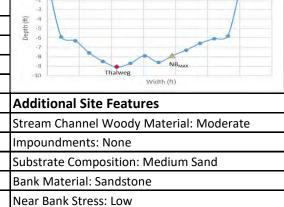
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6.0

RB Landuse: Pasture

LB Landuse: Pasture, Natural Forest



PI421 Bankfull Depth Profile

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40272 Longitude: -81.74577

Severity Scale: 6.75-Moderate

County: Hardee Site Number: PI422 Reach Length: 120 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (40.57)	1.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:



0	Width (ft)
0	Additional Site Features
0	Stream Channel Woody Material: Numerous
0	Impoundments: None
0.75	Substrate Composition: Medium sand
0.75	Bank Material: Sand
0.25	Near Bank Stress: High
0	RB Landuse: Pasture, Natural Forest
6.75	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40217 Longitude: -81.74583

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI424 Reach Length: 65 ft.

Landowner: The Property LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.95)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5

Full

Partial

Severity Scale:



Bank Material: Sand

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

0

0.25

6.0

PI424 Bankfull Depth Profile

Right Bank

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40257 Longitude: -81.74524

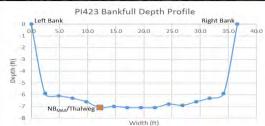
Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI423 Reach Length: 160 ft.

Landowner: The Property LLC



Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Fair	1	1
Channel Alteration:	None	0	1
Bank Erosion:	Active	1	
BEHI:	High (32.95)	1	1
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Α
Water Odor:	Normal	0	S
Fish Passage Barrier:	None	0	Ir
RB: Riparian Buffer:	0 ft.	0.75	S



Local NPSP:	Obvious Sources	1.5	NB _{MAX} /Thalweg
Shoring Structures:	None	0	8 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture, Natural Forest
	Severity Scale:	6.0	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.40076 Longitude: -81.74656

Severity Scale: 6.25-Moderate

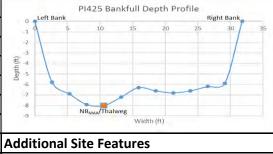
County: Hardee Site Number: PI425 Reach Length: 330 ft.

Landowner: The Property LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (34.83)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	0 ft.	0.75



Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.25	LB Landuse: Natural Forest, Pasture

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.39754 Longitude: -81.74921 Severity Scale: 5.75-Moderate

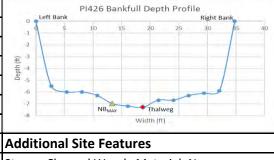
County: Hardee Site Number: PI426 Reach Length: 160 ft.

Landowner: The Property LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (34.16)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5



Shoring Structures:	None	0	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture
	Severity Scale:	5.75	LB Landuse: Natural Forest, Pasture

Notes: Small creek coming in above site w/unpaved road crossing; Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.38950 Longitude: -81.76151

Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI427 Reach Length: 130 ft.

Landowner: WHITE MARSH LLC



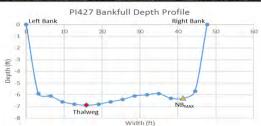
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Risk Factor	Ranking	Score	100.000
Pfankuch-Channel Stability:	Fair	1	0 Left Bank
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	Depth (ft)
BEHI:	High (39.21)	1	ă _5
Local NPSP:	Obvious Sources	1.5	-7
Shoring Structures:	None	0	-8
Pipe Discharge:	None	0	Additional
Water Odor:	Normal	0	Stream Char
Fish Passage Barrier:	None	0	Impoundme
RB: Riparian Buffer:	100 ft.	0	Substrate Co
LB: Riparian Buffer:	40 ft.	0.5	Bank Materi
RB: Floodplain Access:	Partial	0.25	Near Bank S

Full

Severity Scale:



-8 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.39864 Longitude: -81.74778

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI428 Reach Length: 95 ft.

Landowner: The Property LLC





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (36.05)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low (1.12)
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.0	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.39668 Longitude: -81.74976

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI429 Reach Length: 330 ft.

Landowner: The Property LLC





Risk Factor	Ranking	Score	*Bank Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate (29.48)	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low (1.19)
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture, Natural Forest
	Severity Scale:	5.5	LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.39671 Longitude: -81.75104

Severity Scale: 5.5-Moderate

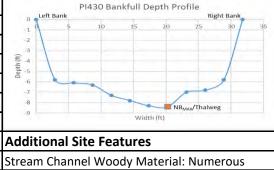
County: Hardee Site Number: PI430 Reach Length: 140 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (30.13)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	40 ft.	0.5	
LB: Riparian Buffer:	60 ft.	0.25	
-			



Pipe Discharge:

None

Normal

Stream Channel Woody Material: Numerous

Fish Passage Barrier:

None

RB: Riparian Buffer:

40 ft.

0.5

Substrate Composition: Medium Sand

LB: Riparian Buffer:

60 ft.

0.25

Bank Material: Sand

RB: Floodplain Access:

Partial

0.25

Near Bank Stress: Moderate

LB: Floodplain Access:

Full

0

RB Landuse: Natural Forest, Pasture

Severity Scale:

5.5

LB Landuse: Pasture, Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.38609 Longitude: -81.76437 Severity Scale: 4.0-Low

County: Hardee Site Number: PI431 Reach Length: 200 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.97)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Partial

Severity Scale:

0.25

4.0

-4 4 4 4 4 4 4 4 4 4 4 4 4		
Additional Site Features		
Stream Channel Woody Material: Extensive		
Impoundments: None		
Substrate Composition: Medium Sand		
Bank Material: Sand		
Near Bank Stress: Moderate		
RB Landuse: Natural Forest, Pasture		

LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.38725 Longitude: -81.76551 Severity Scale: 3.75-Low

County: Hardee Site Number: PI432 Reach Length: 400 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	7
Channel Alteration:	None	0	1
Bank Erosion:	Active	1	
BEHI:	High (36.25)	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	1
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Very Low (0.94)
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	3.75	LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.38675 Longitude: -81.76667

Severity Scale: 3.5-Low

County: Hardee Site Number: PI433 Reach Length: 105 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.50)	1
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0

Partial

Severity Scale:



Bank Material: Sand

0.25

3.5

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

Right Bank

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.38553 Longitude: -81.76711



County: Hardee Site Number: PI434 Reach Length: 500 ft.

Landowner: WHITE MARSH LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Moderate (25.69)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0

Full

Partial

Severity Scale:

0

0.25

3.25

th that are the second of the				
width (ft)				
Additional Site Features				
Stream Channel Woody Material: Extensive				
Impoundments: None				
Substrate Composition: Medium Sand				
Bank Material: Sandy Clay				
Near Bank Stress: Low				
RB Landuse: Natural Forest				

LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43836 Longitude: -81.72526

Severity Scale: 2.5-Low

County: Hardee Site Number: PI435 Reach Length: 620 ft. Landowner: DH Ranch Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (24.87)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0



Substrate Composition: Medium Sand

Bank Material: Sand

RB: Floodplain Access: Full 0 Near Bank Stress: Moderate
LB: Floodplain Access: Full 0 RB Landuse: Natural Forest

Severity Scale: 2.5 LB Landuse: Natural Forest

Notes: Good riparian; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43894 Longitude: -81.72613

Severity Scale: 2.5-Low

County: Hardee Site Number: PI436 Reach Length: 325 ft. Landowner: DH Ranch Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (22.96)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0

Full

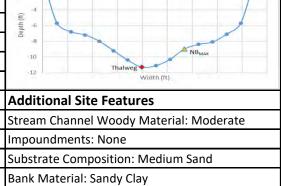
Full

Severity Scale:

0

0

2.5



Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: 303d: NA

RB: Floodplain Access:

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43743 Longitude: -81.72792

Severity Scale: 3.75-Low

County: Hardee Site Number: PI437 Reach Length: 105 ft.

Landowner: Square D Ranch LTD LLP



Risk Factor	Ranking	Score	PI437 Ba
Pfankuch-Channel Stability:	Fair	1	5 10
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	8 - 6 - 6
BEHI:	Moderate (22.77)	0.5	-10
Local NPSP:	Moderate Potential	1	-12
Shoring Structures:	None	0	-14
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Non-
RB: Riparian Buffer:	100 ft.	0	Substrate Composition
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sandy
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Mo
LB: Floodplain Access:	Full	0	RB Landuse: Natural
	Severity Scale:	3.75	LB Landuse: Natural I

Dankina



Additional Site Features

Stream Channel Woody Material: Numerous
Impoundments: None

Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: Cattle fencing approx. 100 ft. from stream; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43576 Longitude: -81.72855

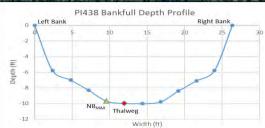
Severity Scale: 3.75-Low

County: Hardee Site Number: PI438 Reach Length: 270 ft.

Landowner: Square D Ranch LTD LLP



Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	County (a)
BEHI:	Moderate (19.57)	0.5	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Ad
Water Odor:	Normal	0	Stı
Fish Passage Barrier:	None	0	lm
RB: Riparian Buffer:	100 ft.	0	Su
LB: Riparian Buffer:	40 ft.	0.5	Ва



	Severity Scale:	3.75	LB Landuse: Natural Forest, Pasture	
B: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest	
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate	
.B: Riparian Buffer:	40 ft.	0.5	Bank Material: Sandy Clay	
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand	
Fish Passage Barrier:	None	0	Impoundments: None	
Water Odor:	Normal	0	Stream Channel Woody Material: Dominating	
Pipe Discharge:	None	0	Additional Site Features	
Shoring Structures:	None	0	-12 Width (ft)	
ocal NPSP:	Slight Potential	0.5	Thalweg	

Notes: 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43511 Longitude: -81.73104

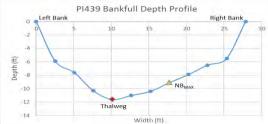
Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI439 Reach Length: 117 ft.

Landowner: J.A.M. Farms Corporation*



Risk Factor	Ranking	Score	PI43
Pfankuch-Channel Stability:	Fair	1	O Left Bank
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	8 9 9
BEHI:	Low (19.20)	0	-10
Local NPSP:	Obvious Sources	1.5	-12
Shoring Structures:	None	0	-14
Pipe Discharge:	None	0	Additional Site
Water Odor:	Normal	0	Stream Channel
Fish Passage Barrier:	None	0	Impoundments:
RB: Riparian Buffer:	40 ft.	0.5	Substrate Compo
LB: Riparian Buffer:	80 ft.	0.25	Bank Material: Sa
RB: Floodplain Access:	Full	0	Near Bank Stress
LB: Floodplain Access:	Full	0	RB Landuse: Nati



-14
Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
mpoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: Low
RB Landuse: Natural Forest, Pasture
B Landuse: Natural Forest

Notes: 303d: NA; *Square C Ranch LTD LLP also owns small portion of site

Severity Scale:

4.25

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43353 Longitude: -81.73100

Severity Scale: 4.0-Low

County: Hardee Site Number: PI440 Reach Length: 120 ft.

Landowner: J.A.M. Farms Corporation





		- 1
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (14.47)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



			Inalweg
Shoring Structures:	None	0	-9 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	4.0	LB Landuse: Natural Forest, Pasture

Notes: 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43338 Longitude: -81.73169

Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI441 Reach Length: 62 ft.

Landowner: J.A.M. Farms Corporation



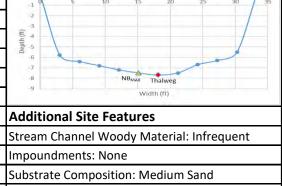


Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Very High (40.89)	1.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	80 ft.	0.25

Full

Full

Severity Scale:



Bank Material: Sand

Near Bank Stress: Low

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest, Pasture

0

0

5.25

Notes: 303d: NA

RB: Floodplain Access:

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.43253 Longitude: -81.73128

Severity Scale: 3.5-Low

County: Hardee Site Number: PI442 Reach Length: 135 ft.

Landowner: J.A.M. Farms Corporation





	724	
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (18.58)	0
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

3.5

## 6 NB _{MAX} NH Thalweg Width (ft)				
Additional Site Features				
Stream Channel Woody Material: Infrequent				
Impoundments: None				
Substrate Composition: Medium Sand				
Bank Material: Sandy Clay				
Near Bank Stress: Low				
RB Landuse: Natural Forest, Pasture				

LB Landuse: Natural Forest, Pasture

Notes: 303d: NA

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.42999 Longitude: -81.73531

Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI443 Reach Length: 400 ft.

Landowner: J.A.M. Farms Corporation



Risk Factor	Ranking	Score	PI443 Ba
Pfankuch-Channel Stability:	Fair	1	0 Left Bank
Channel Alteration:	None	0	-4
Bank Erosion:	Active	1	8 - 8 - 6 (f)
BEHI:	Very High (39.70)	1.5	-10
Local NPSP:	Slight Potential	0.5	-12
Shoring Structures:	None	0	-14
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Nor
RB: Riparian Buffer:	100 ft.	0	Substrate Compositi
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Lo
LB: Floodplain Access:	Full	0	RB Landuse: Natural

Severity Scale:

4.25

O Leit	Bank			Right Bar
-2	10	20	30	40
				/
-4				/
-6				1
-8	-			
-10		-	1	
4-1		-		
-12		NB/	Thalweg	

-14 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.42789 Longitude: -81.74169

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI444 Reach Length: 235 ft.

Landowner: J.A.M. Farms Corporation



Risk Factor	Ranking	Score	PI444 Bankfull Depth Profile Right Bank
Pfankuch-Channel Stability:	Fair	1	O Left Bank Right Bank 100 50 100 150 200 250 300 350 400
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	4 + (4)
BEHI:	High (29.67)	1	-7
Local NPSP:	Moderate Potential	1	-8 -9 NB _{MAX} /Thalweg
Shoring Structures:	None	0	-10 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	5.5	LB Landuse: Pasture

Notes: 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.42693 Longitude: -81.74235

Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI445 Reach Length: 150 ft.

Landowner: J.A.M. Farms Corporation





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.70)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:

0

4.25

O Left Bank								Right	Bank	
	-2	5	10	15	20	25	30	35	49	45
	Depth (ft)									
	-10		-				-			
	-12				Thalwe	g	NB _{MAX}			
	-14				Widt	h (ft)				
	Addit	tional	Site I	Feat	ures					
	Stream	n Chan	nel V	/ood	у Ма	teria	ıl: İnf	requ	ent	
	Impo	undmei	nts: N	lone						

Substrate Composition: Medium Sand

Bank Material: Sandy Clay Near Bank Stress: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

PI445 Bankfull Depth Profile

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.42537 Longitude: -81.74374 Severity Scale: 4.75-Moderate

County: Hardee Site Number: PI446 Reach Length: 105 ft.

Landowner: J.A.M. Farms Corporation



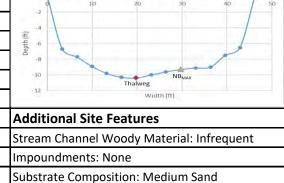
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The state of the s	
	PI446 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (17.80)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	100 ft.	0

Partial

Partial

Severity Scale:



Bank Material: Sandy Clay

LB Landuse: Natural Forest

RB Landuse: Pasture, Natural Forest

Near Bank Stress: Low

0.25

0.25

4.75

Notes: 303d: Impaired - Fecal Coliform

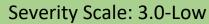
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.42270 Longitude: -81.74210



County: Hardee Site Number: PI447 Reach Length: 326 ft.

Landowner: J.A.M. Farms Corporation



			1
1			
PI447 Ba	nkfull Depth	Profile	

Risk Factor	Ranking	Score
NISK I actor	Nanking	30016
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (16.96)	0
Local NPSP:	Moderate Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Full	0

Partial

Severity Scale:

0.25

3.0

-18 NB _{MAX} Thalweg -18 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.42119 Longitude: -81.74285

Severity Scale: 4.0-Low

County: Hardee Site Number: PI448 Reach Length: 200 ft. Landowner: Kelly W. James





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.10)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

4.0

(1) -4 +4 +4 +5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41973 Longitude: -81.74029

Severity Scale: 3.5-Low

County: Hardee Site Number: PI449 Reach Length: 230 ft.

Landowner: Southern Sisters Family LTD





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (13.89)	0
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5

Full

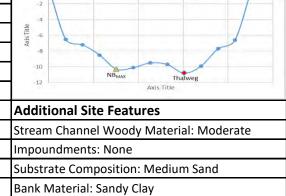
Full

Severity Scale:

0

0

3.5



Near Bank Stress: Low

RB Landuse: Natural Forest

LB Landuse: Natural Forest, Pasture

PI449 Bankfull Depth Profile

Right Bank

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41544 Longitude: -81.74217

Severity Scale: 4.5-Moderate

County: Hardee Site Number: PI450 Reach Length: 380 ft.

Landowner: Southern Sisters Family LTD

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest



Risk Factor	Ranking	Score	PI450 Bankfull Depth Profile Left Bank Right Bank
Pfankuch-Channel Stability:	Fair	1	-1 5 10 15 20 25 30 35
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	19 · 4
BEHI:	Low (17.91)	0	6 7
Local NPSP:	Obvious Sources	1.5	NB _{MAX} /Thalweg
Shoring Structures:	None	0	-9 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High

Partial

Severity Scale:

0.25

4.5

Notes: 303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41380 Longitude: -81.74340

Severity Scale: 5.75-Moderate

County: Hardee Site Number: PI451 Reach Length: 340 ft.

Landowner: Southern Sisters Family LTD





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (31.17)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
I.B. Rinarian Ruffer	20 ft	0.75



Shoring Structures:	None	0	-10 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Agriculture, Nat. Forest
	Severity Scale:	5.75	LB Landuse: Pasture, Nat. Forest, Recreation

Notes: Cattle fence and wooden bridge across river; 303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41253 Longitude: -81.74377

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI452 Reach Length: 325 ft.

Landowner: Southern Sisters Family LTD



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (32.03)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75

Full

Full

Severity Scale:

0

0

6.0

4 ## 5
Additional Site Features
Stream Channel Woody Material: Numerous
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Pasture, Natural Forest
LB Landuse: Natural Forest, Pasture

303d: Impaired - Fecal Coliform

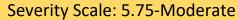
Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41174 Longitude: -81.74393



County: Hardee Site Number: PI453 Reach Length: 100 ft.

Landowner: Donna & James H Webb Jr

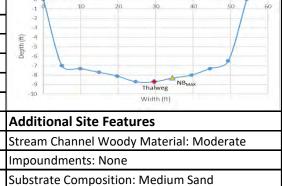




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (35.77)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:



Bank Material: Sand

0

5.75

Near Bank Stress: Moderate

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

303d: Impaired - Fecal Coliform

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41069 Longitude: -81.74362

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI454 Reach Length: 280 ft.

Landowner: Southern Sisters Family LTD



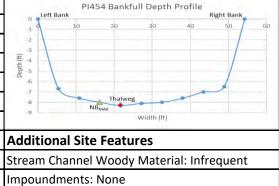


Ranking	Score
Fair	1
None	0
Active	1
High (38.52)	1
Obvious Sources	1.5
None	0
None	0
Normal	0
None	0
0 ft.	0.75
0 ft.	0.75
	Fair None Active High (38.52) Obvious Sources None None Normal None 0 ft.

Full

Partial

Severity Scale:



Substrate Composition: Medium Sand

LB Landuse: Natural Forest, Pasture

Bank Material: Sand

RB Landuse: Pasture

Near Bank Stress: Moderate

0

0.25

6.25

303d: Impaired - Fecal Coliform

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41122 Longitude: -81.74474

Severity Scale: 6.0-Moderate

County: Hardee Site Number: PI455 Reach Length: 135 ft.

Landowner: Donna & James H Webb Jr



Risk Factor	Ranking	Score	PI455 Bankfull Depth Profile
Pfankuch-Channel Stability:	Fair	1	O Left Bank Right Bank 10 20 30 40 50
Channel Alteration:	None	0	-2
Bank Erosion:	Active	1	9-66 (4)
BEHI:	High (36.76)	1	-7
Local NPSP:	Obvious Sources	1.5	-8 -9 NB _{MAX} /Thalweg
Shoring Structures:	None	0	-10 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.0	LB Landuse: Pasture

303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.41040 Longitude: -81.74588

Severity Scale: 6.25-Moderate

County: Hardee Site Number: PI456 Reach Length: 155 ft.

Landowner: Donna & James H Webb Jr





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (39.27)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	20 ft.	0.75
LB: Riparian Buffer:	0 ft.	0.75
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

-1 0	5	10	15	20	25	30	35	40
-3								
-7								
-8 -9			-		lweg			
-10			1	Width (ft)				

	Severity Scale:	6.25	LB Landuse: Pasture
B: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
B: Riparian Buffer:	0 ft.	0.75	Bank Material: Sandy Clay
RB: Riparian Buffer:	20 ft.	0.75	Substrate Composition: Medium Sand
ish Passage Barrier:	None	0	Impoundments: None
Vater Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Pipe Discharge:	None	0	Additional Site Features
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303d: Impaired - Fecal Coliform

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.45489 Longitude: -81.68587

Severity Scale: 4.0-Low

County: Hardee Site Number: PI457 Reach Length: 210 ft.

Landowner: Septem Land Development





PI457 Bankfull Depth Profile

Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Low (12.60)	0
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Full

Severity Scale:

0

4.0

-2 -3 -4 -4 -4 -5 -7 -8 -9 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Clay
Near Bank Stress: Moderate

RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

Notes: 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.45229 Longitude: -81.68897

Severity Scale: 4.5-Moderate

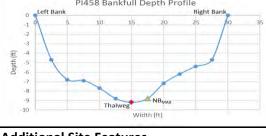
County: Hardee Site Number: PI458 Reach Length: 125 ft.

Landowner: Robertson Farms LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.36)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0
		· ·



Shoring Structures:	None	0	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	4.5	LB Landuse: Natural Forest

Notes: 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.45139 Longitude: -81.69266

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI459 Reach Length: 150 ft.

Landowner: Robertson Farms LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (20.88)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	60 ft.	0.25

Full

Full

Severity Scale:

0

0

5.0



Substrate Composition: Medium Sand

RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest, Pasture

Bank Material: Sandy Clay

Near Bank Stress: Moderate

PI459 Bankfull Depth Profile

Notes: 303d: NA

RB: Floodplain Access:

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.45141 Longitude: -81.69399 Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI460 Reach Length: 81 ft.

Landowner: Robertson Farms LLC





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Fair	1
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.84)	0.5
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25
LB: Floodplain Access:	Full	0

Severity Scale:

5.25



Width (ff)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sandy Clay
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Pasture
LB Landuse: Natural Forest, Pasture

Notes: 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 28.44074 Longitude: -81.72218

Severity Scale: 3.5-Low

County: Hardee Site Number: PI461 Reach Length: 210 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	80 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	3.5	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.4411 Longitude: -81.72198

Severity Scale: 3.25-Low

County: Hardee Site Number: PI462 Reach Length: 82 ft. Landowner: D H Ranch Inc.



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.25	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.440708 Longitude: -81.720396

Severity Scale: 3.0-Low

County: Hardee Site Number: PI463 Reach Length: 99 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44143 Longitude: -81.71952 Severity Scale: 3.5-Low

County: Hardee Site Number: PI464 Reach Length: 120 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	1
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	1
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	3.5	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44155 Longitude: -81.71948

Severity Scale: 4.0-Low

County: Hardee Site Number: PI465 Reach Length: 73 ft. Landowner: D H Ranch Inc.



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Very High	1.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	4.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.4416 Longitude: -81.71902

Severity Scale: 3.75-Low

County: Hardee Site Number: PI466 Reach Length: 168 ft. Landowner: D H Ranch Inc.





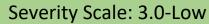
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Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Very High	1.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	80 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.75	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.440969 Longitude: -81.718062



County: Hardee Site Number: PI467 Reach Length: 340 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: NR
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: NR

Full

Severity Scale:

0

3.0

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44158 Longitude: -81.71671

Severity Scale: 3.5-Low

County: Hardee Site Number: PI468 Reach Length: 71 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.5	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44021 Longitude: -81.71519

Severity Scale: 3.5-Low

County: Hardee Site Number: PI469 Reach Length: 224 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	1
Channel Alteration:	None	0	1
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	1
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	3.5	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44075 Longitude: -81.7145

Severity Scale: 3.25-Low

County: Hardee Site Number: PI470 Reach Length: 148 ft. Landowner: D H Ranch Inc.



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
ВЕНІ:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.25	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44216 Longitude: -81.71436

Severity Scale: 2.5-Low

County: Hardee Site Number: PI471 Reach Length: 181 ft.







Risk Factor Ranking *Depth Profile Not Recorded* Score Pfankuch-Channel Stability: Fair 1 None Channel Alteration: 0 1 Bank Erosion: Active BEHI: Moderate 0.5 No Evidence Local NPSP: 0 **Shoring Structures:** None 0 Pipe Discharge: None 0 Water Odor: Normal 0 None 0 Fish Passage Barrier: Impoundments: None 100 ft. 0 RB: Riparian Buffer: Substrate Composition: Sand 100 ft. 0 LB: Riparian Buffer: Bank Material: Clay 0 RB: Floodplain Access: Full Near Bank Stress: Moderate

Full

Severity Scale:

Additional Site Features
Stream Channel Woody Material: Moderate

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA; *Site also located on property owned by Square D Ranch LTD LLP

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Restoration Option 1

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44189 Longitude: -81.71315 Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI472 Reach Length: 68 ft. Landowner: D H Ranch Inc.



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	Very High	1.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	1
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Very High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	4.25	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44227 Longitude: -81.71284

Severity Scale: 3.5-Low

County: Hardee Site Number: PI473 Reach Length: 78 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.5	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44152 Longitude: -81.71283 Severity Scale: 3.0-Low

County: Hardee Site Number: PI474 Reach Length: 71 ft. Landowner: D H Ranch Inc.



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.4417 Longitude: -81.71179

Severity Scale: 3.0-Low

County: Hardee Site Number: PI475 Reach Length: 180 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sandy-clay
RB: Floodplain Access:	Partial	0.5	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest

3.0

LB Landuse: Natural Forest

Severity Scale:

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44019 Longitude: 27.44019

Severity Scale: 3.0-Low

County: Hardee Site Number: PI476 Reach Length: 95 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Partial	0.5	RB Landuse: Natural Forest
	Severity Scale:	3.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: -81.70635 Longitude: 27.44069 Severity Scale: 3.0-Low

County: Hardee Site Number: PI477 Reach Length: 77 ft.







Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.5	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: -81.7054 Longitude: 27.44154

Severity Scale: 3.0-Low

County: Hardee Site Number: PI478 Reach Length: 69 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
ВЕНІ:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Partial	0.5	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44139 Longitude: -81.70535

Severity Scale: 3.25-Low

County: Hardee Site Number: PI479 Reach Length: 115 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High

Partial

Severity Scale:

0.25

3.25

RB Landuse: Natural Forest

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Restoration Option 1

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44092 Longitude: -81.70472

Severity Scale: 3.25-Low

County: Hardee Site Number: PI480 Reach Length: 210 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	1
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Dominating
Fish Passage Barrier:	None	0	Impoundments: Woody Material Jams
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	3.25	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44104 Longitude: -81.70436



County: Hardee Site Number: PI481 Reach Length: 125 ft. Landowner: D H Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
ВЕНІ:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	2.75	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44238 Longitude: -81.70411



County: Hardee Site Number: PI482 Reach Length: 80 ft.

Landowner: D H Ranch Inc.*





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High	1	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: Woody Material Jams
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate

Full

Severity Scale:

RB Landuse: Natural Forest, Pasture

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA; *Site also located on property owned by Grass Valley Ranch Inc.,

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LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44283 Longitude: -81.70413 Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI483 Reach Length: 100 ft.

Landowner: Grass Valley Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	7
Channel Alteration:	None	0	1
Bank Erosion:	Active	1	
BEHI:	Very High	1.5	
Local NPSP:	Moderate Potential	1	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: Woody Material Jams
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest

Severity Scale:

5.25

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44250 Longitude: -81.70283

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI484 Reach Length: 75 ft.

Landowner: Grass Valley Ranch Inc.



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	Moderate Potential	1	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Recreational
	Severity Scale:	5.0	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44257 Longitude: -81.70235 Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI485 Reach Length: 160 ft.

Landowner: Grass Valley Ranch Inc.



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	Depth Profile Not Recorded

Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Moderate Potential	1	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	4.25	LB Landuse: Natural Forest, Recreation

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44462 Longitude: -81.70151 Severity Scale: 4.75-Moderate

County: Hardee Site Number: PI486 Reach Length: 335 ft.

Landowner: Grass Valley Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	4.75	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44451 Longitude: -81.70042

Severity Scale: 4.75-Moderate

County: Hardee Site Number: PI487 Reach Length: 63 ft.

Landowner: Grass Valley Ranch Inc.





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	4.75	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44582 Longitude: -81.69868 Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI488 Reach Length: 135 ft.

Landowner: Guy A. Willard (trustee)





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	7
Channel Alteration:	None	0	7
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	4.25	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44701 Longitude: -81.69861

Severity Scale: 5.0-Moderate

County: Hardee Site Number: PI489 Reach Length: 110 ft.

Landowner: Grass Valley Ranch Inc.





LB Landuse: Natural Forest, Pasture

Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest

Severity Scale:

5.0

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44696 Longitude: -81.69723

Severity Scale: 5.5-Moderate

County: Hardee Site Number: PI490 Reach Length: 125 ft.

Landowner: Guy A. Willard (trustee)





LB Landuse: Pasture, Natural Forest

Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest

5.5

Severity Scale:

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44720 Longitude: -81.69710 Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI491 Reach Length: 100 ft.

Landowner: Guy A. Willard (trustee)





Risk FactorRankingScorePfankuch-Channel Stability:Fair1Channel Alteration:None0Bank Erosion:Active1BEHI:Moderate0.5Local NPSP:Obvious Sources1.5Shoring Structures:None0Pipe Discharge:None0Water Odor:Normal0

Depth Profile Not Recorded

	Severity Scale:	4.25	LB Landuse: Natural Forest, Pasture	
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest	
RB: Floodplain Access:	Full	0	Near Bank Stress: High	
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand	
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand	
Fish Passage Barrier:	None	0	Impoundments: None	
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent	
Pipe Discharge:	None	0	Additional Site Features	
Shoring Structures:	None	0		
Local NPSP:	Obvious Sources	1.5		
BEHI:	Moderate	0.5		

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44785 Longitude: -81.69567 Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI492 Reach Length: 130 ft.

Landowner: Guy A. Willard (trustee)





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture

Severity Scale:

4.25

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: NA

Restoration Option 1

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44851 Longitude: -81.69332 Severity Scale: 5.25-Moderate

County: Hardee Site Number: PI493 Reach Length: 100 ft.

Landowner: Susan L. Alley & Others



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	5.25	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44933 Longitude: -81.69396

Severity Scale: 4.5-Moderate

County: Hardee Site Number: PI494 Reach Length: 95 ft.

Landowner: Susan L. Alley & Others



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Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High

Full

Severity Scale:

0

4.5

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: NA

Restoration Option 1

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.44981 Longitude: -81.69440 Severity Scale: 4.25-Moderate

County: Hardee Site Number: PI495 Reach Length: 190 ft.

Landowner: Susan L. Alley & Others



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Fair	1	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sandy Clay
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	4.25	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: NA

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20001 Longitude: -81.98771

Severity Scale: 7.0-Moderate

County: Desoto Site Number: PI496 Reach Length: 50 ft.

Landowner: V C Hollingsworth SR





Ranking	Score	*Depth Profile Not Recorded*
Poor	1.5	
None	0	
Active	1	
Very High	1.5	
Obvious Sources	1.5	
None	0	
None	0	Additional Site Features
Normal	0	Stream Channel Woody Material: Infrequent
None	0	Impoundments: None
0 ft.	0.75	Substrate Composition: Medium Sand
40 ft.	0.5	Bank Material: Sand
Partial	0.25	Near Bank Stress: High
Full	0	RB Landuse: Pasture
Severity Scale:	7.0	LB Landuse: Natural Forest, Pasture
	Poor None Active Very High Obvious Sources None None Normal None 0 ft. 40 ft. Partial Full	Poor 1.5 None 0 Active 1 Very High 1.5 Obvious Sources 1.5 None 0 None 0 Normal 0 None 0 0 ft. 0.75 40 ft. 0.5 Partial 0.25 Full 0

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20071 Longitude: -81.98651 Severity Scale: 6.25-Moderate

County: Desoto Site Number: PI497 Reach Length: 150 ft.

Landowner: V C Hollingsworth SR





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.25	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20278 Longitude: -81.98621 Severity Scale: 5.25-Moderate

County: Desoto Site Number: PI498 Reach Length: 60 ft.

Landowner: V C Hollingsworth SR

LB Landuse: Natural Forest, Pasture





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	80 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture

5.25

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Severity Scale:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20480 Longitude: -81.98696 Severity Scale: 7.25-Moderate

County: Desoto Site Number: PI499 Reach Length: 40 ft.

Landowner: V C Hollingsworth SR





Risk Factor	Ranking	Score	*Depth Profile
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Very High	1.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site
Water Odor:	Normal	0	Stream Channel V
Fish Passage Barrier:	None	0	Impoundments: N
RB: Riparian Buffer:	0 ft.	0.75	Substrate Compo
I.D. Dinarian Buffor	∩ ft	0.75	Pank Material: Sa

Not Recorded*

BEHI:	Very High	1.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Partial	0.25	RB Landuse: Pasture
	Severity Scale:	7.25	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20547 Longitude: -81.98715 Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI500 Reach Length: 70 ft.

Landowner: V C Hollingsworth SR



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	80 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Medium Sand

0

0.25

5.75

Near Bank Stress: High

RB Landuse: Pasture, Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Full

Partial

Severity Scale:

Restoration Option 1

RB: Floodplain Access:

LB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20667 Longitude: -81.98714

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI501 Reach Length: 250 ft.

Landowner: V C Hollingsworth



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.0	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20741 Longitude: -81.98699 Severity Scale: 6.75-Moderate

County: Desoto Site Number: PI502 Reach Length: 150 ft.

Landowner: V C Hollingsworth





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	7
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	60 ft.	0.25	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: High

t Recorded*

ion: Medium Sand Full LB: Floodplain Access: 0 RB Landuse: Pasture, Natural Forest **Severity Scale:** 6.75 LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20830 Longitude: -81.98616

Severity Scale: 7.0-Moderate

County: Desoto Site Number: PI503 Reach Length: 140 ft.

Landowner: V C Hollingsworth



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	Very High	1.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	60 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	7.0	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20838 Longitude: -81.98688

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI504 Reach Length: 150 ft.

Landowner: V C Hollingsworth





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Poor	1.5
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0

Depth Profile Not Recorded

BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Numerous
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.0	LB Landuse: Natural Forest, Pasture

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20927 Longitude: -81.98734

Severity Scale: 5.5-Moderate

County: Desoto Site Number: PI505 Reach Length: 90 ft.

Landowner: V C Hollingsworth



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	5.5	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20885 Longitude: -81.98814 Severity Scale: 5.25-Moderate

County: Desoto Site Number: PI506 Reach Length: 70 ft.

Landowner: V C Hollingsworth





Risk Factor Ranking Score Poor Pfankuch-Channel Stability: 1.5 Channel Alteration: None 0

Depth Profile Not Recorded

		_	
Bank Erosion:	Active	1	7
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	5.25	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20932 Longitude: -81.98815 Severity Scale: 6.25-Moderate

County: Desoto Site Number: PI507 Reach Length: 125 ft.

Landowner: V C Hollingsworth





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand

Full

Full

Severity Scale:

0

0

6.25

Near Bank Stress: High

RB Landuse: Natural Forest

LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.20876 Longitude: -81.98908

Severity Scale: 7.5-High

County: Desoto Site Number: PI508 Reach Length: 330 ft.

Landowner: V C Hollingsworth





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Mass-wasting	1.5	
BEHI:	Very High	1.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sandy Clay

Partial

Full

Severity Scale:

0.25

0

7.5

Near Bank Stress: Moderate

LB Landuse: Natural Forest, Pasture

RB Landuse: Pasture

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Restoration Option 1

RB: Floodplain Access:

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21037 Longitude: -81.99043 Severity Scale: 5.75-Moderate

County: Desoto Site Number: PI509 Reach Length: 85 ft.

Landowner: V C Hollingsworth





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High

RB Landuse: Natural Forest, Pasture

LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Full

Severity Scale:

0

5.75

Restoration Option 1

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21068 Longitude: -81.99171

Severity Scale: 7.5-High

County: Desoto Site Number: PI510 Reach Length: 135 ft.

Landowner: V C Hollingsworth



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Risk Factor	Ranking	Score		
Pfankuch-Channel Stability:	Poor	1.5		
Channel Alteration:	None	0		
Bank Erosion:	Mass-wasting	1.5		
BEHI:	Very High	1.5		
Local NPSP:	Obvious Sources	1.5		
Shoring Structures:	None	0		
Pipe Discharge:	None	0		
Water Odor:	Normal	0		

Depth Profile Not Recorded

Bank Erosion:	Mass-wasting	1.5	
BEHI:	Very High	1.5	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	7.5	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.21068 Longitude: -81.99171

Severity Scale: 6.0-Moderate

County: Desoto Site Number: PI511 Reach Length: 85 ft.

Landowner: V C Hollingsworth





Risk Factor Ranking Score Poor Pfankuch-Channel Stability: 1.5 Channel Alteration: None 0 Bank Erosion: Active 1 BI Sh Pi RI RI LE

Depth Profile Not Recorded

BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Extensive
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	80 ft.	0.25	Substrate Composition: Medium Sand
LB: Riparian Buffer:	20 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest, Pasture
	Severity Scale:	6.0	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21337 Longitude: -81.99566 Severity Scale: 6.25-Moderate

County: Desoto Site Number: PI512 Reach Length: 75 ft.

Landowner: V C Hollingsworth





Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Poor	1.5	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Moderate
LB: Floodplain Access:	Full	0	RB Landuse: Pasture
	Severity Scale:	6.25	LB Landuse: Pasture, Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.21422 Longitude: -81.99580

Severity Scale: 7.0-Moderate

County: Desoto Site Number: PI513 Reach Length: 180 ft.

Landowner: V C Hollingsworth





Ranking **Risk Factor** Score Pfankuch-Channel Stability: Poor 1.5 Channel Alteration: None 0 1.5 Bank Erosion: Mass-wasting BEHI: Very High 1.5 **Obvious Sources** Local NPSP: 1.5 **Shoring Structures:** None 0 None 0 **Additional Site Features** Pipe Discharge: Water Odor: Normal 0 Stream Channel Woody Material: Numerous 0 Fish Passage Barrier: None Impoundments: None 100 ft. RB: Riparian Buffer: 0 Substrate Composition: Medium Sand 20 ft. 0.75 LB: Riparian Buffer: Bank Material: Sand RB: Floodplain Access: Full 0 Near Bank Stress: High

Depth Profile Not Recorded

RB Landuse: Pasture, Natural Forest

LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: Impaired - Potable Water Supplies (BOD, DO)

Partial

Severity Scale:

0.25

7.0

Restoration Option 1

Joshua Creek

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.16807 Longitude: -81.88316 Severity Scale: 3.75-Low

County: De Soto Site Number: PI514 Reach Length: 60 ft.

Landowner: Golden Ranch Farms LLC



Risk Factor	Ranking	Score	*Depth Profile Not Recorded*
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	Present	1.5	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Very High
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.75	LB Landuse: Utilities

Notes: BEHI estimated; 303d: Impaired - Aquatic Life Harvesting (DO)

Joshua Creek

Watershed: Peace River

Subwatershed: Lower Joshua Creek

Latitude: 27.167577 Longitude: -81.882168

Severity Scale: 2.0-Low

County: De Soto Site Number: PI515 Reach Length: 80 ft.

Landowner: DD & TR Geraci





Risk Factor	Ranking	Score	*Depth Profile Not
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate	0.5	
Local NPSP:	No Evidence	0	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft	0.5	Substrate Composition
LB: Riparian Buffer:	100 ft	0	Bank Material: Sand
PR: Floodalain Access:	Eull	0	Noar Pank Stross: Lov

"Deptn	Profile	NOT	Kecoi	raea*
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Shoring Structures:	None	0	
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Full	0	RB Landuse: Pasture, Natural Forest
	Severity Scale:	2.0	LB Landuse: Natural Forest

Notes: BEHI estimated; 303d: Impaired - Aquatic Life Harvesting (DO)

Appendix B. Peace River Watershed unpaved road crossing site summaries.

Gum Swamp Branch	Sediment Risk Index: 52-Low
Watershed: Peace River	County: Hardee
Subwatershed: Upper Payne Creek	Site Number: PU001
Latitude: 27.601247	LULC: Cropland, pasture, tree crops &
Longitude: -81.969113	bottomland forest
Road Name: John Gill Rd.	Landowner(s): Ronnie Albritton*





Right Approach from Crossing Structure

	ucture:	

Right Approac	th from Crossing Structure			
Risk Factor	Ranking	Score		
US Channel Morph	E	5		
DS Channel Morph	Е	5	AND	
DS Bank Alteration	Natural	5		
Upstream Skew Angle	< 5°	5		
Crossing fill condition	Vegetated	5	Extremely many	
Inlet/Outlet Condition	Sediment Islands	3	cyamp granch	
Potential Eroded Vol.	> 40 c.y.	1		
Soil K Factor	≤ 0.20	5	n siste	
Approach Slope Mean	≤ 2.0%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegetated	1	hind - 11 - 24 - 24 - 24 - 24 - 24 - 24 - 24	
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1	Additonal Site Features	
Upstream Lt Ditch	Bare Soil	0	Crossing Type and Quantity: Bridge	
Downstream Rt Outlet	Vegetated	1	Crossing Material: Wood	
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop: NA	
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier: Not Present	
Downstream Lt Ditch	Vegetated	1	Notes: Perched tributary flowing into Gum Swa	
Improved Outlet Total	4	1	Branch from US left bank contributing high amoun	
Improved Ditches Total	3	0	of sediment. *Additional land owners: James &	
	SRI Total:	52	Grunholzer.	

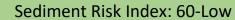
Gum Swamp Branch

Watershed: Peace River

Subwatershed: Upper Payne Creek

Latitude: 27.604750 Longitude: -81.957291

Road Name: Hendry Road



County: Hardee Site Number: PU002

LULC: Cropland, pasture, tree crops &

bottomland forest

Landowner(s): Sean & Kathy Murphy*



Right Approach from Crossing Structure



Crossing Structure: US

Right Approach from Crossing Structure				
Risk Factor	Ranking	Score	Ī	
US Channel Morph	E	5		
DS Channel Morph	E	5		
DS Bank Alteration	Natural	5	1	
Upstream Skew Angle	<5°	5]	
Crossing fill condition	Vegetated	5		
Inlet/Outlet Condition	No Impairment	5	l	
Potential Eroded Vol.	≤ 21 c.y.	5]	
Soil K Factor	≤ 0.20	5]	
Approach Slope Mean	≤ 2.0%	5]	
Road Approach Material	All Aggregate	5	l	
Upstream Rt Outlet	Vegetated	1	l	
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1	1	
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	•	
Downstream Rt Ditch	Vegetated	1	I	
Downstream Lt Ditch	Vegetated	1	Ī	
Improved Outlet Total	4	1]	
Improved Ditches Total	4	1]	
			1	

SRI Total:



The second secon
Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: *Additional land owners: Robert & Barbara
Hambrick

West Fork Horse Creek

Watershed: Peace River

Subwatershed: West Fork Horse Creek

Latitude: 27.490762 Longitude: -82.028557

Road Name: Owen Roberts Rd.

Sediment Risk Index: 56-Low

County: Hardee Site Number: PU003

LULC: Bottomland forest, crops and patureland

& mixed rangeland

Landowner(s): IMC Phosphates Co.



Left Approach from Crossing Structure



Crossing Structure: DS

Left Approach from Crossing Structure				
Risk Factor	Ranking	Score	Ī	
US Channel Morph	С	5	1	
DS Channel Morph	С	5	1	
DS Bank Alteration	Minor or Partial	3	1	
Upstream Skew Angle	< 5°	5		
Crossing fill condition	Good/Vegetated	5		
Inlet/Outlet Condition	Sediment/Scouring	3	1	
Potential Eroded Vol.	< 21 c.y.	5]	
Soil K Factor	≤ 0.20	5	1	
Approach Slope Mean	≤ 2.0%	5		
Road Approach Material	All Aggregate	5	l	
Upstream Rt Outlet	Vegetated	1	l	
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1	1	
Upstream Lt Ditch	Vegetated	1	•	
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	Ţ	
Downstream Rt Ditch	Vegetated	1		
Downstream Lt Ditch	Vegetated	1	l	
Improved Outlet Total	4	1	Ī	
Improved Ditches Total	4	1	1	

SRI Total:



(
Additonal Site Features
Crossing Type and Quantity: Bridge (1)
Crossing Material: Wood
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: Cattle access upstream

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.511512 Longitude: -81.863388

Road Name: Ander Marsh Rd.

Sediment Risk Index: 48-Low

County: Hardee Site Number: PU004

LULC: Cropland, pastureland, low density

residential & bottomland forest Landowner(s): David & Jane Durando*





DS Channel from Crossing

Cross	sing Structure: DS		
Risk Factor	Ranking	Score	
US Channel Morph	E	5	
DS Channel Morph	E	5	
DS Bank Alteration	High	1	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Fair/riprap	3	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	2.1% - 4.0%	3	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	C
Downstream Rt Outlet	Riprap	1	C
Downstream Lt Outlet	Other	0	C
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	Ν
Improved Outlet Total	3	0	C
Improved Ditches Total	4	1	
	SRI Total:	48	
			_



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Cor. metal & concrete
Culvert Outfall Drop: 3 in.
Fish Passage Barrier: Present
Notes: Fish passage barrier caused by drop off from concrete pad; incised stream; cattle access, fencing
DS. *Additional land owners: B Carlton, K & D Oden

Troublesome Creek

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.512026 Longitude: -81.871501

Road Name: Alton Carleton Rd.

Sediment Risk Index: 42-Moderate

County: Hardee Site Number: PU005

LULC: Tree crops, other open land & low density

residential

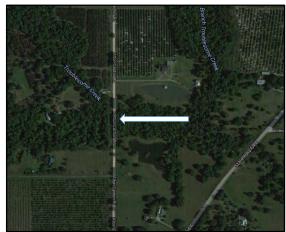
Landowner(s): ML & Carolyn Coker*





Crossing Structure: US

Left Approac	ch from Crossing Structure		
Risk Factor	Ranking	Score	Ī
US Channel Morph	E	5	
DS Channel Morph	С	5	
DS Bank Alteration	High	1	
Upstream Skew Angle	< 5°	5	
Crossing fill condition	Fair	3	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤ 0.20	5	
Approach Slope Mean	≤ 2.0%	5	
Road Approach Material	Agg + Native Soil	3	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Bare Soil	0	
Upstream Lt Ditch	Bare Soil	0	
Downstream Rt Outlet	Bare Soil	0	
Downstream Lt Outlet	Bare Soil	0	
Downstream Rt Ditch	Bare Soil	0	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	2	1	
Improved Ditches Total	1	2	
	SRI Total:	42	1



0.000
Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: *Additional land owners: R & D Durrance, J &
M Albritton

Oak Creek

Watershed: Peace River

Subwatershed: Lower Oak Creek

Latitude: 27.405532 Longitude: -81.681382

Road Name: George Marsh Rd.

Sediment Risk Index: 47-Low

County: Hardee Site Number: PU006

LULC: Pastureland, citrus groves

Landowner(s): Citra Lee Partnership





Crossing Structure: DS

Right Approac	Right Approach from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	E	5	
DS Channel Morph	E	5	
DS Bank Alteration	High	1	
Upstream Skew Angle	< 5°	5	
Crossing fill condition	Good-Fair	4	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤ 0.20	5	
Approach Slope Mean	≤ 2.0%	5	
Road Approach Material	Agg + Native Soil	3	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Bare Soil	0	
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	0
Downstream Rt Outlet	Bare Soil	0	0
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	١
Improved Outlet Total	2	1	9
Improved Ditches Total	4	1	l
	·		1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood
Culvert Outfall Drop: NA
Fish Passage Barrier: Present
Notes: Cattle access, potential fish passage barrier
due to downstream fence and associated debris jam
build up

Mineral Branch

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.454056 Longitude: -81.723300

Road Name: Mineral Branch Rd.

Sediment Risk Index: 47-Low

County: Hardee Site Number: PU007

LULC: Citrus groves, pastureland

Landowner(s): Square D Ranch LTD LLP*





DS Channel from Crossing

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	D	1
DS Channel Morph	E	5
DS Bank Alteration	High	1
Upstream Skew Angle	< 5°	5
Crossing fill condition	Good-Fair	4
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤ 0.20	5
Approach Slope Mean	≤ 2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Synthetic	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Bare Soil	0
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	3	0
Improved Ditches Total	4	1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: *Additional land owners: The Carleton Group
LLC, Dixie Belle Groves Partnership

Old Town Creek

Watershed: Peace River

Subwatershed: Charlie Creek Headwaters

Latitude: 27.6310 Longitude: -81.620490

Road Name: Old Town Creek Rd.

Sediment Risk Index: 56-Low

County: Hardee Site Number: PU008

LULC: Natural Forest, Pasture

Land Owner(s): Crews Groves Inc, 660 LLC







Crossing Structure: US

Right Approac	ch from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	DA	3
DS Channel Morph	E	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	< 5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤ 0.20	5
Approach Slope Mean	≤ 2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (3)
Crossing Material: Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Paved as of 11/1/2016; Open box culvert

Watershed: Peace River

Subwatershed: Buckhorn Creek

Latitude: 27.529672 Longitude: -81.716465

Improved Ditches Total

Road Name: Collin Poucher Rd.

Sediment Risk Index: 52-Low

County: Hardee Site Number: PU009

LULC: Pastureland, citrus groves

Landowner(s): Barlow Family Partnership*



Left Approach from Crossing Structure



Crossing Structure: DS

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	С	5
DS Channel Morph	С	5
DS Bank Alteration	High	1
Upstream Skew Angle	< 5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤ 0.20	5
Approach Slope Mean	≤ 2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Bare Soil	0
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Bare Soil	0
Downstream Lt Outlet	Bare Soil	0
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Bare Soil	0
Improved Outlet Total	1	2

3

SRI Total:

0



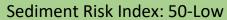
Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Cattle access. *Additional land owners:
Durrance & Whidden Properties LLC

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.005428 Longitude: -81.935606

Road Name: Live Oak Blvd.



County: Charlotte Site Number: PU010

LULC: Pasture

Land Owner(s): Zachariah P Zacharia*



Left Approach from Crossing Structure



Crossing Structure: US

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	С	5
DS Channel Morph	Ponded	1
DS Bank Alteration	Minor/Partial	3
Upstream Skew Angle	<5°	5
Crossing fill condition	Fair	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	50

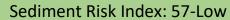


Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Culvert is perched at road crossing; *Additional
and owners: Zemel Family Ventures LLC, Hudson
Hammocks LLC, & JMH-TR

Deep Creek Gulch

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.059925 Longitude: -82.008414 Road Name: Branson Rd



County: Desoto Site Number: PU011

LULC: Natural Forest, Low Density Housing

Land Owner(s): Juanita & Winfred Gibbs*





Crossing Structure: DS

Right Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	С	5
DS Channel Morph	С	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Good	5
Inlet/Outlet Condition	Scouring	4
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
•	•	

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: Jacqueline White, SW
Florida Water Management District

Unnamed Canal/Ditch

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.089844 Longitude: -81.007486 Road Name: Unnamed

Sediment Risk Index: 42-Moderate

County: Desoto Site Number: PU012

LULC: Industrial, mowed grass

Land Owner(s): PRMRWSA*



Right Approach from Crossing Structure			
Risk Factor	Ranking	Score	T
US Channel Morph	Ditch	1	1
DS Channel Morph	E	5	1
DS Bank Alteration	High	1	1
Upstream Skew Angle	>30°	1]
Crossing fill condition	Fair, Riprap	3]
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤0.20	5]
Approach Slope Mean	<2°	5]
Road Approach Material	All aggregate	5	
Upstream Rt Outlet	Riprap	1	
Upstream Lt Outlet	Riprap	1	
Upstream Rt Ditch	Vegetated	1	4
Upstream Lt Ditch	Vegetated	1	-
Downstream Rt Outlet	Riprap	1	0
Downstream Lt Outlet	Riprap	1	-
Downstream Rt Ditch	Vegetated	1	I
Downstream Lt Ditch	Vegetated	1	I
Improved Outlet Total	4	1]
Improved Ditches Total	4	1	7

SRI Total:



Crossing Structure: DS



Additonal Site Features
Crossing Type and Quantity: Culvert (3)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Discharging from city water supply reservoir.
Riprap present in stream. *Peace River Manasota
Regional Water Supply Authority

Watershed: Peace River

Subwatershed: Lower Horse Creek

Latitude: 27.178447 Longitude: -81.974194

Road Name: Horse Creek Rd.

Sediment Risk Index: 51-Low

County: Desoto Site Number: PU013 LULC: Natural forest

Land Owner(s): Joshua Rhodes*



Left Approach from Crossing Structure



Crossing Structure: US

	Day 1:	6	
Risk Factor	Ranking	Score	
US Channel Morph	Ponded	1	
DS Channel Morph	E	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	5°-30°	3	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Slight Scouring	4	The state of the s
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	THE CONTRACTOR OF THE PARTY OF THE PARTY.
Approach Slope Mean	<2°	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	SERVER CONTRACTOR
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site Features
Upstream Lt Ditch	Bare Soil	0	Crossing Type and Quantity: Culvert (3)
Downstream Rt Outlet	Vegetated	1	Crossing Material: Corrugated Metal
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop: 0 in.
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier: Not Present
Downstream Lt Ditch	Vegetated	1	Notes: 1 large, two small culverts. Large culve
Improved Outlet Total	4	1	overflow channel, small culverts in main chan
Improved Ditches Total	3	0	*Additional land owners: Martin Raguth
	SRI Total:	51	7

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.314731 Longitude: -81.813592 Road Name: NE Bombay Rd.

Sediment Risk Index: 54-Low

County: Desoto Site Number: PU014

LULC: Low density residential, pastureland

Land Owner(s): Stewart Parker*



Left Approach from Crossing Structure



Crossing Structure: DS

Risk Factor	Ranking	Score	1
US Channel Morph	С	5	
DS Channel Morph	С	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	5°-30°	3	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	<2°	5]
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Α
Upstream Lt Ditch	Vegetated	1	С
Downstream Rt Outlet	Bare Soil	0	С
Downstream Lt Outlet	Vegetated	1	С
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	Ν
Improved Outlet Total	3	0	а
Improved Ditches Total	4	1	la
·		•	7

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (4)
Crossing Material: Corr. Metal, Synthetic
Culvert Outfall Drop: 2 ft.
Fish Passage Barrier: Present
Notes: Cement headwall with 2 corrugated metal
and 2 synthetic culverts underneath. *Additional
land owners: Arcadia Ranch Properties LLC

Watershed: Peace

Subwatershed: Peace River Branch

Latitude: 27.347683 Longitude: -81.816406 Road Name: River Rd.

Sediment Risk Index: 46-Low

County: Hardee
Site Number: PU015

LULC: Pastureland, low density residential

Land Owner(s): Glen Douglas, Judith Shoun





Crossing Structure: US

Right Approach	from	Crossing	Structure
MgHL Apploach	110111	CIUSSIIIg	Juditule

Risk Factor	Ranking	Score	
US Channel Morph	Channelized	1	
DS Channel Morph	С	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	>30°	1	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤0.20	5	0 0000
Approach Slope Mean	<2°	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	The state of the s
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site Feat
Upstream Lt Ditch	Vegetated	1	Crossing Type and Qu
Downstream Rt Outlet	Vegetated	1	Crossing Material: Co
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop:
Downstream Rt Ditch	Bare Soil	0	Fish Passage Barrier:
Downstream Lt Ditch	Vegetated	1	Notes: Culverts ruste
Improved Outlet Total	4	1	is a channelized road
Improved Ditches Total	3	0	negative slope.

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal, Concrete
Culvert Outfall Drop: 8 in.
Fish Passage Barrier: Present
Notes: Culverts rusted, upstream section of stream is a channelized road ditch. Left Approach has a negative slope.

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.403067 Longitude: -81.736100 Road Name: Gordon Rd.

Sediment Risk Index: 48-Low

County: Hardee Site Number: PU016

LULC: Pastureland, citrus groves, low

density residential

Land Owner(s): Twenty-Twenty Groves*



Crossing Structure: DS

Right Approach from Crossing Structure				
Risk Factor	Ranking	Score	Ī	
US Channel Morph	Е	5]	
DS Channel Morph	Ponded	1	Ī	
DS Bank Alteration	Minor/Partial	3]	
Upstream Skew Angle	>30°	1]	
Crossing fill condition	Good/Vegetated	5]	
Inlet/Outlet Condition	Scouring	3		
Potential Eroded Vol.	< 21 c.y.	5]	
Soil K Factor	≤0.20	5]	
Approach Slope Mean	<2°	5]	
Road Approach Material	All Aggregate	5]	
Upstream Rt Outlet	Vegetated	1		
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1	4	
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	0	
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F	
Downstream Lt Ditch	Vegetated	1	I	
Improved Outlet Total	4	1]!	
Improved Ditches Total	4	1]I	

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert
Crossing Material: Could not view
Culvert Outfall Drop: Could not view
Fish Passage Barrier: Could not view
Notes: Road turns into private drive. Fence
blocking view of crossing structure. *Additional
land owners: Martha & Thomas Trust Taylor

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.465422 Longitude: -81.644203 Road Name: Oak Hill Ranch

Sediment Risk Index: 52-Low

County: Hardee Site Number: PU017

LULC: Low density residential

Land Owner(s): Robert Garren*





Crossing Structure: DS

Left Approach from Crossing Structure				
Risk Factor	Ranking	Score		
US Channel Morph	Wetland	5		
DS Channel Morph	Wetland	5	SIZE OF	
DS Bank Alteration	Natural	5		
Upstream Skew Angle	<5°	5	20000	
Crossing fill condition	Good/Vegetated	5		
Inlet/Outlet Condition	No Impairment	5		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	≤2.0	5	30.00	
Approach Slope Mean	<2°	5		
Road Approach Material	Native Soil	1	2000	
Upstream Rt Outlet	Vegetated	1		
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Bare Soil	0	Α	
Upstream Lt Ditch	Bare Soil	0	Cr	
Downstream Rt Outlet	Vegetated	1	Cr	
Downstream Lt Outlet	Vegetated	1	Cı	
Downstream Rt Ditch	Bare Soil	0	Fi	
Downstream Lt Ditch	Bare Soil	0	N	
Improved Outlet Total	4	1	Cr	
Improved Ditches Total	0	1		
·	•		7	

SRI Total:



Additonal Site Features	
Crossing Type and Quantity: Culvert (1)	
Crossing Material: Corrugated Metal	
Culvert Outfall Drop: 0 in.	
Fish Passage Barrier: Not Present	
Notes: *Additional land owners: Campus USA	
Credit Union, Danny & Cathy Meadows	

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.501574 Longitude: -81.776556 Road Name: Farrell Rd.

Sediment Risk Index: 53-Low

County: Hardee Site Number: PU018 LULC: Pastureland

Land Owner(s): ALBRITTON R C & V L*







DS Channel from Crossing

Right Approac	ch from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	Wetland	5]
DS Channel Morph	Wetland	5	
DS Bank Alteration	Natural	4	40
Upstream Skew Angle	5° to 30°	3	* 1000 M
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Blocked	1	100
Potential Eroded Vol.	< 21 c.y.	5	100
Soil K Factor	0.02	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	_
Upstream Rt Ditch	Vegetated	1	Δ
Upstream Lt Ditch	Vegetated	1	С
Downstream Rt Outlet	Vegetated	1	С
Downstream Lt Outlet	Vegetated	1	C
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	Ν
Improved Outlet Total	4	1	la
Improved Ditches Total	4	1	1
	SRI Total:	53	1



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Aquatic vegetation blocking inlet, *Additional and owners: HERNANDEZ JOSE JOEL & LILIA

Myrtle Creek

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.963495 Longitude: -81.911681 Road Name: Unnamed Road Sediment Risk Index: 54-Low

County: Charlotte Site Number: PU019

LULC: Low density residential

Land Owner(s): HERTENLEHNER JOEY M*







Crossing Structure: DS

Right Approach from Crossing Structure		
Risk Factor Ranking		Score
US Channel Morph	E	5
DS Channel Morph	E	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Fair/Riprap	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Riprap	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	54



Additonal Site Features
Crossing Type and Quantity: Culvert (4)
Crossing Material: Corrugated Metal (3), PVC (1)
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: No water flowing in 3 of 4 culverts, *Additional
and owners: SISK JEFFREY & DEANA

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.979455 Longitude: -81.880742 Road Name: Trails End Dr.

Sediment Risk Index: 48-Low

County: Charlotte Site Number: PU020

LULC: Low density residential

Land Owner(s): FORD STEVEN L & PAMELA R





Crossing Structure: US

Left Approac	ch from Crossing Structure	
Risk Factor Ranking		Score
US Channel Morph	Ponded	1
DS Channel Morph	E	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	>30°	1
Crossing fill condition	Fair	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤2.0	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	48



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Slightly pooled at crossing

Watershed: Peace River

Subwatershed: Middle Shell Creek

Latitude: 26.977753 Longitude: -81.879385

Road Name: Trails End Dr.

Sediment Risk Index: 53-Low

County: Charlotte Site Number: PU021

LULC: Low Density Residential

Land Owner(s): FORD STEVEN L & PAMELA R







Crossing Structure: US

Right Approa	ch from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	E	5	
DS Channel Morph	E	5	
DS Bank Alteration	Minor/Partial	3	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Fair to Poor	2	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Riprap	1	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
	SRI Total:	53	



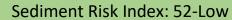
Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes:

Hog Branch

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.58005 Longitude: -81.829963 Road Name: Mott Rd.



County: Hardee Site Number: PU022

LULC: Pastureland, Citrus Groves

Land Owner(s): ESPARZA JOSE*





Crossing Structure: DS

Right Approach 1	from (rossing	Structure

Birevibbioa	on nom crossing ou dotaire		
Risk Factor	Ranking	Score	ſ
US Channel Morph	E	5	
DS Channel Morph	E	5	
DS Bank Alteration	Minor/Partial	3	
Upstream Skew Angle	>30°	1	l
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	l
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	l
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	4
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	-
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	l
Improved Outlet Total	4	1	l
Improved Ditches Total	4	1	

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (3)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 10 in.
Fish Passage Barrier: Present
Notes: Pasture - no riparian vegetation, *Additional
land owners: HARDEE COUNTY INDUSTRIAL

Watershed: Peace River

Subwatershed: Lower Shell Creek

Latitude: 26.992303 Longitude: -81.940715 Road Name: Turkey Oak Rd.

Sediment Risk Index: 48-Low

County: Charlotte Site Number: PU023

LULC: Low Density Residential

Land Owner(s): ZIEGLER BRIAN





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	Ī
US Channel Morph	Ponded	1	Ī
DS Channel Morph	Ponded	1	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Fair/Riprap	3	l
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	Ī
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	1
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	1
·	·		1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Concrete
Culvert Outfall Drop: 2 ft.
Fish Passage Barrier: Present
Notes: Riprap barrier downstream of crossing

Watershed: Peace River

Subwatershed: Lower Shell Creek

Latitude: 27.005804 Longitude: -81.947147 Road Name: Live Oak Blvd. Sediment Risk Index: 58-Low

County: Charlotte Site Number: PU024 LULC: Pastureland

Land Owner(s): HUDSON HAMMOCKS LLC





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	
US Channel Morph	Wetland	5	1
DS Channel Morph	E	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
	SRI Total:	58	



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Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 3 in.
Fish Passage Barrier: Present
Notes: Stream not flowing; Pasture upstream

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.00534 Longitude: -81.927457 Road Name: Live Oak Blvd

Sediment Risk Index: 46-Low

County: Charlotte Site Number: PU025

LULC: Pastureland, wetland

Land Owner(s): HUDSON HAMMOCKS & JMH-TR





Crossing Structure: DS

Risk Factor	ch from Crossing Structure	Caara	+
KISK Factor	Ranking	Score	4
US Channel Morph	Ponded	1	╛
DS Channel Morph	Ponded	1	
DS Bank Alteration	Minor	3	
Upstream Skew Angle	5° to 30°	3	
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	1
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
			_

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 1 in.
Fish Passage Barrier: Present
Notes: Pasture upstream and downstream

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.00497 Longitude: -81.910367 Road Name: Live Oak Rd.

Sediment Risk Index: 43-Moderate

County: Charlotte Site Number: PU026

LULC: Pasture, Low Density Residential

Land Owner(s): HUDSON HAMMOCKS & JMH-TR*



eft Annroach from Crossing Structure



Crossing Structure: DS

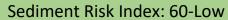
Left Approach from Crossing Structure				
Risk Factor	Ranking	Score		
US Channel Morph	Ponded	1		
DS Channel Morph	Ponded	1		
DS Bank Alteration	Partial	3		
Upstream Skew Angle	>30°	1		
Crossing fill condition	Vegtated/Fair	4		
Inlet/Outlet Condition	Sediment/Scouring	3		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	≤0.20	5		
Approach Slope Mean	≤2.0%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegtated	1		
Upstream Lt Outlet	Vegtated	1		
Upstream Rt Ditch	Vegtated	1		
Upstream Lt Ditch	Vegtated	1		
Downstream Rt Outlet	Vegtated	1		
Downstream Lt Outlet	Vegtated	1		
Downstream Rt Ditch	Vegtated	1		
Downstream Lt Ditch	Vegtated	1		
Improved Outlet Total	4	1		
Improved Ditches Total	4	1		
	SRI Total:	43		



Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.012643 Longitude: -81.890356 Road Name: Farm Rd.



County: Charlotte Site Number: PU027 LULC: Wetland, Prairie

Land Owner(s): CHARLOTTE COUNTY





Crossing Structure: DS

Left Approach from Crossing Structure			Crossing Structure: DS	
Risk Factor	Ranking	Score	The second of the	
US Channel Morph	Wetland	5		
DS Channel Morph	E	5		
DS Bank Alteration	Natural	5		
Upstream Skew Angle	<5°	5		
Crossing fill condition	Vegetated	5		
Inlet/Outlet Condition	No Impairment	5		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	≤0.20	5		
Approach Slope Mean	≤2.0%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegetated	1		
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1	Additonal Site Features	
Upstream Lt Ditch	Vegetated	1	Crossing Type and Quantity: Culvert (1)	
Downstream Rt Outlet	Vegetated	1	Crossing Material: PVC	
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop: 0 in.	
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier: Not Present	
Downstream Lt Ditch	Vegetated	1	Notes: Prairie Creek Preserve	
Improved Outlet Total	4	1		
Improved Ditches Total	4	1	7	
	SRI Total:	60	7	

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.016723 Longitude: -81.887703 Road Name: Farm Rd.

Sediment Risk Index: 60-Low

County: Charlotte Site Number: PU028 LULC: Pasture, Prairie

Land Owner(s): CHARLOTTE COUNTY



Left Approach from Crossing Structure



Crossing Structure: DS

Left Approac	h from Crossing Structure		Crossing Structure. DS
Risk Factor	Ranking	Score	
US Channel Morph	E	5	
DS Channel Morph	Е	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site Features
Upstream Lt Ditch	Vegetated	1	Crossing Type and Quantity: Culvert (1)
Downstream Rt Outlet	Vegetated	1	Crossing Material: PVC
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop: 0 in.
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier: Present
Downstream Lt Ditch	Vegetated	1	Notes: Prairie Creek Preserve
Improved Outlet Total	4	1	7
Improved Ditches Total	4	1	7
	SRI Total:	60	7

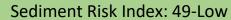
Hickory Branch

Watershed: Peace River

Subwatershed: Troublesome Creek

Latitude: 27.51681 Longitude: -81.78054

Road Name: Gilliard Farm Rd.



County: Hardee Site Number: PU029

LULC: Natural Forest, Low Density Residential

Land Owner(s): Barnes Sandra L R*





Crossing Structure: DS

Left Approac	ch from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	Е	5
DS Channel Morph	E	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Vegetated/Riprap	4
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	> 40 c.y.	1
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Sand/Clay	3
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	49



Watershed: Peace River

Subwatershed: Myrtle Slough - Shell Creek

Latitude: 27.01831 Longitude: -81.753664 Road Name: Farabeo Rd.

Sediment Risk Index: 38-Moderate

County: Charlotte Site Number: PU030 LULC: Pasture

Land Owner(s): SPANISH TRAIL LAND & CATTLE CO*





Crossing Structure: DS

Right Approach from Crossing Structure			
Risk Factor	Ranking	Score	
US Channel Morph	Ponded	1	
DS Channel Morph	Ponded	1	
DS Bank Alteration	High	1	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Bare Soil	0	
Upstream Lt Ditch	Bare Soil	0	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Bare Soil	0	
Downstream Lt Ditch	Bare Soil	0	
Improved Outlet Total	4	1	
Improved Ditches Total	0	1	
	SRI Total:	38	



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Reinforced Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Channelized; Cattle access, *Additional land
owners: JLRC REALTY CORP

Watershed: Peace River Subwatershed: Lettuce Lake

Latitude: 27.055317 Longitude: -82.01364 Road Name: SW Erwin St

Sediment Risk Index: 28-High

County: Desoto Site Number: PU031

LULC: Low Density Residential

Land Owner(s): MEYER MARY OLIVE*

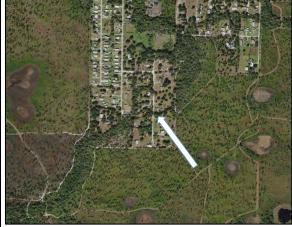






Crossing Structure: DS

Right Approa	ch from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	G	1	
DS Channel Morph	G	1	
DS Bank Alteration	High	1	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Poor	1	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Native Soil	1	
Upstream Rt Outlet	Bare Soil	0	
Upstream Lt Outlet	Bare Soil	0	
Upstream Rt Ditch	Bare Soil	0	
Upstream Lt Ditch	Bare Soil	0	
Downstream Rt Outlet	Bare Soil	0	
Downstream Lt Outlet	Bare Soil	0	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Bare Soil	0	
Improved Outlet Total	0	1	
Improved Ditches Total	1	2	
	SRI Total:	28	



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: PVC
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Generally unsafe crossing - no guard rail

Osborn Branch

Watershed: Peace River

Subwatershed: Middle Horse Creek

Latitude: 27.38206 Longitude: -82.005282 Road Name: Farr Rd

Sediment Risk Index: 56-Low

County: Hardee Site Number: PU032 LULC: Pasture, Prairie

Land Owner(s): VINA JAVIER





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	
US Channel Morph	Wetland	5	E to the
DS Channel Morph	С	5	
DS Bank Alteration	Minor	3	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site Featur
Upstream Lt Ditch	Vegetated	1	Crossing Type and Quan
Downstream Rt Outlet	Vegetated	1	Crossing Material: PVC
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop: 0 i
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier: No
Downstream Lt Ditch	Vegetated	1	Notes: *Additional land
Improved Outlet Total	4	1	INC
Improved Ditches Total	4	1	1
	SRI Total:	56	7



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: PVC
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: QUAIL CREEK FARMS
INC

Watershed: Peace River

Subwatershed: McBride Branch

Latitude: 27.274418 Longitude: -81.814208

Road Name: County Ranches Rd

Sediment Risk Index: 46-Low

County: Desoto Site Number: PU033

LULC: Low Density Residential, Citrus Groves

Land Owner(s): COBBAN WILLIAM FRANKLIN*



Left Approach from Crossing Structure



Crossing Structure: DS

20.07.000	c c. cssg c acca. c	
Risk Factor	Ranking	Score
US Channel Morph	E	5
DS Channel Morph	Ponded	1
DS Bank Alteration	Minor	3
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Fair	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Bare Soil	0
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	3	0
Improved Ditches Total	4	1
·		·

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 1.2 ft.
Fish Passage Barrier: Present
Notes: Two roads measured on right approach,
*Additional land owners: CONNER RONNIE ESTATE

Watershed: Peace River Subwatershed: Fish Branch Latitude: 27.357052 Longitude: -81.727610

Road Name: Fish Branch Rd.

Sediment Risk Index: 50-Low

County: Hardee Site Number: PU034

LULC: Natural Forest, Pasture, Citrus Groves

Land Owner(s): WILBURN CARL M & BETTY*





Crossing Structure: DS

Left Approach from Crossing Structure				
Risk Factor	Ranking	Score	╛	
US Channel Morph	E	5		
DS Channel Morph	Ponded	1		
DS Bank Alteration	Natural	5		
Upstream Skew Angle	<5°	5		
Crossing fill condition	Good	5]	
Inlet/Outlet Condition	Sediment/Scouring	3		
Potential Eroded Vol.	> 40 c.y.	1		
Soil K Factor	≤0.20	5		
Approach Slope Mean	≤2.0%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegetated	1		
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1		
Upstream Lt Ditch	Vegetated	1		
Downstream Rt Outlet	Vegetated	1		
Downstream Lt Outlet	Vegetated	1		
Downstream Rt Ditch	Vegetated	1		
Downstream Lt Ditch	Vegetated	1		
Improved Outlet Total	4	1		
Improved Ditches Total	4	1	Ī	
			7	

SRI Total:



Watershed: Peace River Subwatershed: Fish Branch

Latitude: 27.347928 Longitude: -81.731616 Road Name: Price Rd.

Sediment Risk Index: 38-Moderate

County: Hardee Site Number: PU035

LULC: Pasture, Citrus Groves, Natural Forest

Land Owner(s): WILBURN CARL M & BETTY





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	
US Channel Morph	E	5	
DS Channel Morph	E	5	
DS Bank Alteration	High	1	
Upstream Skew Angle	>30°	1	
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	Blocked	1	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Native Soil	1	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Bare Soil	0	
Downstream Lt Ditch	Bare Soil	0	
Improved Outlet Total	4	1	
Improved Ditches Total	2	1	
	SRI Total:	38	



Additonal Site Features	
Crossing Type and Quantity: Culvert (4)	
Crossing Material: Corrugated Metal/Concrete	
Culvert Outfall Drop: 0 in.	
Fish Passage Barrier: Not Present	
Notes: Cattle crossing downstream of crossing; 3/4	
culverts blocked by sand; Barb wire fence full of	
debris upstream and downstream of crossing	

Watershed: Peace River

Subwatershed: Upper Oak Creek

Latitude: 27.34072 Longitude: -81.622426

Road Name: Ten Mile Grade Rd

Sediment Risk Index: 46-Low

County: Hardee/Desoto Site Number: PU036 LULC: Pasture, wetland

Land Owner(s): SKIPPER CATTLE & CITRUS





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	
US Channel Morph	Wetland	5	
DS Channel Morph	E	5	
DS Bank Alteration	Minor	3	
Upstream Skew Angle	>30°	1	
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	0
Downstream Rt Outlet	Bare Soil	0	0
Downstream Lt Outlet	Bare Soil	0	0
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	١
Improved Outlet Total	2	1	
Improved Ditches Total	4	1	
			7

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: PVC/Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Pasture upstream and downstream

Fish Branch

Watershed: Peace River Subwatershed: Fish Branch

Latitude: 27.368787 Longitude: -81.709092 Road Name: Fish Branch Rd.

Sediment Risk Index: 44-Moderate

County: Hardee Site Number: PU037

LULC: Natural Forest, Pasture

Land Owner(s): WELLS LAWRENCE B & CYNTHIA L





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	
US Channel Morph	Ponded	1	
DS Channel Morph	Ponded	1	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Bare Soil	0	1
Upstream Lt Ditch	Bare Soil	0	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	١
Improved Outlet Total	4	1	
Improved Ditches Total	2	1	
	SRI Total:	44	

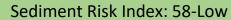


Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal/Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Deep ponds on both sides of crossing

Watershed: Peace River

Subwatershed: Lower Charlie Creek

Latitude: 27.406414 Longitude: -81.755684 Road Name: Paulsen Dr.



County: Hardee Site Number: PU038

LULC: Citrus groves, Pasture, Natural Forest

Land Owner(s): TWENTY-TWENTY GROVES*



Left Approach from Crossing Structure



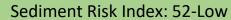
DS from crossing structure

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	Wetland	5
DS Channel Morph	Wetland	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Good	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	Sandy Aggregate	3
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	58



Watershed: Peace River Subwatershed: Lake Garfield

Latitude: 27.846418 Longitude: -81.72773 Road Name: Barush Rd.



County: Polk

Site Number: PU039

LULC: Pasture, Citrus groves

Land Owner(s): CREWS PHILIP F*



Left Approach from Crossing Structure



DS from crossing structure

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	Wetland	5
DS Channel Morph	Wetland	5
DS Bank Alteration	Minor	3
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Fair	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	52

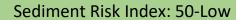


Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Crossing structure blocked by barb wire
upstream and downstream; Channel alteration - cattle
prints in stream, no riparian in areas/bank erosion,
Additional land owner: CREWS SANDRA

Watershed: Peace River

Subwatershed: Charlie Creek Headwaters

Latitude: 27.617569 Longitude: -81.617688 Road Name: Mel Smith Rd.



County: Hardee Site Number: PU040

LULC: Pasture, Citrus groves, Natural Forest

Land Owner(s): CREWS GROVES INC*





DS from crossing structure

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	Ī
US Channel Morph	С	5	
DS Channel Morph	С	5	
DS Bank Alteration	High	1	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	F
Upstream Lt Ditch	Vegetated	1	C
Downstream Rt Outlet	Vegetated	1	C
Downstream Lt Outlet	Vegetated	1	C
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	N
Improved Outlet Total	4	1	ji
Improved Ditches Total	4	1	١
·		•	1

SRI Total:



E NOTE AND LOCATION	
Additonal Site Features	
Crossing Type and Quantity: Culvert (2)	
Crossing Material: Reinforced Concrete	
Culvert Outfall Drop: 0 in.	
Fish Passage Barrier: Not Present	
Notes: Cattle degrading banks; Tree branches blockin	
inlet, *Additional land owners: DE LA CRU	Z PABLO
MOLINA	

Watershed: Peace River

Subwatershed: Bee Branch - Charlie Creek

Latitude: 27.603008 Longitude: -81.56140 Road Name: N Ruth Rd.

Sediment Risk Index: 60-Low

County: Highlands Site Number: PU041

LULC: Low Density Residential, Natural Forest

Land Owner(s): DOT





Crossing Structure: DS

Left Approac	h from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	С	5
DS Channel Morph	С	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1

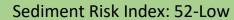
SRI Total:



Watershed: Peace River

Subwatershed: Bee Branch - Charlie Creek

Latitude: 27.599101 Longitude: -81.561388 Road Name: N Ruth Rd.



County: Highlands Site Number: PU042

LULC: Low Density Residential, Natural Forest

Land Owner(s): IGLESIAS CARIDAD LOPEZ



Left Approach from Crossing Structure



Crossing Structure: DS

Left Approac	ch from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	С	5	
DS Channel Morph	С	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	5° to 30°	3	
Crossing fill condition	Fair	3	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggegate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Bare Soil	0	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	4	1	
Improved Ditches Total	3	0	
	SRI Total:	52	



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Crossing fill not well vegetated

Watershed: Peace River

Subwatershed: Little Charlie Bowlegs

Latitude: 27.476248 Longitude: -81.556506 Road Name: Hammock Rd.



Left Approach from Crossing Structure

Lett Approach	Hom crossing structure	
Risk Factor	Ranking	Score
US Channel Morph	DA	3
DS Channel Morph	Е	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	>30°	1
Crossing fill condition	Fair	3
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	> 40 c.y.	1
Soil K Factor	>0.40	1
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
-		

SRI Total:

44

Sediment Risk Index: 44-Moderate

County: Highlands Site Number: PU043 LULC: Cypress Swamp

Land Owner(s): TIITF REC + PARKS



Crossing Structure: DS



Additonal Site Features

Crossing Type and Quantity: Bridge (1)

Crossing Material: Wood

Culvert Outfall Drop: NA

Fish Passage Barrier: Not Present

Notes: Highlands Hammock State Park; Retaining walls on all four sides of bridge

Watershed: Peace River Subwatershed: 031001010504

Latitude: 27.470475 Longitude: -81.553801 Road Name: Cottage Rd.



County: Highlands Site Number: PU044 LULC: Cypress Swamp

Land Owner(s): TIITF REC + PARKS





Crossing Structure: DS

Left Approach	from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	Wetland	5	٦
DS Channel Morph	Wetland	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Riprap	3	
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	>0.40	1	
Approach Slope Mean	≤2.0%	5	٦
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
	SRI Total:	54	



Additonal Site Features
Crossing Type and Quantity: Bridge (1)
Crossing Material: Wood
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: Two culverts on right approach

Watershed: Peace River

Subwatershed: Middle Charlie Creek

Latitude: 27.462676 Longitude: -81.65670

Road Name: Davis Ranch Rd.

Sediment Risk Index: 56-Low

County: Hardee Site Number: PU045

LULC: Pasture, Natural Forest

Land Owner(s): WIDENER LACY ALLEN*





DS from crossing structure

Left Approach	from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	С	5
DS Channel Morph	С	5
DS Bank Alteration	Minor	3
Upstream Skew Angle	<5°	5
Crossing fill condition	Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	56



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Stream not flowing at survey; Cattle in
streambed, *Additional land owners: WARNIMONT
NANCY L AS TRUSTEE

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.522206 Longitude: -81.746444 Road Name: Mel Bryan Rd. Sediment Risk Index: 53-Low

County: Hardee Site Number: PU046

LULC: Pasture, Citrus Groves, Natural Forest,

Wetland

Land Owner(s): GARZA MARTHA H*





Crossing Structure: DS

Left Approach	from Crossing Structure		
Risk Factor	Ranking	Score	\prod_{i}
US Channel Morph	Wetland	5	
DS Channel Morph	Ponded	1	
DS Bank Alteration	Minor	3	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Vegetated/Fair	4	
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5]
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	C
Downstream Rt Outlet	Vegetated	1	C
Downstream Lt Outlet	Vegetated	1	C
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	Ν
Improved Outlet Total	4	1	۷
Improved Ditches Total	4	1	Ī
			٦.

SRI Total:



Watershed: Peace River

Subwatershed: Limestone Creek

Latitude: 27.351393 Longitude: -81.885723

Sediment Risk Index: 36-High

County: Hardee Site Number: PU047

LULC: Pasture, Natural Forest

Land Owner(s): LIMESTONE RANCH LLC





Crossing Structure: DS

Left Approach	n from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	С	5	Ī
DS Channel Morph	Ponded	1	
DS Bank Alteration	High	1	
Upstream Skew Angle	>30°	1	
Crossing fill condition	Riprap/Bare Soil	2	
Inlet/Outlet Condition	Semi-blocked	2	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Bare Soil	0	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Bare Soil	0	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	3	0	
Improved Ditches Total	3	0	
	SRI Total:	36	



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Cattle watering hole downstream of crossing,
cow patties in stream; Barb wire fence across
downstream channel - potential for blockage

Watershed: Peace River

Subwatershed: Upper Horse Creek

Latitude: 27.466877 Longitude: -82.055458 Road Name: Roy Moore Rd.

Sediment Risk Index: 58-Low

County: Hardee/Manatee Site Number: PU048

LULC: Pasture, Natural Forest

Land Owner(s): LONG JOHN AND MADISON





Crossing Structure: DS

Left Approach	n from Crossing Structure	
Risk Factor Ranking Score		
US Channel Morph	Wetland	5
DS Channel Morph	Wetland	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	58



CHARLESCALE VIE
Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes:

Watershed: Peace River

Subwatershed: Buckhorn Creek

Latitude: 27.529646 Longitude: -81.72651

Road Name: Colin Poucher Rd.



County: Hardee Site Number: PU049

LULC: Citrus Groves, Pasture

Land Owner(s): SKITKA DANNY*





Crossing Structure: DS

Left Approac	Left Approach from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	G	1
DS Channel Morph	G	1
DS Bank Alteration	High	1
Upstream Skew Angle	<5°	5
Crossing fill condition	Vegetated	5
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Bare Soil	0
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	3	0
Improved Ditches Total	4	1
	SRI Total:	44



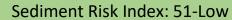
Additonal Site Features
Crossing Type and Quantity: Culvert (3)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Berm upstream and downstream on pasture
and citrus groves, *Additional land owners: WILBURN
CARL M & BETTY A

Buckhorn Creek

Watershed: Peace River

Subwatershed: Buckhorn Creek

Latitude: 27.533873 Longitude: -81.71920 Road Name: S Barlow Rd.



County: Hardee Site Number: PU050

LULC: Pasture, Citrus Groves, Natural Forest

Land Owner(s): BARLOW FAMILY PARTNERSHIP*





Crossing Structure: DS

Risk Factor	Ranking	Score	
US Channel Morph	E	5	3
DS Channel Morph	E	5	*
DS Bank Alteration	High	1	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Vegetated/Fair	4	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	A
Upstream Lt Ditch	Vegetated	1	Cr
Downstream Rt Outlet	Vegetated	1	Cr
Downstream Lt Outlet	Vegetated	1	Cı
Downstream Rt Ditch	Vegetated	1	Fis
Downstream Lt Ditch	Vegetated	1	No
Improved Outlet Total	4	1	flo
Improved Ditches Total	4	1	RC

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Stream possibly channelized; Stream not
flowing at survey, *Additional land owners: BURNETT
ROBERT W & RENE GAIL

Watershed: Peace River

Subwatershed: Buckhorn Creek

Latitude: 27.54436 Longitude: -81.675998 Road Name: Rest Haven Rd.



County: Hardee Site Number: PU051 LULC: Citrus Groves

Land Owner(s): T C PRESCOTT LLC





Crossing Structure: DS

Left Approac	th from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	E	5
DS Channel Morph	Е	5
DS Bank Alteration	High	1
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Riprap	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	> 40 c.y.	1
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	Sandy Aggregate	3
Upstream Rt Outlet	Bare Soil	0
Upstream Lt Outlet	Bare Soil	0
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Bare Soil	0
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	1	2
Improved Ditches Total	4	1
·	·	•

SRI Total:



S. ROBERT ST. ST. AND
Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Channelized

Watershed: Peace River

Subwatershed: Charlie Creek Headwaters

Latitude: 27.580922 Longitude: -81.675373

Road Name: Van Simmons Rd.



Left Approach from Crossing Structure

Left Approac	ch from Crossing Structure		
Risk Factor	Ranking	Score	
US Channel Morph	G	1	
DS Channel Morph	G	1	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	5° to 30°	3	
Crossing fill condition	Fair	3	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Bare Soil	0	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	4
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Riprap	1	(
Downstream Lt Outlet	Bare Soil	0	(
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	I
Improved Outlet Total	2	1]
Improved Ditches Total	4	1	

SRI Total:

44

Sediment Risk Index: 44-Moderate

County: Hardee Site Number: PU052

LULC: Natural Forest, Citrus Groves, Pasture

Land Owner(s): NEECE MELBA*



Crossing Structure: DS



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Metal/Reinforced Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: CENTER FOR
ORANGUTAN

Coons Bay Branch

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.598011 Longitude: -81.858859 Road Name: Peeples Rd. Sediment Risk Index: 50-Low

County: Hardee Site Number: PU053

LULC: Natural Forest, Citrus Groves

Land Owner(s): MOSAIC FERTILIZER LLC





Crossing Structure: DS

Left Approac	ch from Crossing Structure	
Risk Factor	Ranking	Score
US Channel Morph	E	5
DS Channel Morph	E	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	5° to 30°	3
Crossing fill condition	Poor/Bare Soil	1
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	<u> </u>	·

SRI Total:

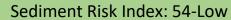


10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes:

Watershed: Peace River

Subwatershed: Alligator Branch

Latitude: 27.461894 Longitude: -81.770118 Road Name: John Carlton Rd.



County: Hardee Site Number: PU054

LULC: Pasture, Citrus Groves, Natural Forest,

Wetland

Land Owner(s): RAFTER C RANCH INC*





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	Ī
US Channel Morph	Wetland	5	٦
DS Channel Morph	E	5	1
DS Bank Alteration	Minor/Partial	3	1
Upstream Skew Angle	<5°	5	٦
Crossing fill condition	Good/Vegetated	5	٦
Inlet/Outlet Condition	Sediment/Scouring	3	٦
Potential Eroded Vol.	21-40 c.y.	3	٦
Soil K Factor	≤0.20	5	٦
Approach Slope Mean	≤2.0%	5	٦
Road Approach Material	All Aggregate	5	٦
Upstream Rt Outlet	Vegetated	1	1
Upstream Lt Outlet	Vegetated	1	٦
Upstream Rt Ditch	Vegetated	1	,
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	4	1	٦
Improved Ditches Total	4	1	٦
	SRI Total:	54	



Additonal Site Features
Crossing Type and Quantity: Culvert (3)
Crossing Material: PVC/Concrete
Culvert Outfall Drop: 1 ft.
Fish Passage Barrier: Present
Notes: Cement pad drop off, *Additional land owners:
CARLTON ELLA MAE

Prairie Creek

Watershed: Peace River

Subwatershed: Lower Prairie Creek

Latitude: 27.025430 Longitude: -81.875098 Road Name: Unnamed road



County: Charlotte Site Number: PU055 **LULC: Natural Forest**

Land Owner(s): Charlotte County





Right approach from hilltop

Right Approach from ford			
Risk Factor	Ranking	Score	
US Channel Morph	Ponded	1]
DS Channel Morph	E	5	1
DS Bank Alteration	Natural	5	1
Upstream Skew Angle	<5°	5	1
Crossing fill condition	Good/Vegetated	5]
Inlet/Outlet Condition	Sediment/Scouring	3]
Potential Eroded Vol.	21-40 c.y.	3]
Soil K Factor	0.21 to 0.40	3]
Approach Slope Mean	>4.0%	1]
Road Approach Material	All Native Soil	1]
Upstream Rt Outlet	Bare Soil	0]
Upstream Lt Outlet	Bare Soil	0	
Upstream Rt Ditch	Bare Soil	0	1
Upstream Lt Ditch	Bare Soil	0	(
Downstream Rt Outlet	Bare Soil	0	(
Downstream Lt Outlet	Bare Soil	0	(
Downstream Rt Ditch	Bare Soil	0	F
Downstream Lt Ditch	Bare Soil	0	1
Improved Outlet Total	0	1	7
Improved Ditches Total	0	1	1
			٦.

SRI Total:



Additional Site Features Crossing Type and Quantity: Ford Crossing Material: Native Soil Culvert Outfall Drop: NA Fish Passage Barrier: Not Present Notes: Located within Prairie Creek Preserve; Used by Charlotte County employees

Whidden Creek

Watershed: Peace River

Subwatershed: Whidden Creek

Latitude: 27.71048 Longitude: -81.89163

Road Name: District Line Rd.



County: Polk

Site Number: PU056

LULC: Historic Phosphate Mining, Wetland,

Natural Forest

Land Owner(s):US AGRI CHEMICALS CORP*





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	Ī
US Channel Morph	DA	3	
DS Channel Morph	DA	3	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Fair	3	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	> 40 c.y.	1	
Soil K Factor	≤0.20	5	
Approach Slope Mean	2.1% to 4.0%	3	
Road Approach Material	All Native Soil	1	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	
Downstream Rt Outlet	Vegetated	1	
Downstream Lt Outlet	Vegetated	1	
Downstream Rt Ditch	Vegetated	1	
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
	SRI Total:	42	



Additonal Site Features
Crossing Type and Quantity: Bridge (1)
Crossing Material: Reinforced Concrete
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: *Additional land owners: STILLWATER
PRESERVE DEVELOPMENT LLC

Little Payne Creek

Watershed: Peace River

Subwatershed: Little Payne Creek

Latitude: 27.67908 Longitude: -81.91555

Road Name: Walker Rd.

Sediment Risk Index: 35-High

County: Polk

Site Number: PU057

LULC: Natural Forest, Phosphate Mining (Historic

& Active)

Land Owner(s): DEP*





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	Ī
US Channel Morph	Ponded	1]
DS Channel Morph	С	5	1
DS Bank Alteration	High	1	
Upstream Skew Angle	>30°	1	
Crossing fill condition	Riprap/Poor	2	
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	Aggregate/Native Soil	3	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Bare Soil	0	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Bare Soil	0	•
Downstream Rt Outlet	Bare Soil	0	•
Downstream Lt Outlet	Bare Soil	0	(
Downstream Rt Ditch	Vegetated	1	ı
Downstream Lt Ditch	Vegetated	1	
Improved Outlet Total	1	2]
Improved Ditches Total	3	0	Ī
			7

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (3)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0.8 ft.
Fish Passage Barrier: Present
Notes: Deep scour pool, *Additional land owners:
STILLWATER PRESERVE DEVELOPMENT LLC

Olive Branch

Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.63296 Longitude: -81.89565 Road Name: Pool Rd.

Sediment Risk Index: 51-Low

County: Hardee Site Number: PU058

LULC: Natural Forest, Citrus Groves, Pasture

Land Owner(s): WOODARD VANCE J*





Crossing Structure: DS

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	E	5
DS Channel Morph	E	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	5° to 30°	2
Crossing fill condition	Fair	3
Inlet/Outlet Condition	Sediment/Scouring	3
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Reinforced Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: MOSAIC FERTILIZER
LLC

Watershed: Peace River

Subwatershed: Upper Payne Creek

Latitude: 27.63119 Longitude: -81.97923 Road Name: John Gill Rd. Sediment Risk Index: 50-Low

County: Hardee Site Number: PU059 LULC: Natural Forest

Land Owner(s): HARDEE COUNTY





Crossing Structure: DS

Left Approach from Crossing Structure		
Risk Factor	Ranking	Score
US Channel Morph	Ponded	1
DS Channel Morph	С	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Vegetated	5
Inlet/Outlet Condition	Blocked	1
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤0.20	5
Approach Slope Mean	≤2.0%	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
-		

SRI Total:



Watershed: Peace River

Subwatershed: Lower Payne Creek

Latitude: 27.62186 Longitude: -81.91206 Road Name: Prines Rd.

Sediment Risk Index: 40-Moderate

County: Hardee Site Number: PU060

LULC: Pasture, Citrus Groves

Land Owner(s): BEST GLENDA*





Crossing Structure: DS

Left Approach from Crossing Structure			
Risk Factor	Ranking	Score	Ī
US Channel Morph	F	1	1
DS Channel Morph	F	1	1
DS Bank Alteration	High	1	1
Upstream Skew Angle	5° to 30°	3	1
Crossing fill condition	Fair/Riprap	3	
Inlet/Outlet Condition	Sediment/Scouring	3]
Potential Eroded Vol.	< 21 c.y.	5	1
Soil K Factor	≤0.20	5	
Approach Slope Mean	≤2.0%	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	
Upstream Lt Ditch	Vegetated	1	-
Downstream Rt Outlet	Bare Soil	0	
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	I
Downstream Lt Ditch	Vegetated	1	ا
Improved Outlet Total	3	0	
Improved Ditches Total	4	1	1

SRI Total:



Control of
Additonal Site Features
Crossing Type and Quantity: Culvert (2)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 3 in.
Fish Passage Barrier: Present
Notes: *Additional land owners: MOSAIC FERTILIZER LLC

Watershed: Peace River

Subwatershed: Thompson Branch

Latitude: 27.62857 Longitude: -81.82051 Road Name: Captive Ave.



Left Approach from Crossing Structure

2017 (\$1.0001111011101000011800110000110				
Risk Factor	Ranking	Score	Ī	
US Channel Morph	G	1		
DS Channel Morph	G	1	ĺ	
DS Bank Alteration	High	1	l	
Upstream Skew Angle	<5°	5	l	
Crossing fill condition	Fair	3	ĺ	
Inlet/Outlet Condition	Sediment/Scouring	3	ĺ	
Potential Eroded Vol.	< 21 c.y.	5	l	
Soil K Factor	≤0.20	5	ĺ	
Approach Slope Mean	≤2.0%	5	l	
Road Approach Material	All Aggregate	5	l	
Upstream Rt Outlet	Bare Soil	0	l	
Upstream Lt Outlet	Vegetated	1	ĺ	
Upstream Rt Ditch	Vegetated	1	4	
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	•	
Downstream Rt Ditch	Vegetated	1	l	
Downstream Lt Ditch	Vegetated	1	Ī	
Improved Outlet Total	3	0	ļ	
Improved Ditches Total	4	1		

SRI Total:

42

Sediment Risk Index: 42-Moderate

County: Hardee Site Number: PU061 LULC: Residential

Land Owner(s): GARCIA JOSE O QUINTERO*



Crossing Structure: DS



Additonal Site Features
Crossing Type and Quantity: Culvert (1)
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 5 in.
Fish Passage Barrier: Present
Notes: *Additional land owners: REEVES MICHAEL
AND JIMMY AND

Little Charlie Creek

Watershed: Peace River

Subwatershed: Little Charlie Creek

Latitude: 27.62716 Longitude: -81.72779

Road Name: Locklar Rd.

Sediment Risk Index: 50-Low

County: Hardee Site Number: PU062

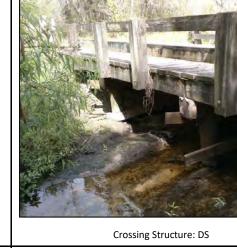
LULC: Natural Forest, Citrus Groves, Phosphate

Mining

Land Owner(s): SEANSA LLC*



Left Approach from Crossing Structure



Left Approach from Crossing Structure		
Ranking	Score	
С	5	1
С	5	
Natural	5	
<5°	5	
Good/Vegetated	5	1
Sediment/Scouring	3	
> 40 c.y.	1	
≤0.20	5	1
≤2.0%	5	1
All Native Soil	1	
Vegetated	1	
Vegetated	1	
Vegetated	1	1
Vegetated	1	(
Vegetated	1	(
Vegetated	1	(
Vegetated	1	F
Vegetated	1	1
4	1	ļ
4	1	ا
SRI Total:	50	
	Ranking C C C Natural <5° Good/Vegetated Sediment/Scouring > 40 c.y. ≤0.20 ≤2.0% All Native Soil Vegetated	RankingScoreC5C5Natural5<5°



A CONTROL OF THE PARTY OF THE P
Additonal Site Features
Crossing Type and Quantity: Bridge (1)
Crossing Material: Wood/Concrete
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: Fence across stream under bridge - debris jam
potential; USGS gaging station at crossing, *Additional
and owners: MOSAIC FERTILIZER LLC

Appendix C. Withlacoochee River Watershed impairment site summaries.

Withlacoochee River

Watershed: Withlacoochee River

Subwatershed: West Lake Rousseau (Barge Canal)

Latitude: 29.020844 Longitude: -82.639861

Severity Scale: 3.25-Low

County: Citrus
Site Number: WI001

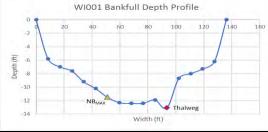
Reach Length: 25 ft.

Landowner: Michael Collins





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Historic	0.5
Bank Erosion:	Active	0.5
BEHI:	High (30.14)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0



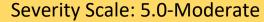
	Severity Scale:	3.25	LB Landuse: Natural Forest, Residential
LB: Floodplain Access:	Partial	0.25	RB Landuse: Recreation, Natural Forest
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Riparian Buffer:	30 ft.	0.5	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: Manmade (Lake Rousseau)
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	0	Width (ft)
Local NPSP:	Slight Potential	0.5	12 NB _{MAX} Thalweg

Notes: Unpaved road beside dam on right bank w/recreational access; Discharge from dam released at 90 degree angle to stream channel on left bank at site; 303d: Impaired - DO and Benthic Macroinvertebrates Bioassessments

Watershed: Withlacoochee River

Subwatershed: West Lake Rousseau (Barge Canal)

Latitude: 29.030458 Longitude: -82.680134



County: Citrus
Site Number: WI002

Reach Length: 94 ft.

Landowner: Withlacoochee LLC





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (33.33)	1	
Local NPSP:	Obvious Sources	1.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	0 ft.	0.75	
LB: Riparian Buffer:	0 ft.	0.75	



WI002 Bankfull Depth Profile

Water Odor:

Normal

Stream Channel Woody Material: Infrequent

Fish Passage Barrier:

None

O Impoundments: None

RB: Riparian Buffer:

Oft.

O.75

Substrate Composition: Medium Sand

LB: Riparian Buffer:

Oft.

O.75

Bank Material: Sand

RB: Floodplain Access:

Full

O Near Bank Stress: Low

LB: Floodplain Access:

Full

O RB Landuse: Utilities

Severity Scale:

5.0

LB Landuse: Pasture

Notes: Cleared land for gas pipeline & powerlines; Cattle present; 303d: Impaired - DO and

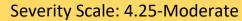
Benthic Macroinvertebrates Bioassessments

Restoration Option 2 or 3

Watershed: Withlacoochee River

Subwatershed: West Lake Rousseau (Barge Canal)

Latitude: 29.01766 Longitude: -82.63734



County: Citrus

Site Number: WI003 Reach Length: 306 ft. Landowner: Justin A. Lamb





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	High (36.06)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
I.D. Dinarian Buffor	O ft	0.75

0	Left Bank	W1003			3		Rig	ht Bank	
-5	20	40	60	80	100	120	140	100	180
		4					por de		
Depth (ft)					1				
de -15		1		-					
-20			1						
-25		NB _{MA}	x/Thalw	eg					
				Widt	h (ft)				
LibhΔ	ional S	ite F	eatu	res					

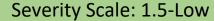
Shoring Structures:	None	0	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest
	Severity Scale:	4.25	LB Landuse: Residential

Notes: Well-manicured lawn; Dock construction at site; Site is below dam w/little flow fluctuations at the confluence of old Withlacoochee River channel and Cross FL Barge Canal; 303d: Impaired - Chlorophyll-A, DO, mercury in fish tissues

Watershed: Withlacoochee River

Subwatershed: North Tsala Apopka Lake

Latitude: 28.99169 Longitude: -82.35630



County: Citrus

Site Number: WI004 Reach Length: 217 ft.

Landowner: Duke Energy Florida Inc.





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (23.30)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0



LOCALINI SI .	INO EVIDENCE	<u> </u>	-12 NB _{MAX} Thalweg
Shoring Structures:	None	0	-12 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Utilities
	Severity Scale:	1.5	LB Landuse: Utilities, Residential

Notes: Along cleared area for power lines where vegetation is regrowing; boat dock present w/more erosion than area under power lines; 303d: Impaired - DO, Benthic Macroinvertebrates Bioassessment and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.44989 Longitude: -82.14579

Severity Scale: 3.25-Low

County: Pasco Site Number: WI005 Reach Length: 200 ft.

Landowner: State of Florida (TIITF)

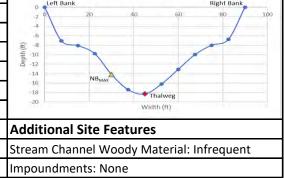




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.49)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Full	0

Partial

Severity Scale:



Substrate Composition: Medium Sand

RB Landuse: Natural Forest, Transportation

Bank Material: Sand

0.25

3.25

Near Bank Stress: Moderate

LB Landuse: Natural Forest

Notes: 303d: Impaired - DO and mercury in fish tissues

Restoration Option 1

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.47841 Longitude: -82.17411

Severity Scale: 4.0-Low

County: Pasco

Site Number: WI006 Reach Length: 100 ft.

Landowner: Philip & Irmgard L Veith





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	Moderate (26.50)	0.5	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	Present	1.5	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	40 ft.	0.5	
I.B. Pinarian Ruffer	100 ft	0	



Shoring Structures:	Present	1.5	-12 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Floodplain Access:	Full	0	RB Landuse: Residential, Natural Forest
	Severity Scale:	4.0	LB Landuse: Natural Forest

Notes: 303d: Impaired - DO and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Dobes Hole Lake

Latitude: 28.35194 Longitude: -82.12609

Severity Scale: 3.25-Low

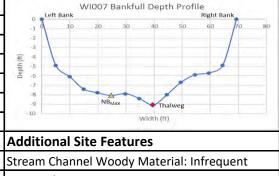
County: Pasco

Site Number: WI007 Reach Length: 45 ft. Landowner: SWFWMD





Risk Factor	Ranking	Score	
Pfankuch-Channel Stability:	Good	0	
Channel Alteration:	None	0	
Bank Erosion:	Active	1	
BEHI:	High (36.51)	1	
Local NPSP:	Slight Potential	0.5	
Shoring Structures:	None	0	
Pipe Discharge:	None	0	
Water Odor:	Normal	0	
Fish Passage Barrier:	None	0	
RB: Riparian Buffer:	100 ft.	0	
LB: Rinarian Buffer:	Ω ft	0.75	



Impoundments: None Substrate Composition: Medium Sand Bank Material: Sand LB: Riparian Buffer: U ft. RB: Floodplain Access: Full 0 Near Bank Stress: Low LB: Floodplain Access: Full 0 **RB Landuse: Natural Forest Severity Scale:** 3.25 LB Landuse: Recreation, Natural Forest

Notes: Site next to bridge in Withlacoochee State Forest w/fishing access; 303d: Impaired - DO and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Dobes Hole Lake

Latitude: 28.35389 Longitude: -82.12552

Severity Scale: 4.75-Moderate

County: Pasco

Site Number: WI008 Reach Length: 30 ft. Landowner: SWFWMD





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (36.55)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0

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12					
12			Thalweg		

Width (ft)
Additional Site Features
Stream Channel Woody Material: None
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Recreation, Natural Forest
LB Landuse: Natural Forest

Notes: Upstream side of boat ramp; Rip-rap falling into river w/silt fencing underneath; 303d:

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0

4.75

Full

Full

Severity Scale:

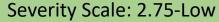
Impaired - DO and mercury in fish tissues

Restoration Option 2

RB: Floodplain Access: LB: Floodplain Access:

Watershed: Withlacoochee Subwatershed: Silver Lake Latitude: 28.59341

Longitude: -82.22146



County: Sumter Site Number: WI009 Reach Length: 64 ft.

Landowner: State of Florida*





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (25.06)	0.5
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



-25 Width (ft)
Additional Site Features
Stream Channel Woody Material: Infrequent
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Low
RB Landuse: Recreation, Natural Forest
LB Landuse: Natural Forest

Notes: *TIITF/Forestry; Day use area in Withlacoochee State Forest - boat ramp, picnic tables, dirt access road; 303d: Impaired - DO and mercury in fish tissues

0

0

2.75

Full

Full

Severity Scale:

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Withlacoochee River

Subwatershed: Silver Lake

Latitude: 28.59762 Longitude: -82.22670

Severity Scale: 3.0-Low

County: Hernando Site Number: WI010 Reach Length: 85 ft.

Landowner: DEP Div. of State Lands*



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (28.43)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	40 ft.	0.5



Shoring Structures:	None	0	Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Infrequent
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	100 ft.	0	Substrate Composition: Medium Sand
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Low
LB: Floodplain Access:	Full	0	RB Landuse: Natural Forest
	Severity Scale:	3.0	LB Landuse: Natural Forest, Recreation

Notes: *TIITF; Sediment input from unpaved access road; 303d: Impaired - DO and mercury in fish

tissues

Restoration Option 2 or 3

Watershed: Withlacoochee River

Subwatershed: Silver Lake

Latitude: 28.68755 Longitude: -82.25679

Severity Scale: 4.25-Moderate

County: Citrus

Site Number: WI011 Reach Length: 25 ft.

Landowner: Ava K. & Terrence Cronin Jr.



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Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (38.83)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	0 ft.	0.75



Substrate Composition: Medium Sand

RB Landuse: Natural Forest, Residential

Bank Material: Sand

LB Landuse: Pasture

Near Bank Stress: Moderate

Notes: Cattle fencing downstream of site; 303d: Impaired - DO and mercury in fish tissues

0

0

4.25

Full

Full

Severity Scale:

Restoration Option 2 or 3

RB: Floodplain Access:

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.48021 Longitude: -82.17745

Severity Scale: 5.25-Moderate

County: Hernando Site Number: WI012 Reach Length: 95 ft.

Landowner: Hernando County





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Historic	0.5
Bank Erosion:	Active	1
BEHI:	High (36.93)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	40 ft.	0.5



	Severity Scale:	5.25	LB Landuse: Transportation
LB: Floodplain Access:	Full	0	RB Landuse: Transportation
RB: Floodplain Access:	Full	0	Near Bank Stress: High
LB: Riparian Buffer:	40 ft.	0.5	Bank Material: Sand
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
Fish Passage Barrier:	None	0	Impoundments: None
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Pipe Discharge:	None	0	Additional Site Features
Shoring Structures:	None	Ü	white (ii)

Notes: Under Hwy 35 bridge; Some sediment input from left bank; 303d: Impaired - DO and mercury in fish tissues

Restoration Option 2 or 3

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.48039 Longitude: -82.17815

Severity Scale: 2.75-Low

County: Hernando Site Number: WI013 Reach Length: 20 ft.

Landowner: Jeffrey & Carol Dunfee





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.45)	0.5
Local NPSP:	Moderate Potential	1
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	100 ft.	0
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



RB Landuse: Natural Forest, Recreation

LB Landuse: Natural Forest

WI013 Bankfull Depth Profile
Right Bank

Notes: Rope swing/swimming hole; 303d: Impaired - DO and mercury in fish tissues

Full

Severity Scale:

0

2.75

Restoration Option 1

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.48093 Longitude: -82.18965

Severity Scale: 4.25-Moderate

County: Hernando Site Number: WI014 Reach Length: 25 ft. Landowner: Larry J. Davis





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.19)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25



Width (ff)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: Moderate
RB Landuse: Natural Forest, Recreation
LB Landuse: Natural Forest

Notes: Unpaved road on top of bank causing sediment input into river; 303d: Impaired - DO and mercury in fish tissues

0

4.25

Full

Severity Scale:

Restoration Option 2 or 3

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.47792 Longitude: -82.19393

Severity Scale: 3.75-Low

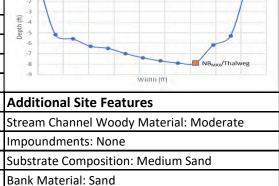
County: Pasco

Site Number: WI015 Reach Length: 35 ft. Landowner: HBHCI*





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate (26.08)	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75
LB: Riparian Buffer:	100 ft.	0



Near Bank Stress: High

RB Landuse: Residential

LB Landuse: Natural Forest

WI015 Bankfull Depth Profile

Notes: *Harbor Behavioral Health Care Institute; Concrete shoring structures present; 303d:

0

0

3.75

Full

Full

Severity Scale:

Impaired - DO and mercury in fish tissues

Restoration Option 1

RB: Floodplain Access:

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.49231 Longitude: -82.20316

Severity Scale: 3.75-Low

County: Hernando Site Number: WI016 Reach Length: 100 ft.

Landowner: KML Properties LLC

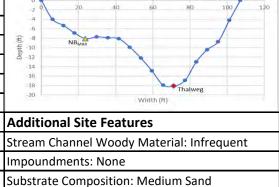




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.41)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	60 ft.	0.25
RB: Floodplain Access:	Partial	0.25

Partial

Severity Scale:



RB Landuse: Residential, Natural Forest

LB Landuse: Natural Forest, Pasture

Bank Material: Sand Near Bank Stress: Low

0.25

3.75

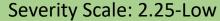
WI016 Bankfull Depth Profile

Notes: 303d: Impaired - DO and mercury in fish tissues

Restoration Option 1

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.49285 Longitude: -82.20367



County: Hernando Site Number: WI017 Reach Length: 60 ft.

Landowner: Paul E. & Reeta M. Elgland



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	WIO17 Pankfull Donth Profile

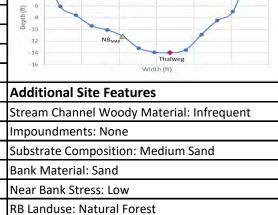
Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	Moderate	0.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Full	0

Partial

Severity Scale:

0.25

2.25



LB Landuse: Natural Forest, Residential

Notes: 303d: Impaired - DO and mercury in fish tissues

Restoration Option 1

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.49939 Longitude: -82.19907

Severity Scale: 4.0-Low

County: Hernando Site Number: WI018 Reach Length: 70 ft

Landowner: Emory R. & Marjorie Waddle

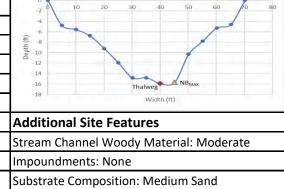




Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Mass-wasting	1.5
BEHI:	Very High (44.48)	1.5
Local NPSP:	No Evidence	0
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	40 ft.	0.5
RB: Floodplain Access:	Partial	0.25

Full

Severity Scale:



Bank Material: Sand

0

4.0

Near Bank Stress: Moderate

RB Landuse: Residential, Natural Forest

LB Landuse: Natural Forest, Residential

Notes: 303d: Impaired - DO and mercury in fish tissues

Restoration Option 1

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.51930 Longitude: -82.20953

Severity Scale: 7.5-High

County: Hernando Site Number: WI019 Reach Length: 16 ft.

Landowner: State of Florida DOT





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Historic	0.5
Bank Erosion:	Active	1
BEHI:	High (37.52)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
DD. Dimenian Duffer.	0 ft	0.75



Local IVI SI .	Obvious sources	1.5	
Shoring Structures:	Present	1.5	-16 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Transportation
	Severity Scale:	7.5	LB Landuse: Transportation

Notes: Right bank under Hwy 98 bridge; Some ruts fromed by sediment and water flow; 303d:

Impaired - DO and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.51922 Longitude: -82.20964

Severity Scale: 7.5-High

County: Hernando Site Number: WI020 Reach Length: 16 ft.

Landowner: State of Florida DOT





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	Historic	0.5
Bank Erosion:	Active	1
BEHI:	High (32.84)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	Present	1.5
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	0 ft.	0.75

-2	10	20	30	40	50	60
-6						
-8					,	1
-10	1				/	
-14		NB _{MAX}	Thalwe			
-16			Widt	h (ft)		

Shoring Structures:	Present	1.5	-16 Width (ft)
Pipe Discharge:	None	0	Additional Site Features
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate
Fish Passage Barrier:	None	0	Impoundments: None
RB: Riparian Buffer:	0 ft.	0.75	Substrate Composition: Medium Sand
LB: Riparian Buffer:	0 ft.	0.75	Bank Material: Sand
RB: Floodplain Access:	Partial	0.25	Near Bank Stress: Moderate
LB: Floodplain Access:	Partial	0.25	RB Landuse: Transportation
	Severity Scale:	7.5	LB Landuse: Transportation

Notes: Left bank under Hwy 98 bridge; Some ruts formed by sediment and water flow; 303d:

Impaired - DO and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.54764 Longitude: -82.19768

Severity Scale: 4.25-Moderate

County: Hernando Site Number: WI021 Reach Length: 100 ft.

Landowner: Steven H Parker





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (33.65)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5
LB: Riparian Buffer:	100 ft.	0



horing Structures:	None	0	-14 Width (ft)
ipe Discharge:	None	0	Additional Site Features
Vater Odor:	Normal	0	Stream Channel Woody Material: Moderate
ish Passage Barrier:	None	0	Impoundments: None
B: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand
B: Riparian Buffer:	100 ft.	0	Bank Material: Sand
B: Floodplain Access:	Full	0	Near Bank Stress: Low
B: Floodplain Access:	Partial	0.25	RB Landuse: Natural Forest, Recreation
	Severity Scale:	4.25	LB Landuse: Natural Forest

Notes: Unpaved access road to rope swing; 303d: Impaired - DO and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.54908 Longitude: -82.20045

Severity Scale: 2.25-Low

County: Hernando Site Number: WI022 Reach Length: 30 ft.

Landowner: DEP Div. of State Lands



2.25

Risk Factor	Ranking	Score	WIO22 Ba
Pfankuch-Channel Stability:	Good	0	10 20
Channel Alteration:	None	0	-8
Bank Erosion:	Active	1	8 8 (f)
BEHI:	High (36.61)	1	-10
Local NPSP:	No Evidence	0	-14 NB _{MAX} /Tha
Shoring Structures:	None	0	-16
Pipe Discharge:	None	0	Additional Site Fea
Water Odor:	Normal	0	Stream Channel Woo
Fish Passage Barrier:	None	0	Impoundments: Nor
RB: Riparian Buffer:	100 ft.	0	Substrate Compositi
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand
RB: Floodplain Access:	Full	0	Near Bank Stress: Hi
LB: Floodplain Access:	Partial	0.25	RB Landuse: Natural

Severity Scale:

0	Bank				Right Bar	IK.
-2	10	20	30	40	50	60
4						
€ -6	-					
-6 -6 -8 -8 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10	1				-	
-10		9	-	0 10	-	
			10			
9.79						
-12 -14						

-16 Width (ft)
Additional Site Features
Stream Channel Woody Material: Moderate
Impoundments: None
Substrate Composition: Medium Sand
Bank Material: Sand
Near Bank Stress: High
RB Landuse: Natural Forest
LB Landuse: Natural Forest

Notes: 303d: Impaired - DO and mercury in fish tissues

Watershed: Withlacoochee River Subwatershed: Devil's Creek

Latitude: 28.56478 Longitude: -82.20052

Severity Scale: 4.0-Low

County: Hernando Site Number: WI023 Reach Length: 30 ft.

Landowner: DEP Div. of State Lands





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (37.80)	1
Local NPSP:	Obvious Sources	1.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	60 ft.	0.25
LB: Riparian Buffer:	100 ft.	0
RB: Floodplain Access:	Partial	0.25

-2	10	20	30 4	o	50	60	6	80
-4								-11
Depth (ft)	1					A STATE OF THE PARTY OF THE PAR		
-10	-				1	-		= 1
-12 -14		-	•	1	[▲] NB _{MA}	×		
-16			Widt					
Addition	al Sit	e Feat	tures					
Stream Channel Woody Material: Moderate								
Impoundments: None								
Substrate Composition: Medium Sand								

Bank Material: Sand

Near Bank Stress: Moderate

LB Landuse: Natural Forest

RB Landuse: Natural Forest, Recreation

Notes: Unpaved road to recreation area; 303d: Impaired - DO and mercury in fish tissues

0

4.0

Full

Severity Scale:

Restoration Option 1

Watershed: Withlacoochee River

Subwatershed: Silver Lake

Latitude: 28.57208 Longitude: -82.20734

Severity Scale: 3.0-Low

County: Sumter Site Number: WI024 Reach Length: 150 ft.

Landowner: DEP Div. of State Lands





Risk Factor	Ranking	Score
Pfankuch-Channel Stability:	Good	0
Channel Alteration:	None	0
Bank Erosion:	Active	1
BEHI:	High (38.49)	1
Local NPSP:	Slight Potential	0.5
Shoring Structures:	None	0
Pipe Discharge:	None	0
Water Odor:	Normal	0
Fish Passage Barrier:	None	0
RB: Riparian Buffer:	40 ft.	0.5



Local NPSP:	Slight Potential	0.5	Thalweg		
Shoring Structures:	None	0	30 Width (ft)		
Pipe Discharge:	None	0	Additional Site Features		
Water Odor:	Normal	0	Stream Channel Woody Material: Moderate		
Fish Passage Barrier:	None	0	Impoundments: None		
RB: Riparian Buffer:	40 ft.	0.5	Substrate Composition: Medium Sand		
LB: Riparian Buffer:	100 ft.	0	Bank Material: Sand		
RB: Floodplain Access:	Full	0	Near Bank Stress: Low		
LB: Floodplain Access:	Full	0	RB Landuse: Recreation, Natural Forest		
	Severity Scale:	3.0	LB Landuse: Natural Forest		

Notes: Bank next to boat ramp used for loading/unloading passengers; Downstream of site has sediment build up and makes boat passage difficult at low flow; 303d: Impaired - DO and mercury in fish tissues

Appendix D. Withlacoochee River Watershed unpaved road crossing site summaries.

Withlacoochee River Watershed: Withlacoochee River Subwatershed: Pony Creek Latitude: 28.32578 Longitude: -81.93182 Road Name: Main Grade Rd. Sediment Risk Index: 57-Low County: Polk Site Number: WU001 LULC: Natural Forest Land Owner(s): SWFWMD

1

1

57





Crossing Structure: Right Approach

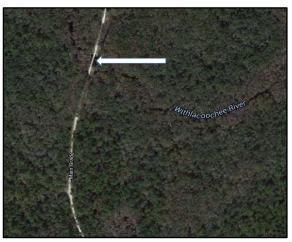
Crossing Structure. DS				
Risk Factor	Ranking	Score		
US Channel Morph	Wetland	5		
DS Channel Morph	Wetland	5		
DS Bank Alteration	Natural	5		
Upstream Skew Angle	< 5°	5		
Crossing fill condition	Vegetated/Rip-rap	4		
Inlet/Outlet Condition	No Impairment	5		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	0.21-0.40	3		
Approach Slope Mean	< 2%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegetated/Rip-rap	1		
Upstream Lt Outlet	Vegetated/Rip-rap	1		
Upstream Rt Ditch	Vegetated	1		
Upstream Lt Ditch	Vegetated	1		
Downstream Rt Outlet	Vegetated/Rip-rap	1		
Downstream Lt Outlet	Vegetated/Rip-rap	1		
Downstream Rt Ditch	Vegetated	1		
Downstream Lt Ditch	Vegetated	1		

4

SRI Total:

Improved Outlet Total

Improved Ditches Total



THE STATE OF THE S
Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood/Metal
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: Fill is a combination of riprap and vegetation

Unnamed Tributary

Watershed: Withlacoochee River

Subwatershed: Pony Creek

Latitude: 28.32694 Longitude: -81.93150

Road Name: Main Grade Rd.

Sediment Risk Index: 57-Low

County: Polk

Site Number: WU002 LULC: Natural Forest

Land Owner(s): SWFWMD





US Channel from Crossing

Crossing Structure: Right Approach				
Risk Factor	Ranking	Score		
US Channel Morph	Wetland	5		
DS Channel Morph	Wetland	5		
DS Bank Alteration	Natural	5		
Upstream Skew Angle	< 5°	5		
Crossing fill condition	Vegetated/Rip-rap	4		
Inlet/Outlet Condition	No Impairment	5		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	0.21-0.40	3		
Approach Slope Mean	< 2%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegetated/Rip-rap	1		
Upstream Lt Outlet	Vegetated/Rip-rap	1		
Upstream Rt Ditch	Vegetated	1	1	
Upstream Lt Ditch	Vegetated	1	0	
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F	
Downstream Lt Ditch	Vegetated	1	١	
Improved Outlet Total	4	1		
Improved Ditches Total	4	1		
			-	

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood/Metal
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes: Fill is a combination of riprap and vegetation

Unnamed Tributary

Watershed: Withlacoochee River

Subwatershed: Pony Creek

Latitude: 28.32819 Longitude: -81.93130

Road Name: Main Grade Rd.

Sediment Risk Index: 56-Low

County: Polk

Site Number: WU003 LULC: Natural Forest

Land Owner(s): SWFWMD



Crossing Structure: DS



Crossing Structure: Left Approach

Crossing Structure: DS				
Risk Factor	Ranking	Score		
US Channel Morph	Wetland	5		
DS Channel Morph	Wetland	5		
DS Bank Alteration	Natural	5		
Upstream Skew Angle	< 5°	5		
Crossing fill condition	Fair/Rip-rap	3		
Inlet/Outlet Condition	No Impairment	5		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	0.21-0.40	3		
Approach Slope Mean	< 2%	5		
Road Approach Material	All Aggregate	5		
Upstream Rt Outlet	Vegetated	1		
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1		
Upstream Lt Ditch	Vegetated	1		
Downstream Rt Outlet	Vegetated	1		
Downstream Lt Outlet	Vegetated	1		
Downstream Rt Ditch	Vegetated	1		
Downstream Lt Ditch	Vegetated	1		
Improved Outlet Total	4	1		
Improved Ditches Total	4	1		

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood/Metal
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes:

Watershed: Withlacoochee River

Subwatershed: Lower Withlacoochee Swamp

Latitude: 28.321392 Longitude: -82.03099 Road Name: Main Line Rd

Sediment Risk Index: 52-Low

County: Sumter Site Number: WU004 LULC: Natural Forest

Land Owner(s): SWFWMD





Crossing Structure: US

Craccina	Structure:	Diah+	1 nnraach

Risk Factor	Ranking	Score	
US Channel Morph	DA	3	
DS Channel Morph	DA	3	Part of the same
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Fair/Riprap	3	
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	0.21-0.40	3	
Approach Slope Mean	<2°	5	
Road Approach Material	All aggregate	5	TE AND A SON
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site Fea
Upstream Lt Ditch	Vegetated	1	Crossing Type and Q
Downstream Rt Outlet	Vegetated	1	Crossing Material: W
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier:
Downstream Lt Ditch	Vegetated	1	Notes:
Improved Outlet Total	4	1	7
Improved Ditches Total	4	1	7
	SRI Total:	52	



Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Wood, iron
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes:

Gator Creek

Watershed: Withlacoochee River Subwatershed: Gator Creek

Latitude: 28.277276 Longitude: -82.031084

Road Name: Colt Creek State Park-Unnamed road

Sediment Risk Index: 46-Low

County: Polk

Site Number: WU005 LULC: Natural forest

Land Owner(s): SWFWMD







Crossing Structure: DS

Crossing Structure: Left Approach				
Risk Factor	Ranking	Score		
US Channel Morph	С	5		
DS Channel Morph	Ponded	1		
DS Bank Alteration	High	1	1	
Upstream Skew Angle	5°-30°	3	1	
Crossing fill condition	Good/Vegetated	5		
Inlet/Outlet Condition	Sediment Islands/Scouring	3	1	
Potential Eroded Vol.	< 21 c.y.	5	1	
Soil K Factor	≤ 0.20	5]	
Approach Slope Mean	<2°	5		
Road Approach Material	All aggregate	5		
Upstream Rt Outlet	Vegetated	1]	
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1	1	
Upstream Lt Ditch	Vegetated	1	(
Downstream Rt Outlet	Vegetated	1	(
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Bare Soil	0	F	
Downstream Lt Ditch	Vegetated	1	1	
Improved Outlet Total	4	1	f	
Improved Ditches Total	3	0	\prod	
	SRI Total:	46		



A CAST AND A VESTIGATION OF THE SAME
Additonal Site Features
Crossing Type and Quantity: Culvert, 4
Crossing Material: Reinforced Concrete
Culvert Outfall Drop: 0"
Fish Passage Barrier: Not Present
Notes: Both ditches on right approach appear to
feed into a wetland, not the creek. The left bank
nas a high berm up and dowmstream.

Little Withlacoochee River

Watershed: Withlacoochee River

Subwatershed: Upper Little Withlacoochee River

Latitude: 28.503113 Longitude: -82.017251 Road Name: N. Grade Rd.

Sediment Risk Index: 60-Low

County: Sumter Site Number: WU006 LULC: Natural forest

Land Owner(s): State of Florida







Crossing Structure: US

Crossing St	tructure: Left Approach		
Risk Factor	Ranking	Score	
US Channel Morph	Wetland	5	
DS Channel Morph	Wetland	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	BELLAND CONTRACTOR
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	No Impairment	5	THE WAR THE STATE OF THE STATE
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤ 0.20	5	The second second
Approach Slope Mean	<2°	5	计是对象数据
Road Approach Material	All aggregate	5	1.25
Upstream Rt Outlet	Vegetated	1	A STORY NAME OF A
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site Features
Upstream Lt Ditch	Vegetated	1	Crossing Type and Quantity: Bridge
Downstream Rt Outlet	Vegetated	1	Crossing Material: Wood
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Drop: NA
Downstream Rt Ditch	Vegetated	1	Fish Passage Barrier: Not Present
Downstream Lt Ditch	Vegetated	1	Notes:
Improved Outlet Total	4	1	7
Improved Ditches Total	4	1	7
	SRI Total:	60	7

Unnamed Tributary

Watershed: Withlacoochee River Subwatershed: Gum Swamp

Latitude: 28.89766 Longitude: -82.23651 Road Name: CR 247

Sediment Risk Index: 60-Low

County: Sumter Site Number: WU007 LULC: Natural forest

Land Owner(s): TIITF/GFWFC



Crossing Structure: Right Approach



Crossing Structure: DS

Crossing 3ti	ucture. Night Approach	
Risk Factor	Ranking	Score
US Channel Morph	Wetland	5
DS Channel Morph	Wetland	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤ 0.20	5
Approach Slope Mean	<2°	5
Road Approach Material	All aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1
	SRI Total:	60

Unnamed Tributary

Watershed: Withlacoochee River Subwatershed: Jumper Creek Swamp

Latitude: 28.75838 Longitude: -82.16146

Downstream Rt Ditch

Downstream Lt Ditch

Improved Outlet Total

Improved Ditches Total

Road Name: Unnamed road

Sediment Risk Index: 60-Low

County: Sumter Site Number: WU008 LULC: Natural forest

Land Owner(s): WITHLACOOCHEE STATE FOREST



Crossing Structure: Right Approach



Crossing Structure: DS

9. 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				
Risk Factor	Ranking	Score		
US Channel Morph	Wetland	5		
DS Channel Morph	Wetland	5		
DS Bank Alteration	Natural	5		
Upstream Skew Angle	<5°	5		
Crossing fill condition	Good/Vegetated	5		
Inlet/Outlet Condition	No Impairment	5		
Potential Eroded Vol.	< 21 c.y.	5		
Soil K Factor	≤ 0.20	5		
Approach Slope Mean	<2°	5		
Road Approach Material	All aggregate	5		
Upstream Rt Outlet	Vegetated	1		
Upstream Lt Outlet	Vegetated	1		
Upstream Rt Ditch	Vegetated	1		
Upstream Lt Ditch	Vegetated	1		
Downstream Rt Outlet	Vegetated	1		
Downstream Lt Outlet	Vegetated	1		

Vegetated

Vegetated

4

4

SRI Total:

1

1

1

1



Jumper Creek Canal

Watershed: Withlacoochee River Subwatershed: Jumper Creek Canal

Latitude: 28.69956 Longitude: -82.06298 Road Name: SE 25th St

Sediment Risk Index: 52-Low

County: Sumter
Site Number: WU009

LULC: Residential, Natural forest

Land Owner(s): GALLET YVES P & LISA C*



Crossing Structure: Right Approach



Crossing Structure: DS

Risk Factor	Ranking	Score	
US Channel Morph	С	5	1
DS Channel Morph	С	5	
DS Bank Alteration	High	1	
Upstream Skew Angle	5°-30°	3	minut to
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	Sediment/Scouring	3	AL EST
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤ 0.20	5	
Approach Slope Mean	<2°	5	6000
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	
Upstream Rt Ditch	Vegetated	1	Additonal Site
Upstream Lt Ditch	Vegetated	1	Crossing Type ar
Downstream Rt Outlet	Vegetated	1	Crossing Materia
Downstream Lt Outlet	Vegetated	1	Culvert Outfall D
Downstream Rt Ditch	Vegetated	1	Fish Passage Bar
Downstream Lt Ditch	Vegetated	1	Notes: *Addition
Improved Outlet Total	4	1	T, CAUSEY JOE S
Improved Ditches Total	4	1	& KEITH

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert, 3
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: PRICE WILLIAM
T, CAUSEY JOE S & KAREN K, NESSELROTTE TRINA
& KEITH

Bear Creek

Watershed: Withlacoochee River

Subwatershed: Gum Slough - Withlacoochee River

Latitude: 28.64864 Longitude: -82.14598 Road Name: SW 73rd Ln

Sediment Risk Index: 48-Low

County: Sumter Site Number: WU010

LULC: Residential, natural forest

Land Owner(s): MURPHY CARL B & CYNTHIA J*





Crossing Structure: DS

Risk Factor	Ranking	Score	
US Channel Morph	G	1	24 7.58
DS Channel Morph	G	1	40.00
DS Bank Alteration	High	1	
Upstream Skew Angle	<5°	5	200
Crossing fill condition	Good/Vegetated	5	9.0
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤ 0.20	5	
Approach Slope Mean	<2°	5	2000
Road Approach Material	All Aggregate	5	NI-VAN
Upstream Rt Outlet	riprap	1	2000
Upstream Lt Outlet	riprap	1	
Upstream Rt Ditch	Vegetated	1	Α
Upstream Lt Ditch	Vegetated	1	Cr
Downstream Rt Outlet	Vegetated	1	Cr
Downstream Lt Outlet	Vegetated	1	Cı
Downstream Rt Ditch	Vegetated	1	Fis
Downstream Lt Ditch	Vegetated	1	N
Improved Outlet Total	4	1	BE
Improved Ditches Total	4	1	
			-

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert, 2
Crossing Material: Polyvinyl Chloride
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: UNT ALLEN D &
BETH A

Unnamed Tributary

Watershed: Withlacoochee River Subwatershed: Walled Sink Ditch

Latitude: 28.65529 Longitude: -81.95241

Road Name: Shady Grove Rd

Sediment Risk Index: 52-Low

County: Lake

Site Number: WU011

LULC: Residential, natural forest

Land Owner(s): REYNOLDS ROBERT B*





Crossing Structure: DS

Crossing Str	ructure: Right Approach	
Risk Factor	Ranking	Score
US Channel Morph	F	1
DS Channel Morph	F	1
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	< 21 c.y.	5
Soil K Factor	≤ 0.20	5
Approach Slope Mean	<2°	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	1	1
Improved Ditches Total	1	1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert, 1
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: GROOMS
CHARLIE E & DARLENE S

Unnamed Tributary

Watershed: Withlacoochee River Subwatershed: Walled Sink Ditch

Latitude: 28.65404 Longitude: -81.94587 Road Name: Sunridge Rd

Improved Ditches Total

Sediment Risk Index: 45-Moderate

County: Lake

Site Number: WU012 LULC: Residential, pasture

Land Owner(s): RODGERS BENJAMIN T*







Crossing Structure: DS

Crossing St	ructure: Right Approach	
Risk Factor	Ranking	Score
US Channel Morph	Ponded	1
DS Channel Morph	Wetland	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Fair/Rip-rap	3
Inlet/Outlet Condition	Sediment/Scouring	4
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤ 0.20	5
Approach Slope Mean	<2°	5
Road Approach Material	Native soil	1
Upstream Rt Outlet	bare soil	0
Upstream Lt Outlet	bare soil	0
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	2	1

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert, 1
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: CAPSHAW NANCY A
LIFE ESTATE
1

Watershed: Withlacoochee River Subwatershed: Mill Stream Swamp

Latitude: 28.43922 Longitude: -81.83129

Road Name: Ott Williams Rd

Sediment Risk Index: 56-Low

County: Lake

Site Number: WU013 LULC: Natural forest

Land Owner(s): FARM LAND REAL ESTATE





Crossing Structure: DS

Crossing Str	ructure: Right Approach	
Risk Factor	Ranking	Score
US Channel Morph	Wetland	5
DS Channel Morph	Wetland	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Good/Vegetated	5
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	>40 c.y.	1
Soil K Factor	≤ 0.20	5
Approach Slope Mean	<2°	5
Road Approach Material	All Aggregate	5
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1
Improved Ditches Total	4	1

SRI Total:



Additional Site Features
Crossing Type and Quantity: Culvert, 1
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: *Additional land owners: MC DANIEL
SHIRLEY L TRUSTEE

Watershed: Withlacoochee River Subwatershed: 31002080201

Latitude: 28.22384 Longitude: -81.9985

Road Name: Countryland Dr

Sediment Risk Index: 35-High

County: Polk

Site Number: WU014

LULC: Residential, natural forest

Land Owner(s): XAYASONGKHAM BOUNMA*



Crossing Structure: Right Approach



Crossing Structure: DS

Risk Factor	Ranking	Score	
US Channel Morph	G	1	
DS Channel Morph	G	1	
DS Bank Alteration	High	1	
Upstream Skew Angle	>30°	1	
Crossing fill condition	Fair/Rip-rap	4	
Inlet/Outlet Condition	Sediment/Scouring	3	1
Potential Eroded Vol.	>40 c.y.	1	
Soil K Factor	≤ 0.20	5	
Approach Slope Mean	<2°	5	
Road Approach Material	All Aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	Control of the Contro
Upstream Rt Ditch	Vegetated	1	Additonal Site F
Upstream Lt Ditch	Vegetated	1	Crossing Type and
Downstream Rt Outlet	Vegetated	1	Crossing Material
Downstream Lt Outlet	Vegetated	1	Culvert Outfall Dr
Downstream Rt Ditch	Vegetated	1	Fish Passage Barr
Downstream Lt Ditch	bare soil	0	Notes: Channelize
Improved Outlet Total	4	1	owners: LEE CARC
Improved Ditches Total	3	0	
	SRI Total:	35	



Additonal Site Features

Crossing Type and Quantity: Culvert, 1

Crossing Material: Corrugated Metal

Culvert Outfall Drop: 0 in.

Fish Passage Barrier: Not Present

Notes: Channelized creek, *Additional land owners: LEE CAROLINE M

Watershed: Withlacoochee River Subwatershed: Mill Stream Swamp

Latitude: 28.47756 Longitude: -81.86454 Road Name: Los Robles Dr

Sediment Risk Index: 43-Moderate

County: Lake

Site Number: WU015

LULC: Residential, natural forest

Land Owner(s): HILLARY MATTHEW B*



Crossing Structure: Right Approach



Crossing Structure: DS

Risk Factor	Ranking	Score
US Channel Morph	Wetland	5
DS Channel Morph	F	1
DS Bank Alteration	Minor or Partial	3
Upstream Skew Angle	5°-30°	3
Crossing fill condition	Fair/Rip-rap	3
Inlet/Outlet Condition	Sediment/Scouring	4
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤ 0.20	5
Approach Slope Mean	<2°	5
Road Approach Material	Native soil	1
Upstream Rt Outlet	Vegetated	1
Upstream Lt Outlet	Vegetated	1
Upstream Rt Ditch	Vegetated	1
Upstream Lt Ditch	Vegetated	1
Downstream Rt Outlet	Vegetated	1
Downstream Lt Outlet	Vegetated	1
Downstream Rt Ditch	Vegetated	1
Downstream Lt Ditch	Vegetated	1
Improved Outlet Total	4	1

4

SRI Total:

1

43

Improved Ditches Total



Additonal Site Features
Crossing Type and Quantity: Culvert, 2
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Channelized creek, *Additional land owners:
CURTIS WILMONT D JR & GLORIA

Watershed: Withlacoochee River Subwatershed: Mill Stream Swamp

Latitude: 28.47034 Longitude: -81.85933 Road Name: Los Robles Dr

Sediment Risk Index: 50-Low

County: Lake

Site Number: WU016 LULC: Natural forest

Land Owner(s): FEDERAL HOME MORTGAGE



Crossing Structure: Right Approach



Crossing Structure: DS

Risk Factor	Ranking	Score				
US Channel Morph	Ponded	1			"大学"	
DS Channel Morph	С	5				
DS Bank Alteration	Natural	5		4		
Upstream Skew Angle	5°-30°	3	_			
Crossing fill condition	Good/Vegetated	5				
Inlet/Outlet Condition	No Impairment	5				
Potential Eroded Vol.	< 21 c.y.	5		73		
Soil K Factor	≤ 0.20	5				
Approach Slope Mean	<2°	5				
Road Approach Material	Native soil	1				
Upstream Rt Outlet	Vegetated	1				
Upstream Lt Outlet	Vegetated	1		A 300.0001 14 400.		and the second s
Upstream Rt Ditch	Vegetated	1		Additonal	Additional Site Feature	Additonal Site Features
Upstream Lt Ditch	Vegetated	1		Crossing Ty	Crossing Type and Quant	Crossing Type and Quantity: Culvert, 1
Downstream Rt Outlet	Vegetated	1		Crossing Ma	Crossing Material: Reinfo	Crossing Material: Reinforced Concret
Downstream Lt Outlet	Vegetated	1		Culvert Out	Culvert Outfall Drop: 0 in	Culvert Outfall Drop: 0 in.
Downstream Rt Ditch	Vegetated	1		Fish Passage	Fish Passage Barrier: Not	Fish Passage Barrier: Not Present
Downstream Lt Ditch	Vegetated	1		Notes: 2 sm	Notes: 2 small tributaries	Notes: 2 small tributaries upstream
Improved Outlet Total	4	1				
Improved Ditches Total	4	1				
	SRI Total:	50				

Withlacoochee River

Watershed: Withlacoochee River

Subwatershed: Ashley Bay

Latitude: 28.35243 Longitude: -82.12618 Road Name: River Rd

Sediment Risk Index: 58-Low

County: Pasco

Site Number: WU017 LULC: Natural forest

Land Owner(s): SWFWMD



Crossing Structure: Right Approach



Crossing Structure: DS

Risk Factor	Ranking	Score	
US Channel Morph	Е	5	
DS Channel Morph	Е	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Fair/Rip-rap	3	W 18 C
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	< 21 c.y.	5	
Soil K Factor	≤ 0.20	5	*(*)
Approach Slope Mean	<2°	5	
Road Approach Material	All aggregate	5	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	*NA	1	
Upstream Rt Ditch	Vegetated	1	Additonal
Upstream Lt Ditch	*NA	1	Crossing Ty
Downstream Rt Outlet	Vegetated	1	Crossing M
Downstream Lt Outlet	*NA	1	Culvert Out
Downstream Rt Ditch	Vegetated	1	Fish Passag
Downstream Lt Ditch	*NA	1	Notes: Left
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
	SRI Total:	58	

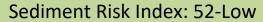


Additonal Site Features
Crossing Type and Quantity: Bridge
Crossing Material: Reinforced Concrete
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Left approach was paved

Watershed: Withlacoochee River

Subwatershed: Lower Little Withlacoochee River

Latitude: 28.53447 Longitude: -82.10075 Road Name: Boggey Rd



County: Sumter Site Number: WU018 LULC: Natural forest

Land Owner(s): WITHLACOOCHEE STATE FOREST



Crossing Structure: Right Approach



Crossing Structure: DS

Risk Factor	Ranking	Score	
US Channel Morph	E	5	Ī
DS Channel Morph	E	5	
DS Bank Alteration	Natural	5	I
Upstream Skew Angle	<5°	5	l
Crossing fill condition	Good/Vegetated	5	Ī
Inlet/Outlet Condition	Sediment/Scouring	3	
Potential Eroded Vol.	21-40 c.y.	3	Ī
Soil K Factor	≤ 0.20	5	Ī
Approach Slope Mean	<2°	5	Ī
Road Approach Material	Native soil	1	
Upstream Rt Outlet	Vegetated	1	l
Upstream Lt Outlet	Vegetated	1	Ī
Upstream Rt Ditch	Vegetated	1	1
Upstream Lt Ditch	Vegetated	1	0
Downstream Rt Outlet	Vegetated	1	0
Downstream Lt Outlet	Vegetated	1	(
Downstream Rt Ditch	Vegetated	1	F
Downstream Lt Ditch	Vegetated	1	١
Improved Outlet Total	4	1	Ī
Improved Ditches Total	4	1	Ī
			-

SRI Total:

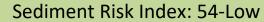


District the Edward April 1985 to 1985
Additonal Site Features
Crossing Type and Quantity: Culvert, 1
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes: Concrete pad on top of crossing

Watershed: Withlacoochee River

Subwatershed: Lower Little Withlacoochee River

Latitude: 28.54872 Longitude: -82.11501 Road Name: Boggey Rd



County: Sumter Site Number: WU019 LULC: Natural forest

Land Owner(s): WITHLACOOCHEE STATE FOREST





Crossing Structure: DS

Crossing Structure: Right Approach			
Risk Factor	Ranking	Score	1
US Channel Morph	С	5	
DS Channel Morph	С	5	
DS Bank Alteration	Natural	5	
Upstream Skew Angle	<5°	5	
Crossing fill condition	Good/Vegetated	5	
Inlet/Outlet Condition	No Impairment	5	
Potential Eroded Vol.	21-40 c.y.	3	
Soil K Factor	≤ 0.20	5	
Approach Slope Mean	<2°	5	
Road Approach Material	Native soil	1	
Upstream Rt Outlet	Vegetated	1	
Upstream Lt Outlet	Vegetated	1	A STATE OF
Upstream Rt Ditch	Vegetated	1	Addi
Upstream Lt Ditch	Vegetated	1	Cross
Downstream Rt Outlet	Vegetated	1	Cross
Downstream Lt Outlet	Vegetated	1	Culve
Downstream Rt Ditch	Vegetated	1	Fish F
Downstream Lt Ditch	Vegetated	1	Notes
Improved Outlet Total	4	1	
Improved Ditches Total	4	1	
·	•	•	

SRI Total:



Additonal Site Features
Crossing Type and Quantity: Culvert, 2
Crossing Material: Corrugated Metal
Culvert Outfall Drop: 0 in.
Fish Passage Barrier: Not Present
Notes:

Watershed: Withlacoochee River

Subwatershed: Lower Little Withlacoochee River

Latitude: 28.54064 Longitude: -82.10728 Road Name: Boggey Rd

Improved Ditches Total

Sediment Risk Index: 42-Moderate

County: Sumter Site Number: WU020 LULC: Natural forest

Land Owner(s): WITHLACOOCHEE STATE FOREST



Crossing Structure: Right Approach

Ford: DS

Risk Factor	Ranking	Score
US Channel Morph	Е	5
DS Channel Morph	Е	5
DS Bank Alteration	Natural	5
Upstream Skew Angle	<5°	5
Crossing fill condition	Poor, Bare Soil	1
Inlet/Outlet Condition	No Impairment	5
Potential Eroded Vol.	21-40 c.y.	3
Soil K Factor	≤ 0.20	5
Approach Slope Mean	<2°	5
Road Approach Material	Native soil	1
Upstream Rt Outlet	bare soil	0
Upstream Lt Outlet	bare soil	0
Upstream Rt Ditch	bare soil	0
Upstream Lt Ditch	bare soil	0
Downstream Rt Outlet	bare soil	0
Downstream Lt Outlet	bare soil	0
Downstream Rt Ditch	bare soil	0
Downstream Lt Ditch	bare soil	0
Improved Outlet Total	0	1

0

SRI Total:

1



Additonal Site Features
Crossing Type and Quantity: Ford
Crossing Material: NA
Culvert Outfall Drop: NA
Fish Passage Barrier: Not Present
Notes:

Appendix E. Riparian buffer land use land cover analysis and statistical prediction of riparian impairment in non-navigable streams and reaches of the Peace River and Withlacoochee River watersheds

INTRODUCTION

Riparian buffers in river systems provide functional environmental benefits for water quality, aquatic and terrestrial habitats, aquatic connectivity, and bank stability. Riparian habitats have been severely impacted in many watersheds across the Unites States due to agriculture, urbanization, and deforestation. As a result, there is a need to assess riparian condition and prioritize for restoration. Traditionally, riparian studies were completed by field survey and manual mapping, which is time consuming and costly. Our study utilized geographical information systems (GIS) and land use land cover (LULC) data as a cost-effective alternative. The Peace River and Withlacoochee River Threats Assessments and Fish Assemblage Monitoring project identified agricultural pastures as the primary land use associated with impaired areas, and thus, it became the focus of our analysis. The objectives of this study were to: (1) determine the amount of pasture, as well as other LULC categories, within riparian buffers in streams of interest; (2) assess the statistical relationship between the amount of agriculture within riparian buffers and level of impairment identified during standard threats assessment surveys; and (3) utilize this statistical relationship to estimate or predict the level of impairment in non-navigable streams and reaches in the Peace River and Withlacoochee River watersheds.

METHODS

The riparian LULC buffers were analyzed in ArcGIS (ESRI 2014) using the 2010 Cooperative Land Cover v2.3 file geodatabase. In order to streamline the LULC data within the Cooperative Land Cover geodatabase, the 59 codes in the Florida Land Use, Cover and Forms Classification

System (FLDOT 1999) were consolidated into 8 classes including: developed, mining, natural forest, open water, pasture, prairie/scrub, tree crops, and wetland. Assessed streams consisted of all streams greater than 3rd order (Strahler method), as well as 2 first order spring runs (Rainbow River and Gum Slough). We developed a model to estimate the LULC within the 100-foot buffer on each side of target streams' shorelines. However, before the model could be effectively run, additional pre-processing steps were required. The need for data refinement was twofold: (1) the United States Geological Survey stream layer data did not follow the centerline of the stream and thus would bias the buffer's results – solution: retrace or repair centerline for streams of interest; and (2) simply buffering the centerline stream data would bias results on larger streams, since it would capture a high percentage of the category "open water" – solution: use a conical shaped buffer tool that follows the shoreline, as best as possible, and use an additional buffer tool for riparian analysis. Conical shaped buffers were only used on streams with an estimated bankfull width greater than 15 feet. LULC was then summarized by stream into the 8 classes listed above.

The Peace River and Withlacoochee River Threats Assessments and Fish Assemblage Monitoring study was limited to the navigable reaches within the watersheds. We utilized the field-gathered data (impairment site length) and riparian LULC to develop a statistical relationship to estimate the degree of impairment of non-navigable streams and reaches. Using a regression analysis, we examined the influence between percent of pasture within the 100-foot riparian buffer and the length of impairment sites per mile for all surveyed streams in the Peace River and Withlacoochee River watersheds. The regression analysis's best fit line equation was then used to extrapolate the predicted length of impairment per mile for non-navigable streams and reaches that were not assessed during the threats assessment. It is important to note that

some streams (e.g., Charlie Creek and Joshua Creek) were navigable in the lower reach, but non-navigable in the upper reach. Therefore, in this situation we utilized traditional threats-assessment methods in the lower reach and applied the predictive model for the entire stream reach.

RESULTS

Peace River Watershed

The riparian LULC results for the main stem of the Peace River and major tributaries (N = 28) are shown in Figure E1. The dominant LULC for most streams was wetlands, with an average of 74.1% for all streams assessed in the Peace River Watershed. Developed areas comprised a small amount of the riparian LULC, averaging 3.1%. Peace Creek had the highest level of development (10.2%) within the riparian LULC. Pasture lands were the primary LULC of interest due to their negative impacts including streambank erosion, riparian zone degradation, and nonpoint source pollution. Percent pasture ranged from 0 to 28.9% and averaged 7.3% of the LULC in riparian buffers. Peace Creek had the highest percent pasture (28.9%) within the riparian LULC of any stream in the Peace River Watershed. This figure is alarmingly high since, in comparison, the Peace River riparian LULC contained 3.6% pasture and we identified 278 impairment sites (74,454 feet) in the 103.7 miles assessed during the threats-assessment project. Additionally, of the 28 streams assessed for riparian LULC within the Peace River Watershed, 60.7% of the streams had a higher percent pasture than the Peace River. This indicates that many of the non-navigable tributaries have numerous impairments.

Regression analysis determined that percent pasture within the riparian buffer explained 59.9% of the variation in impairment site length per mile for all surveyed streams in the Peace River and Withlacoochee River watersheds ($R^2 = 0.599$, SE = 255.5). Percent pasture yielded

the best relationship with impairment site length (i.e., highest R² values). Using the regression analysis best fit line equation, we extrapolated or predicted the impairment site length per mile for all target streams (Figure E2). The predicted impairment length per mile generally agreed with visual assessments of riparian imagery and collected or observed data (Figure E2). It should be noted, when comparing predicted and observed data, that entire stream lengths were only surveyed in a few cases (e.g., Peace River, Saddle Creek), due to navigability. Therefore, we only included observed results when a significant portion of the stream was assessed in the field. This was done since land uses often change between the upper and lower reaches of a stream, and inclusion of incomplete data may cause discrepancies between observed and predicted results, which may be misleading.

The average predicted impairment length per mile was 1,046.8 feet for all streams assessed in the Peace River Watershed. The highest impairment site length per mile occurred on Peace Creek (4,008 feet). Peace Creek is a highly agriculturalized stream that has been channelized for much of its length and would benefit greatly from restoration to improve aquatic habitat, floodplain connectivity, and water quality. Old Town Creek was predicted to have no impairment length per mile and review of aerial imagery confirmed satisfactory riparian buffer for most of its length. Therefore, Old Town Creek would not require restoration based on our GIS assessment.

Withlacoochee River Watershed

The riparian LULC results for the main stem of the Withlacoochee River and major tributaries (N = 13) are shown in Figure E3. The dominant LULC for most streams in the Withlacoochee River Watershed was wetlands, with an average of 56.6%. Developed areas comprised a higher value of the riparian LULC in the Withlacoochee River Watershed than in the Peace River

Watershed with an average of 7.9%. The most developed waterbodies were the Withlacoochee River (51.2%) and Rainbow River (34.6%). The high level of development in riparian buffers of Rainbow River has resulted in loss of floodplain connectivity and increased nutrients from fertilizer runoff and septic systems leaks. Percent pasture ranged from 0 to 42.5% and averaged 7.3% for all LULC in riparian buffers, which was very similar to the Peace River Watershed. Mattress Drain had the highest percent pasture (42.5%) within the riparian LULC for all streams assessed.

The same best fit line equation used for the Peace River analysis was applied to the Withlacoochee River Watershed to estimate the degree of impairment for non-navigable streams (Figure E4). The average predicted impairment length per mile was 1,039.4 feet for all streams assessed in the Withlacoochee River Watershed. The highest impairment site length per mile occurred on Mattress Drain (5,869.2 feet). Mattress Drain, similar to Peace Creek, is a highly agriculturalized stream that has been channelized for much of its length. This stream would benefit greatly from restoration to provide functional lift and supply quality water to the Withlacoochee River. Three tributaries (Gum Slough, Jumper Creek, and Little Jones Creek) were predicted to have zero impairment length per mile and review of aerial imagery confirmed the condition of these streams. Similar to the Peace River Watershed, we found predicted results agreed with visual assessments of riparian imagery and observed results (Figure E4). Interestingly, for the main stem of Withlacoochee River, the predicted impairment length (290.0 feet/mile) was much higher than observed (16.8 feet/mile). This inconsistency can be attributed to the fact that Withlacoochee River riparian buffers often contained a band of intact riparian forest between the river and the pastures. Therefore, these locations were not identified as

impairment sites during the threats assessment survey, but did impact the predictive model by containing pasture lands.

DISCUSSION

The results reported above show the riparian LULC and predicted level of impairment within riparian buffers of non-navigable streams greater than 3rd order. This information could be utilized by city, county, state, and federal agencies to locate riparian areas where restoration would be most valuable in order to improve the condition of water quality, riparian habitats, and aquatic habitats. This information could also be used to find areas for mitigation projects. Further, this data could be utilized to identify quality riparian areas that are not in need of restoration, but rather protection from future degradation.

The predicted average level of impairment per mile was high (> 1,000 feet) for both watersheds. Based on these results, we foresee that some streams would require sporadic streambank restoration on outside meander bends with high near-bank shear stress, while others would require large scale restoration of the entire stream channel. For example, streams with a high level of impairment and channelization (e.g., Peace Creek and Mattress Drain) would benefit from large-scale restoration including establishing stable stream meanders, riparian buffers, floodplain connectivity, and cattle fencing. Additionally, highly-impaired streams would benefit from the creation of in-channel and off-channel wetlands to promote water quality and nutrient processing.

This analysis is a valuable resource; however, we must acknowledge associated biases. One limitation of this study, as with many GIS LULC studies, is reliance on map accuracy. In some cases, we identified polygons in the LULC map of known pasture lands that were miscategorized as wetlands, forested wetlands, etc. However, in principle, if this categorization

error is consistent throughout the entire LULC map, it should impact results equally. Conversely, if there are large variations in categorization errors from one waterbody to another, it could negatively impact our results. Nonetheless, data accuracy will always impact the results of land use studies. At the onset of the project we investigated using several LULC map options (i.e., USGS National Land Cover Maps, etc.), and the 2010 Cooperative Land Cover map provided the most accurate and recent data available.

CONCLUSION

This study provides valuable insight into the condition of streams that were not surveyed with the standard threats-assessment methods in the Peace River and Withlacoochee River watersheds. While we do not conclude this methodology could replace the threats assessment field surveys, it could be used to locate and prioritize additional areas for field assessment or restoration. We recommend field-verification of these results before considering selection of restoration sites using this method. Overall, based on our results, many of the non-navigable streams and reaches in both watersheds are degraded and restoration would provide functional lift.

This study utilized the best available LULC data to analyze riparian buffer condition in the Peace River and Withlacoochee River watersheds. Our riparian assessment method eliminated common errors that many riparian studies overlook by correcting centerline locations and using conical buffers to more accurately capture streambank locations. Future studies may consider: (1) assessing the accuracy of the predicted results though field verification; (2) testing different LULC layers or increasing accuracy of current; (3) testing a variety of riparian buffer widths; and (4) assessing the proximity of pasture to stream channel within the 100-foot buffer.

Figure E1. Land use land cover within riparian buffers for assessed streams in the Peace River Watershed.

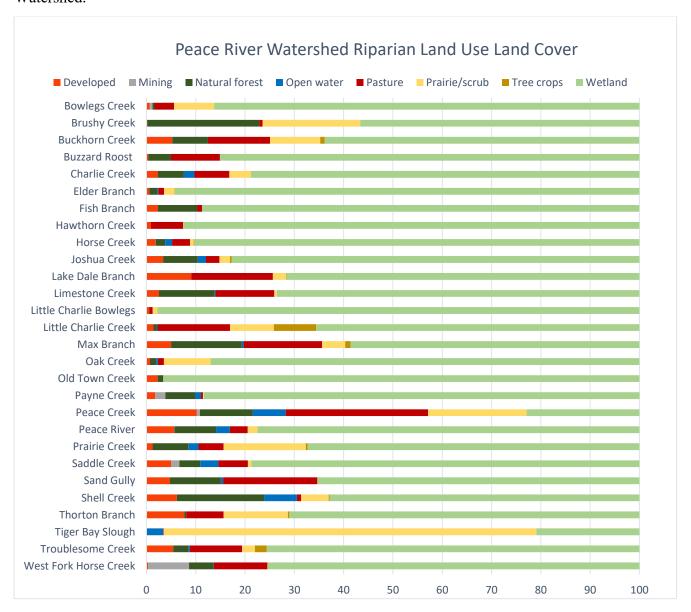


Figure E2. Predicted and observed impairment length per mile for assessed streams in the Peace River Watershed.

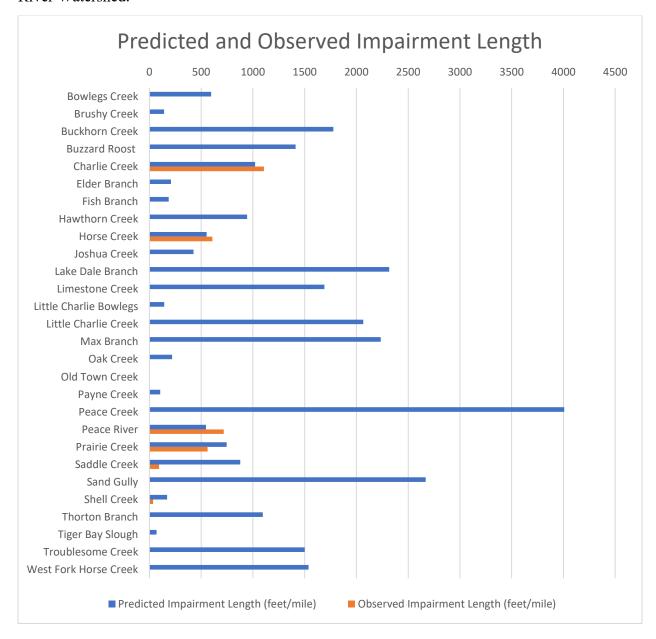


Figure E3. Land use land cover within riparian buffers for assessed streams in the Withlacoochee River Watershed.

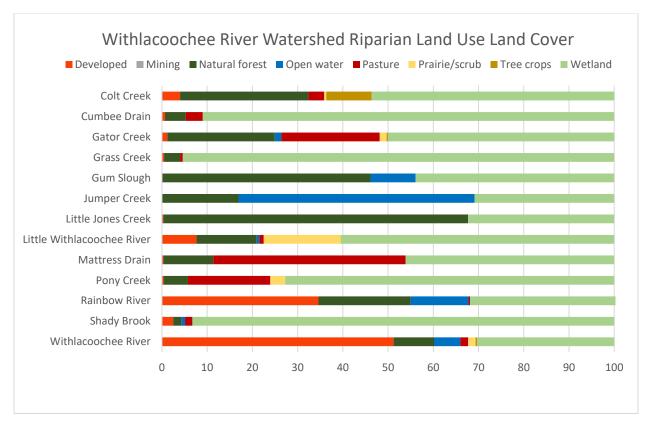


Figure E4. Predicted and observed impairment length per mile for assessed streams in the Withlacoochee River Watershed. Note: observed results were included for Jumper Creek (0 feet/mile), Little Withlacoochee River (0 feet/mile), Rainbow River (0 feet/mile), and Withlacoochee River (16.8 feet/mile).

