



CITY OF PINELLAS PARK
PINELLAS PARK DITCH NO. 5 (WBID 1668B)
BACTERIAL POLLUTION CONTROL PLAN



JUNE, 2017

PREPARED BY:



3931 68th Avenue North • Pinellas Park, FL • tel. 727-526-9158 • fax. 727-527-9683

Table of Contents

Purpose	Page 1
Stakeholders	Page 1
Watershed Characteristics	Page 1
Fecal Coliform Impairment and TMDL	Page 3
Bacterial Pollution Control Plan Timeline	Page 4
Bacterial Pollution Control Plan Development	Page 4
Presentation of Sampling Data / Preliminary Assessment	Page 8
Management Actions for Sources Elimination	Page 10

Summary of Figures

Figure 1 – Pinellas Park Ditch No. 5, WBID 1668B	Page 2
Figure 2 – TMDL Sampling Locations	Page 3
Figure 3 – BPCP Sampling Locations	Page 6
Figure 4A – Pinellas Park Ditch No. 5 Sampling Results	Page 8
Figure 4B – Pinellas Park Ditch No. 5 Sampling Results	Page 9

Appendixes

Appendix 1 – Maps on the Table Meeting Minutes

Appendix 2 – Walk the Waterbody Exercise Meeting Minutes

PURPOSE

In accordance with the requirements set forth in Part VIII.B.4 of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit for Pinellas County, this report has been prepared to document the efforts made by the City of Pinellas Park (City) to address the Pinellas Park Ditch No. 5 fecal coliform Total Maximum Daily Load (TMDL).

STAKEHOLDERS

Pinellas Park Ditch No. 5, a stormwater conveyance system owned and operated by the Pinellas Park Water Management District (PPWMD), is located within southwestern Pinellas Park. Although PPWMD owns and maintains this facility, Pinellas Park owns the rights-of-way and the collection system that contribute the majority of the flow to the Ditch. As such, the City has taken the lead on addressing the TMDL. The list of stakeholders includes:

- City of Pinellas Park
- Pinellas Park Water Management District (PPWMD)
- Pinellas County
- Florida Department of Transportation (FDOT)

Subsequent sections of this Bacterial Pollution Control Plan (BPCP) identify the involvement each stakeholder had throughout this process.

WATERSHED CHARACTERISTICS

The Pinellas Park Ditch No. 5 (WBID 1668B) waterbody segment is located within the Long Bayou Watershed, in the west central portion of Pinellas County, Florida, (Figure 1). Pinellas Park Ditch No. 5, discharges to Saint Joes Creek which flows into the Cross Bayou, Long Bayou, and the Boca Ciega Bay estuaries. The Pinellas Park Ditch No. 5 has a surface area of 0.6 square miles and is entirely within Pinellas County.

Pinellas Park Ditch No. 5 is a free flowing freshwater system which flows into the estuarine segment of Saint Joes Creek. The channel length is approximately 1.3 miles and has concrete lined banks along most of its length. As stated above, the watershed is part of the Pinellas Park Water Management District, which manages the basins within its jurisdiction for stormwater drainage pursuant to Florida Statute.

Land use in the watershed is predominantly residential, with 45 percent of the area designated as such. Major urban areas include portions of the City of Pinellas Park and unincorporated Pinellas County. In 2003, the population of the City of Pinellas Park was 46,449, according to the U.S. Census Bureau. Based on

the population density of the City of Pinellas Park (3095.8 persons/square mile)
the estimated existing population in the Pinellas Park Ditch No. 5 WBID area is
estimated at 7863.

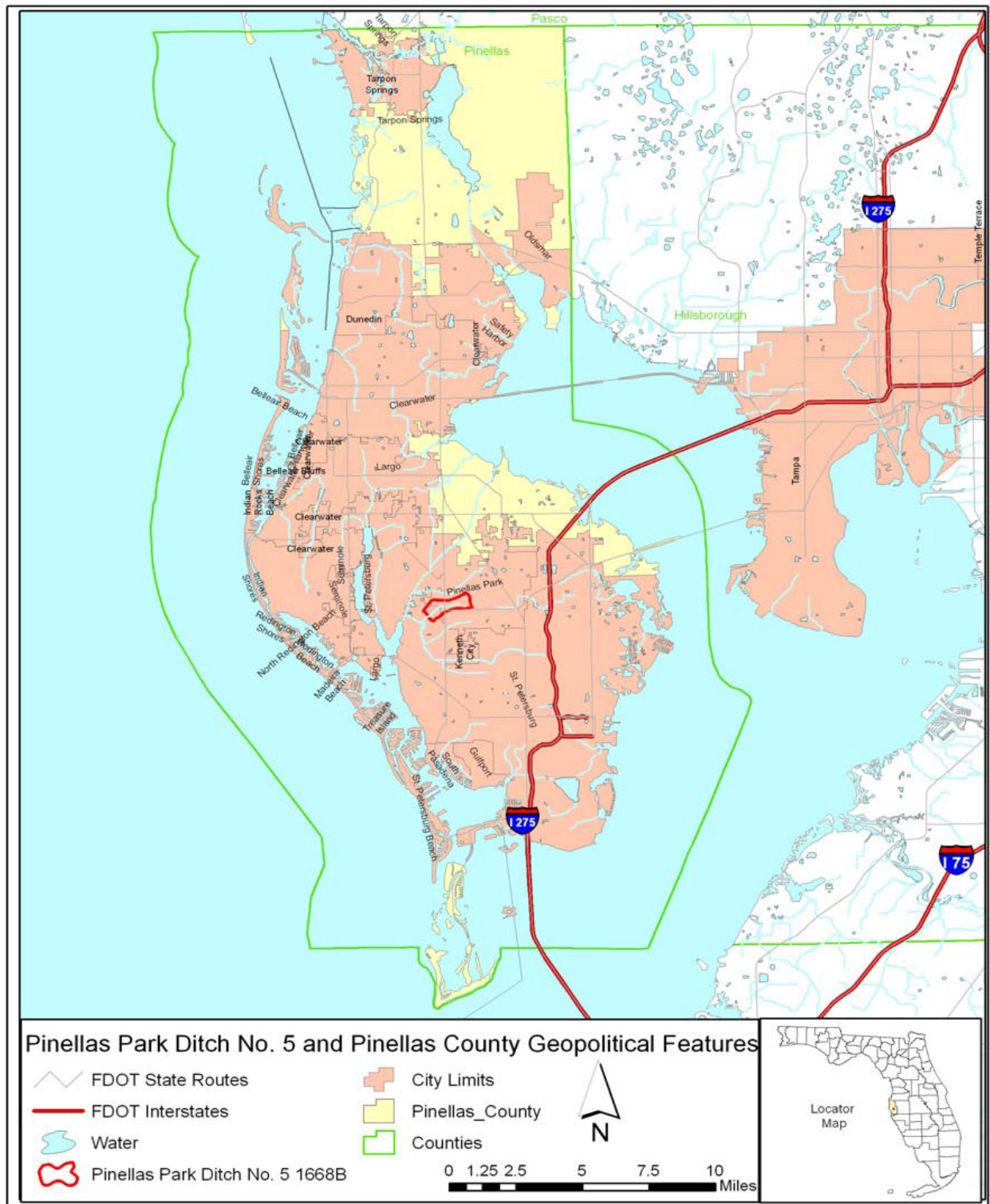


Figure 1 – Pinellas Park Ditch No. 5, WBID 1668B

FECAL COLIFORM IMPAIRMENT AND TMDL

The Environmental Protection Agency (EPA) adopted the TMDL in March, 2008 to identify the allowable loading limits to Ditch No. 5. This was done in an effort to restore the waterbody's Class III designation which identifies the following critical uses:

- Recreation
- Propagation & Maintenance of Healthy, Well-Balanced Fish / Wildlife Population

Fecal coliform load reductions of 71% were required within the TMDL. With no point sources in the watershed, the TMDL identified the below non-point sources as possible contributors to the fecal impairment:

- Wildlife
- Livestock
- Pet Waste
- Leaking Sewer Lines
- Sanitary Sewer Overflows (SSOs)
- Active or Improperly Abandoned Septic Systems
- Improper Dumping and/or Waste Management
- Illicit Discharges

Please reference Figure 2 to view the locations where sampling associated with the TMDL occurred.

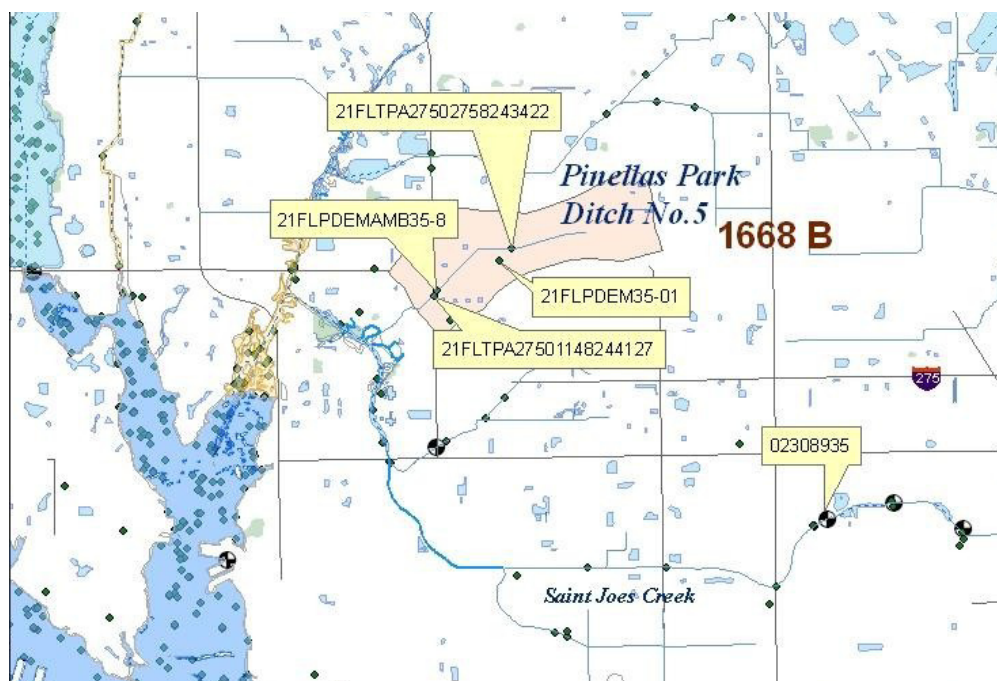


Figure 2 - TMDL Sampling Locations

BACTERIAL POLLUTION CONTROL PLAN TIMELINE

To date, the following tasks have been performed in preparation of this report:

<i>TASK</i>	<i>DATES</i>
Submission of Final TMDL Prioritization Plan	January 16, 2015
FDEP Approval of TMDL Prioritization Plan	January 30, 2015
Preliminary Basin Evaluation / Stakeholder Identification / Coordination with FDEP Personnel / Maps on the Table Preparation & Planning	February 2, 2015 – May 12, 2015
Maps on the Table Event	May 13, 2015
Post-Event Field Follow Up / Future Sampling Point Investigation	May 14, 2015 – February 14, 2016
Final Identification of Sampling Locations	February 15, 2016
Coordination with Pinellas County to Enter into Interlocal Agreement for TMDL Monitoring	February 16, 2016 – April 27, 2016
Authorization of Interlocal Agreement with Pinellas County	April 28, 2016
Commence Sampling Program	May 24, 2016
Review of Sampling Results / Route Identification for Walk the Watershed Field Exercise	May 26, 2016 – November 15, 2016
Walk the Watershed Field Event	November 16, 2016
Post-Event Field Follow Up / Develop Management Actions / Continued Sampling & Evaluation / BPCP Preparation	November 17, 2016 – Present

As evidenced above, the City has diligently proceeded with the preparation of the BPCP once FDEP approval of the TMDL Prioritization Plan was provided.

BACTERIAL POLLUTION CONTROL PLAN DEVELOPMENT

The development of this plan, spearheaded by the City, required collaboration with multiple governmental entities, extensive data review and multiple office-based and field exercises.

Once the TMDL Prioritization Plan was approved, the City began to review City-owned sanitary sewer and stormwater facilities located within the watershed. Locations of extensive historical maintenance were documented and noted for future investigation. Outreach efforts with the PPWMD, Pinellas County and FDOT began in order to obtain information regarding reported discharges (sanitary sewer & citizen illicit dumping) and SSOs.

This information was compiled into a single map which served as the basis for the Maps on the Table (MOTT) exercise. Held on May 13, 2015, this meeting

served as a forum for watershed stakeholders to document locations where known fecal pollution sources may be present. Involving field personnel in this activity was vital as the City was able to “extract” information that was known by some but not by all. Please reference Appendix 1, attached to this report, to view a detailed summary of this meeting.

Immediately following, City personnel visited certain locations reported in the meeting to determine whether further investigation was warranted. These follow up inspections did not yield any direct observance of active illicit discharges. However, this exercise did confirm that these reported sites were worthy of incorporation into the Walk the Watershed (WTW) field exercise. The land use, coupled with the proximity of the properties to stormwater facilities, suggested these locations could contribute to the bacterial loadings within the waterbody.

The City desired tangible testing results prior to the WTW field exercise in order to allow for field investigation to focus on known “hot spots” or other areas of concern. With testing capabilities not available in-house, the City began coordination with Pinellas County to determine the feasibility of entering into an Interlocal Agreement. City and Pinellas County staff met at the proposed testing locations in order to access site accessibility and ensure that these locations do not present staff safety concerns. With testing locations confirmed, the City was able to secure final pricing from the County and finalize the agreement.

In total, the BPCP entails testing at seven (7) locations. Please reference Figure 3 on the following page to view the locations of these sampling points in relation to the overall watershed. Additional discussion on the justification for selecting these sites is provided below.

Sampling Location PPD5-1

This sampling location is located at the downstream reaches of the impaired waterbody’s limits. It is believed that sampling the downstream-most end of the ditch would provide clarity on the bacteria loading that eventually migrates to Saint Joe’s Creek; a downstream waterbody also identified as having a fecal impairment. Further, this is the approximate location of sample ID 21FLTPA27501148244127 which was one (1) of the two (2) sampling points utilized in the EPA’s TMDL.

Sampling Location PPD5-2

This sampling location is located upstream of a large culverted crossing of Park Blvd. This site was selected in an effort to isolate the basin area confined by Belcher Road and 66th Street. Runoff from residential and commercial areas is discharged upstream of this location.

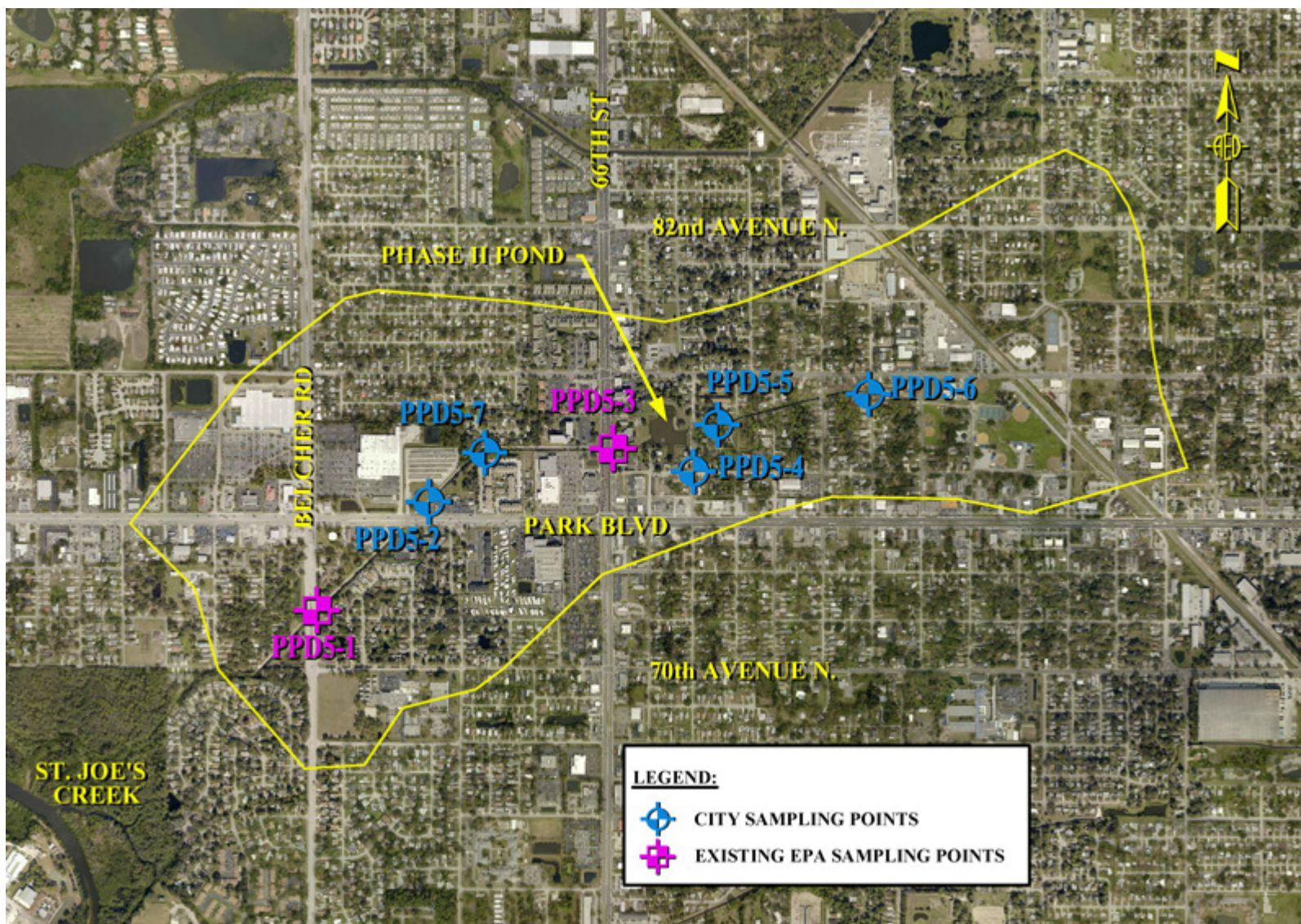


Figure 3 – BPCP Sampling Locations

Sampling Location PPD5-3

Located upstream of a culverted crossing of 66th Street, this sample location is located at the control structure associated with the “Phase II Pond”. This sampling point essentially identifies fecal concentrations for the eastern half of the basin. Further, this is the approximate location of sample ID 21FLTPA2750758243422 which was one (1) of the two (2) sampling points utilized in the EPA’s TMDL.

Sampling Location PPD5-4

Park Blvd., a highly traveled FDOT-owned highway has runoff routed to the aforementioned “Phase II Pond”. This sampling point is intended to identify the fecal concentrations within the commercial corridor that abuts this roadway. Many restaurants are located along this corridor and dumpsters for these facilities are near stormwater collection structures. The actual testing location is at a piped outfall to the “Phase II Pond”.

Sampling Location PPD5-5

This sampling location is located at a piped outfall to the “Phase II Pond”. However, this outfall serves the residential and multi-family communities upstream of the pond and north of Park Blvd.

Sampling Location PPD5-6

Located at the upstream end of the ditch, this sample location is taken immediately downstream of a headwall. This sampling location is intended to identify the fecal concentrations of all upstream locations. High readings at this site allow this City to pinpoint possible fecal sources within the upstream reaches of the watershed.

Sampling Location PPD5-7

This sampling location was added after the Walk the Waterbody field exercise. At the sampling location, a shallow open ditch conveyance system outfalls to the main ditch. Field investigation found that this location was directly downstream of an observed homeless camp, an extensive stray cat population and residential neighborhood. The open ditch was found to convey flows to main ditch at minimal velocities and covered by heavy canopy (resulting in minimal exposure to sunlight).

With sampling point identified and five (5) sampling activities performed at each location, the City scheduled the Walk the Waterbody field exercise. This event

was attended by the City, PPWMD and Pinellas County field / office personnel. Please reference Appendix 2 to view notes summarizing the observations made during this exercise.

The City performed follow up inspections to observed possible fecal pollution sources and monitoring at the previously-identified sampling locations continued. As stated above, a seventh sampling location was added as a result of this BPCP plan development action.

PRESENTATION OF SAMPLING DATA / PRELIMINARY ASSESSMENT

To date, the City has obtained twelve (12) consecutive months of sampling results. This duration mimics the duration utilized by the EPA in preparation of the TMDL. While the City is of the opinion that absolute determinations on SWMP effectiveness cannot be made based upon such a short testing period (when considering all of the variables at play), it is believed that the data identifies positive trends. Please reference Figure 4A below to view a scatter plot of the sampling results.

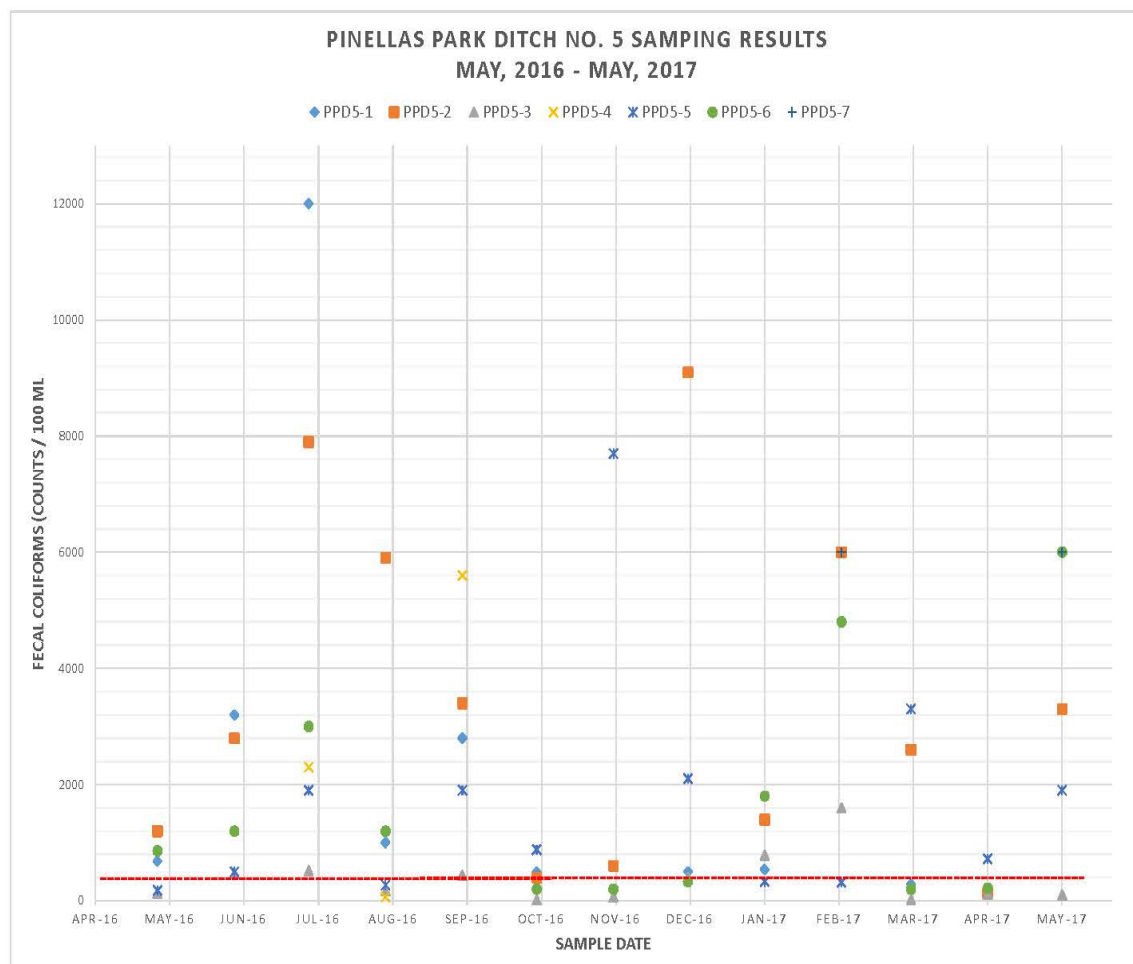


Figure 4A – Pinellas Park Ditch No. 5 Sampling Results *

* 30,000 Count Obtained During 09/2016 Testing @ PPD5-6 Not Plotted to Improve Chart Legibility

A tabular summary of this data is presented in Figure 4B below:

Sample Date	PPD5-1		PPD5-2		PPD5-3		PPD5-4		PPD5-5		PPD5-6		PPD5-7	
	Fecal	E. Coli	Fecal	E. Coli	Fecal	E. Coli	Fecal	E. Coli	Fecal	E. Coli	Fecal	E. Coli	Fecal	E. Coli
May-16	680	172	1200	579	130	16			180	147	860	365		
Jun-16	3200	866	2800	1300	470	44			500	140	1200	649		
Jul-16	12000	3970	7900	1960	520	43	2300	651	1900	1030	3000	3970		
Aug-16	1000	740	5900	3260	170	30	67	16	270	97	1200	373		
Sep-16	2800	512	3400	1460	440	58	5600	354	1900	363	30000	2750		
Oct-16	500	222	400	442	14	12			880	953	200	142		
Nov-16	170	170	600	875	71	101			7700	1640	200	90		
Dec-16	500	550	9100	6210	400	208			2100	195	330	236		
Jan-17	540	944	1400	1100	780	1250			330	174	1800	373		
Feb-17	6000	3460	6000	9680	1600	606			320	233	4800	6210	6000	9680
Mar-17	280	442	2600	3640	17	12			3300	2320	200	353		
Apr-17	41	153	120	86	120	60			720	318	220	95		
May-17	6000	455	3300	657	100	30			1900	222	6000	538	6000	9930

Fecal Coliform (Counts / 100 mL)

E.Coli (MPN / 100 mL)

Blank cells represent inability to test due to low flows.

Figure 4B – Pinellas Park Ditch No. 5 Sampling Results

As evidenced by the above-presented figures, multiple sample recordings identify fecal counts above the allowable 400 counts / 100 mL. However, it shall be noted that the average counts obtained at PPD5-1 and PPD5-3 are lower when compared to the results presented in the EPA TMDL. Please see the summary below:

Sample ID	Average Fecal Count (Counts/100 mL)		Percent Reduction
	EPA TMDL	City Testing	
PPD5-1	4131.67	2593.15	37.23%
PPD5-3	3711.11	371.69	89.98%

It is believed that this is due to the construction of the “Phase II Pond”. This type of structural BMP, completed in 2010, has been shown to reduce fecal coliform loading. Upstream reductions in fecal counts are likely positively impacting the downstream samples collected at PPD5-1.

Additionally, an increase in inspection frequency, a revised wildlife management approach, homeless community outreach, increased trash removal and resident / business outreach which occurred as a direct result of the Walk the Watershed exercise observations has resulted in a decrease in the average fecal counts at the below sampling locations:

Sample ID	Average Fecal Count (Counts/100 mL)		Percent Reduction
	Pre WTW	Post WTW	
PPD5-1	3363.33	1933.00	42.52%
PPD5-2	3600.00	3302.86	8.27%
PPD5-6	6076.67	1935.71	68.15%

While the City understands that additional monitoring would be needed to identify this as a quantifiable trend, the City is hopeful that the reduction in post-WTW fecal count averages continues moving forward.

MANAGEMENT ACTIONS FOR SOURCES ELIMINATION

The City has implemented various structural and non-structural management actions in an effort to reduce bacterial loadings within the waterbody and eliminate sources of fecal pollution.

Structural Management Actions

Constructed prior to the preparation of this report, the “Phase II Pond” represents the most significant structural BMP that would be proposed within the basin. Evaluation of the City-procured monitoring results at PPD5-3 shows that significant fecal count reductions have been seen at the sampling location used in the EPA’s TMDL. The City has since installed trash collection nets on the two (2) piped discharges into the pond and planted aquatic plants in an effort to improve water quality. It is believed that future monitoring results will continue to reflect a reduction in fecal counts when compared to the data utilized in the TMDL.

Previous sections of this report discuss the addition of sampling point PPD5-7 due to the findings of the WTW field exercise. The City is proposing to improve the ditch that outfalls to Ditch No. 5 by removing all exotic and nuisance vegetation, stabilizing the banks and re-grading the ditch to improve conveyance velocities (where feasible and permittable). By increasing velocities and exposure of this water to sunlight, the City is hopeful that these improvements will result in quantifiable fecal count reductions.

Non-Structural Management Actions

The City has, and will continue to, implement the various non-structural management actions discussed below:

Sanitary Sewer Inspection & Maintenance

As an owner of a sanitary sewer utility, the City conducts preventative inspections and performs maintenance activities where needed. Year 4’s Annual

Report finds that the City has inspected over 227,000 linear feet of sanitary sewer main and lined approximately 16,350 linear feet. Four (4) SSOs were discovered and resolved within 2016 alone. In future years, the City will be focusing these preventative inspections within the Ditch No. 5 watershed in an effort to ensure that this system is not contributing to fecal pollution.

Stormwater Inspection & Maintenance

The City regularly maintains the stormwater ponds, pipes, ditches and collection structures that comprise their MS4. Complaints from the community are responded to a timely manner and proactive maintenance and inspections occur as required by the NPDES permitting program.

Animal Waste Management

As discussed in prior sections of this report, animal waste is believed to be a source of fecal pollution within the watershed. The City will continue to enforce the pet waste ordinance which requires immediate removal of pet excrement. The applicable code section reads as follows:

Sec. 5-211. - Defecation in public places; including certain private property.

No person who owns, possesses or is in charge of a dog shall permit such dog to defecate in any public place, or on any private property not belonging to the owner or person in charge of the dog, including, but not limited to: any municipal parks and public rights-of-way, any alleys, sidewalks, school premises, office buildings or common ground areas of condominiums and townhouse subdivisions or upon the floor of any hall of any multiple-dwelling unit which is used in common by the tenants thereof; or upon the fences, lawns, grounds or parkways of any premises, or the walls or stairways of any building abutting on a public way; or upon the floor of any theatre, store, factory or school, or any public rooms or places therewith connected; or upon any school grounds or public park grounds, or the public grounds of any hotel, motel or lodging house which is used in common by the guests thereof, unless such person shall immediately thereafter remove the fecal matter resulting from such defecation and place such matter in an enclosed container, such as, but not limited to, a plastic or paper bag, and remove it.

Livestock that may reside on properties within the watershed will be subject to the City's waste storage and disposal requirements summarized below:

Sec. 18-1530.22. - ANIMAL WASTE STORAGE AND DISPOSAL.

SITE PLAN REQUIRED:

Prior to an owner or occupant's temporarily or permanently keeping one (1) or more livestock, the lot owner and/or occupant shall submit to the Zoning Division a site plan. The required site plan shall show lot lines and locations of all structures on the lot including potable water lines, wells, septic tanks and septic drain fields and the proposed location for the livestock waste storage structure or arrangement.

LIVESTOCK WASTE STORAGE.

The containment and location of livestock waste storage and/or disposal shall minimize odor, vermin and insect infestation impacts on adjacent lots. In this regard, the spreading and/or tilling of livestock wastes into the soil are regarded as disposal and as such are required to comply with the criteria in Subsection (C) below.

The livestock waste storage area shall be located and constructed in such a manner that minimizes exposure to rain or ponding water in order to prevent manure contaminated runoff from the site from entering surface and/or ground waters. The livestock waste storage site shall be sized to contain at a minimum one (1) cubic yard of livestock waste and soiled bedding. The structure used for containment shall have a minimum of three (3) sides and have a floor with an impervious surface. The livestock waste shall only be disposed in a manner allowed by law.

SETBACKS REQUIRED:

Livestock waste storage sites shall not be permitted in the required front yard, secondary front yard, or side yard.

The livestock waste storage site shall not be closer than twenty (20) feet to any property line of the lot.

The livestock waste storage site shall not be closer than fifty (50) feet to any well, lake, pond, wetland, stream or drainage ditch.

For the purposes of this Section, the term "livestock" shall mean any animal weighing three hundred (300) pounds or more. Where livestock are kept as of the effective date of this provision (November 14, 2002), the requirements for animal waste storage and disposal shall not apply.

The WTW field exercise found that certain pet waste stations could be relocated to more strategic locations where the public may be more aware of their presence. Additionally, the City has installed new pet waste stations within parks and open areas within the watershed.

Stray animal populations, where found during the WTW exercise and the follow up inspections, will be addressed. The City is hopeful that the ditch improvements proposed near sampling point PPD5-7, coupled with the actions already undertaken by Pinellas County Animal Services, will permanently remove the observed stray cat population.

Litter and Debris Removal / Street Sweeping

As done in all locations throughout the City, heavy concentrations of litter / debris are reported to the City's code division. Ordinances on record provide the City suitable authority to have public and private properties free of litter and debris.

Street sweeping by in-house forces will continue. In Year 4, the City reported over 3,000 miles of roadway that was swept.

Private Property Inspections

The City has, and will continue to, perform follow up inspections of the properties where possible fecal pollution sources were identified during the WTW field event. These inspections efforts, coupled with the NPDES-required Proactive Inspections, will allow the City to identify future problems before they result in elevated fecal count readings.

Public Outreach & Education

Through the City's website, vehicle / equipment wraps, printed literature and public service announcements, the City educates the public of stormwater pollution matters. In future years, the City is proposing to focus these outreach efforts on bacteria pollution. This is proposed to be done through the installation of signage at open green areas and parks (litter removal, pet waste removal, etc.) as well as flyer and fact sheet distribution.

APPENDIX 1

Maps on the Table Meeting Minutes

MEETING MINUTES



To: Aaron Petersen, City of Pinellas Park
From: Justin V. Keller, P.E., Advanced Engineering & Design, Inc. (AED)
CC: File
Date: November 23, 2015
Re: Channel 5 (Bonn Creek) Maps on the Table Meeting

On May 13, 2015 at 1:30 PM, City of Pinellas Park personnel met with representatives from Pinellas County and the Pinellas Park Water Management District (PPWMD) to discuss possible fecal coliform pollutant sources within the Channel 5 (Bonn Creek) watershed. Referred to as the “Maps on the Table Meeting”, this meeting was a component of the City’s Bacterial Pollution Control Plan (BPCP) to address fecal coliform loadings within WBID 1668B.

This meeting was led by Aaron Petersen of the City of Pinellas Park and attended by the below parties:

Table 3

Ryan Gonzalez, City of Pinellas Park
Robert Grund, City of Pinellas Park
Marty Reich, City of Pinellas Park
Melissa Harrison, Pinellas County (designated notetaker)
Joseph Thames, Pinellas County

Table 4

Stephen Lee, City of Pinellas Park
Dan Hubbard, City of Pinellas Park
Bill Ruttencutter, City of Pinellas Park
Sarah Malone, Pinellas County (designated notetaker)

Table 6

David Cook, PPWMD (designated notetaker)
David Bowen, City of Pinellas Park
Yosvany Naranjo, City of Pinellas Park
Justin Keller, AED

Table 7

Dave Floyd, City of Pinellas Park (designated notetaker)
Randy Roberts, PPWMD
Chip Heinz, Pinellas County

- Mr. Petersen provided an overview of impaired waters within the City limits and key milestones in the development of the BPCP. The pending Walk the Waterbody field exercise was discussed and possible fecal coliform sources were identified along with corresponding mitigation strategies.

- The meeting attendees broke into small groups (identified by table number) to discuss locations where fecal coliform pollutant sources may be located. These locations are summarized on the attached table.
- After the completion of the group activity, each table shared their locations.
- Mr. Petersen inquired about volunteers willing to attend the forthcoming Walk the Waterbody field exercise.
- The meeting concluded and Mr. Petersen stated that the City will be contacting certain parties who attended the meeting for the Walk the Waterbody field exercise.

City of Pinellas Park				
Channel 5 (Bonn Creek) Bacteria Pollution Control Plan (BPCP)				
Maps of the Table Meeting				
Summary of Possible Fecal Sources				
Site ID #	Site Description	General Site Location	Possible Fecal Sources	Commentary / Observations
TABLE 3				
1	Pet Supplies Plus (Pet Store)	7331 Park Blvd.	Pet Waste	Dog walking in vicinity of pet store
2	Vendome Village Lift Station	Intersection of 84th Avenue & 68th Way	Municipal Sewage	Lift station was reported as operational; deemed worthwhile to monitor considering proximity to watershed
3	70th Avenue Dog Walking Area	Eastern Terminus of 70th Avenue (near 75th St.)	Pet Waste	Dog walking along banks of Channel 5
4	Tampa Bay Car Store	6801 Park Blvd.	Private Sewage	Possible location of abandoned septic tank adjacent to Channel 5
5	Park / Belcher Shopping Center	NW Corner of Park Blvd / Belcher Road Intersection	Food Waste	Possible food waste overflowing from dumpsters
6	Sam's Club	7001 Park Blvd.	Food Waste	Possible food waste overflowing from dumpsters
7	Park / 66th Fast Food Complex	SE Corner of Park Blvd. / 66th Street Intersection	Food Waste	Possible food waste overflowing from dumpsters
8	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Various Sources	Pond improvements could impact treatment capabilities
9	The Lodges at Pinellas Park	6781 Park Blvd.	Pet Waste / Private Sewage	Dog walking along private stormwater pond that discharges directly to Channel 5 / Possible location of abandoned septic tank
10	Davis Field Complex	6050 76th Avenue	Human Waste	Possible homeless community
11	Lakeview Equestrian Center	7585 78th Avenue	Pet Waste	Active equestrian center
12	Channel 5 / 71st Street Intersection	Due south of Park Blvd. on 71st Street	Municipal Sewage	Team members reported the smell of sewage at certain times (location of County-owned large diameter sanitary main)
13	CVS Pharmacy (Belcher Road Access)	Due north of Park Blvd. / Belcher Road Intersection	Municipal Sewage	Team members reported the smell of sewage at certain times (location of County-owned large diameter sanitary main)
TABLE 4				
1	Tampa Bay Car Store	6801 Park Blvd.	Private Sewage	Possible location of abandoned septic tank adjacent to Channel 5 / Team members reported possible historic location of treatment plant
2	Channel 5 / 71st Street Intersection	Due south of Park Blvd. on 71st Street	Municipal Sewage	Team members reported the smell of sewage at certain times (location of County-owned large diameter sanitary main) / Team members reported historical SSO observations
3	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Animal Waste	Bat boxes located within confines of pond
4	Davis Field Complex	6050 76th Avenue	Food Waste / Animal Waste	Dumpster overflow from events held at park/ Wildlife scavenging for trash
5	Sam's Club	7001 Park Blvd.	Food Waste	Possible food waste overflowing from dumpsters / Team members reported that code enforcement has improved the conditions
6	63rd Street Dumper Enclosures	Intersection of 63rd Street & Channel 5	Food Waste	Three (3) dumpsters located near Channel 5
7	Lotus Vegetarian Restaurant	6575 Park Blvd.	Food Waste	Possible food waste overflowing from dumpsters
8	Pinellas Park Police Department	7700 59th Street	Pet Waste	Housing for PD Canine Units
9	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Animal Waste	Large concentrations of waterfowl
10A	Nurses Helping Hands ALF	7191 71st Street	Private Sewage	Possible abandoned septic tank
10B	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Private Sewage	Possible abandoned septic tank near Phase II pond
11	Walmart Neighborhood Market	7500 66th Street	Various Sources	Direct runoff (via flume) to Channel 5 / Drainage area may encumber dumpster enclosures
TABLE 6				
1	The Lodges at Pinellas Park	6781 Park Blvd.	Pet Waste / Private Sewage	Possible location of abandoned septic tank
2	Park Ridge Mobile Home Park	6720 Park Blvd	Private Sewage	Possible location of abandoned septic tank
3	Channel 5 / 71st Street Intersection	Due south of Park Blvd. on 71st Street	Municipal Sewage	Team members reported the smell of sewage at certain times (location of County-owned large diameter sanitary main) / Team members reported historical SSO observations

City of Pinellas Park				
Channel 5 (Bonn Creek) Bacteria Pollution Control Plan (BPCP)				
Maps of the Table Meeting				
Summary of Possible Fecal Sources				
Site ID #	Site Description	General Site Location	Possible Fecal Sources	Commentary / Observations
4	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Private Sewage	Possible abandoned septic tank near Phase II pond
5	62nd Way Dumpster Enclosure	Intersection of 62nd Way & Channel 5	Food Waste	Dumpster located near inlet which directly discharges to Channel 5.
6	63rd Street Dumper Enclosures	Intersection of 63rd Street & Channel 5	Food Waste	Three (3) dumpsters located near Channel 5
7	Fairlawn Park Pond	Behind homes located at 67th Way / 77th Avenue Intersection	Human Waste	Possible homeless community
8	Sam's Club	7001 Park Blvd.	Food Waste	Possible food waste overflowing from dumpsters
9	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Animal Waste	Bat boxes located within confines of pond
10	Walmart Neighborhood Market	7500 66th Street	Animal Waste	Bat boxes located near Channel 5
11	Upstream Open Channel Areas	Along Channel 5 from 65th Street to 63rd Street	Pet Waste	Extensive dog walking observed along grassed areas near Channel 5
12	70th Avenue Dog Walking Area	Eastern Terminus of 70th Avenue (near 75th St.)	Pet Waste	Dog walking along banks of Channel 5
13	70th Avenue Dog Walking Area	Eastern Terminus of 70th Avenue (near 75th St.)	Animal Waste	Large concentrations of wildlife
14	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Human Waste	Possible homeless community
15	Emily's Restaurant	7048 Park Blvd.	Human Waste	Possible homeless community / Prior observations of loitering
16	Eco Green Machines	7000 Park Blvd.	Various Sources	Portions of parking lot may directly discharge to Channel 5 without treatment
17	Pinellas Park Middle School	Intersection of 70th Avenue / 69th Street	Human Waste	Possible homeless activity within confines of various ponds located in the neighborhood directly north of the school
18	Fairlawn Park Outfall Ditch	Eastern limits of neighborhood	Various Sources	Team members reported past occurrences of illicit discharges / Sewage smells observed
19	The Lodges at Pinellas Park	6781 Park Blvd.	Various Sources	Vegetation overgrowth at Channel 5 bend may minimize sunlight exposure
20	Bonnie Glynn	Circle Creek Drive	Pet Waste	Homes that abut Channel 5 have rear yard runoff that directly discharges to channel
21	Upstream Open Channel Areas	Along Channel 5 from 64th Street to 63rd Street	Various Sources	Stagnant water observed by team members in this area
TABLE 7				
1	78th Avenue / 66th Street Development	SW Corner of 78th Avenue / 66th Street Intersection	Private Sewage	Team members reported possible abandoned septic tanks (old mobile home park)
2	The Lodges at Pinellas Park	6781 Park Blvd.	Private Sewage	Possible location of abandoned septic tank
3	Park Ridge Mobile Home Park	6720 Park Blvd	Private Sewage	Possible location of abandoned septic tank
4	Pinellas Cascades Mobile Home Park	7840 72nd Street	Private Sewage	Possible location of abandoned septic tank(s)
5	Sam's Club	7001 Park Blvd.	Various Sources	Historical junk yard site
6	Park Blvd Phase II Pond	NE of Park Blvd. / 66th Street Intersection	Animal Waste	Bat boxes located within confines of pond



- ① Petsmart - Dog Walking
 - ② Vendum Village Lift ~~Stage~~ Station
(outside, but worth noting)
 - ③ Dog Walk area - From neighborhood
(Muller's Road)
 - ④ Septic Systems - Active - Auto Sales, maybe some
residential (1)
 - ⑤ Large Shopping Center, possible trash problem
overflowing dumpsters
 - ⑥ Sam's Club, same as above
 - ⑦ Fast Food - dumpsters
 - ⑧ Pond - construction, changed from dry pond to
20-30 feet deep
 - ⑨ Apartment Complex, has large pond, dog walking
(Lodges at Pinellas Park) Possible old Septic(?)
 - ⑩ Davis Field - Homeless, active, long term
 - ⑪ Horse Farm
 - ⑫ Sewer Smell
 - ⑬ Sewer Smell
- County "Barrel neck"
1 42" pipe
into 3 24" pipes

Name: Ryan Gonzalez

Entity/Department: City of Pinellas Park / Sewer

Title: Utilities Foreman

Phone: 727 214-7831

Email: rgonzalez@pinellas-park.com

Are you attending the walk the waterbody?:

Name: Robert Grund

Entity/Department: City of Pinellas Park

Title: Foreman

Phone: 727-541-0737

Email: RGrund@Pinellas-Park.com

Are you attending the walk the waterbody?:

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

Name: Marty Reich

Entity/Department: City of Pinellas Park

Title: Supervisor

Phone: 214-7843

Email: mreich@pinellas-park.com

Are you attending the walk the waterbody?: Sure

Name: Melissa Harrison

Entity/Department: Pinellas County / Natural Resources

Title: Environmental Scientist II

Phone: 453-3420

Email: mharrison@pinellascounty.org

Are you attending the walk the waterbody?:

Name: Joseph Thames

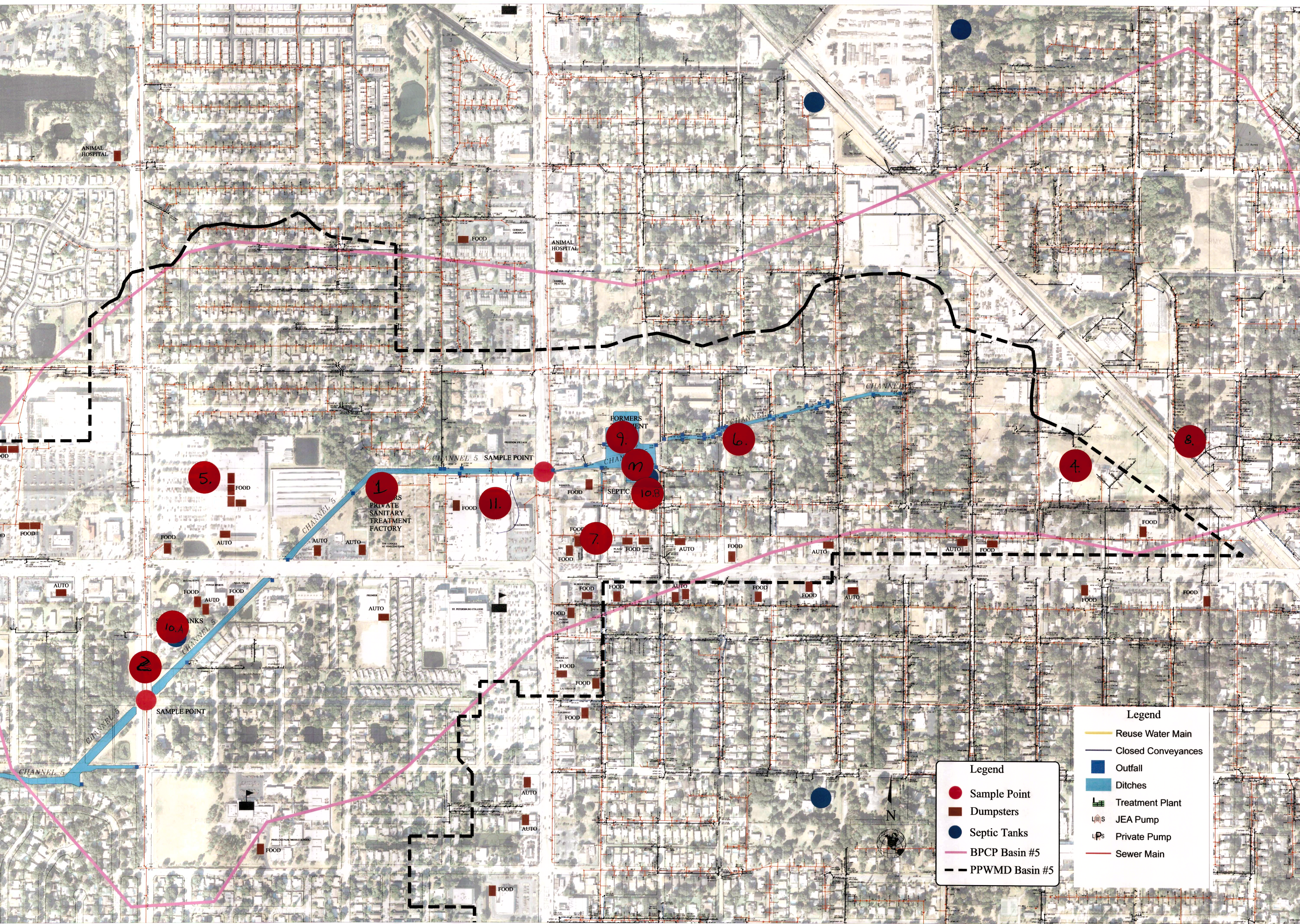
Entity/Department: Pinellas County

Title: NPDES Coordinator

Phone:

Email: jthames@pinellascounty.org

Are you attending the walk the waterbody?: maybe



Note Taker: Sarah Malone

- 1) former Sewer treatment plant
- 2) Pinellas ^(county) Sewer line that used to overflow right near creek (Manhole lids in the air)
- 3) Bat boxes at corner of pond
- 4) Davis Park → dumpsters, drainage problems, trash, clay/dirt from fields wash out, wildlife, raccoons around dumpsters.
- 5) ^{Sams} trash overflow, complaints from neighbors, Now do a pretty good job of cleanup w/ backup from Pinellas Park
- 6) Dumpster enclosures on ~3 streets near ditch (built by Pinellas Park)
- 7) Asian restaurant
- 8) PPPD canine unit
- 9) Ducks, other birds
- 10) Septic tank → believe was decommissioned, not sure if it was done properly
10.B) do not know if in use any longer → septic

11) Walmart sheet flow to ditch thru
flume, water filling station discharge

Name: Stephen Lee
Entity/Department: Building Development Division
Title: Director
Phone: 727-541-0779
Email: slee@pinellas-park.com

Are you attending the walk the waterbody?: ?

Name: DANIEL HUBBARD
Entity/Department: TRANSPORTATION & STORMWATER
Title: DIRECTOR
Phone: 727-369-5835
Email: DHUBBARD@PINELLAS-PARK.COM

Are you attending the walk the waterbody?: YES

Name: Bill Ruten cutter
Entity/Department: Transportation & Stormwater
Title: Supervisor
Phone: 727-541-0734
Email: BRUTTEN CUTTER@pinellas-park.com

Are you attending the walk the waterbody?: Sure

Name: Sarah Malone
Entity/Department: Pinellas County Natural Resources
Title: Sen. Env. Specialist
Phone: 464-4703
Email: smalone@pinellascounty.org
Are you attending the walk the waterbody?: maybe

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

Name: DAVID COOK

Entity/Department: PPWMID

Title: SUP.

Phone: 727 528 8022

Email: david@ppwmid.com

Are you attending the walk the waterbody?:

Name: DAVID BOWEN

Entity/Department: PINEHILLS PARK PARKS

Title: FOREMAN

Phone: 727 214 7730

Email: DBOWEN@PINEHILLS-PARK.COM

Are you attending the walk the waterbody?:

Name: JUSTIN KELLER

Entity/Department: AED

Title: PROJ. ENG.

Phone: 727-526-9158

Email: keller@aed-fl.com

Are you attending the walk the waterbody?: TAD

Maps on the Table Meeting 5/13/2015

Name: *Yosuary Naranjo*

Entity/Department: *City of Pinellas Park*

Title: *Storm Water Foreman*

Phone: *727-433-5058*

Email: *YNARANJO@pinellas-park.com*

Are you attending the walk the waterbody?:

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

2015

JANUARY

S	M	T	W	TH	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	T	W	TH	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH

S	M	T	W	TH	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL

S	M	T	W	TH	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY

S	M	T	W	TH	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24/31	25	26	27	28	29	30

JUNE

S	M	T	W	TH	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JULY

S	M	T	W	TH	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST

S	M	T	W	TH	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24/31	25	26	27	28	29

SEPTEMBER

S	M	T	W	TH	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

S	M	T	W	TH	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	TH	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

S	M	T	W	TH	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

CDM
Smith

#6

① OLD TASCER PARK

JANUARY

② POSSIBLE SEPTIC

③ COUNTY LEFT

④ POSSIBLE SEPTIC

⑤ DUMPSTER

⑥ / /

⑦ DEBRIS / HOMELESS

HOMELESS
STAGNET WATER / WEIRD
LIFE

⑧ DUMPSTER (SAMS)

⑨ BATT HOUSES

⑩ / /

⑪ EXTENSIVE DOG WALKING

⑫ WILDLIFE DOG WALKING

⑬ / /

⑭ HOMELESS

⑮ / / LOITERING WILD LIFE

⑯ PRIVATE PARKING LOT DISCHARGE

⑰ HOMELESS

⑱ FLOODING / ~~IDEAL~~ ILLUSTRATION CONNECTION

⑲ STREET FLOW LACK OF DRAINAGE

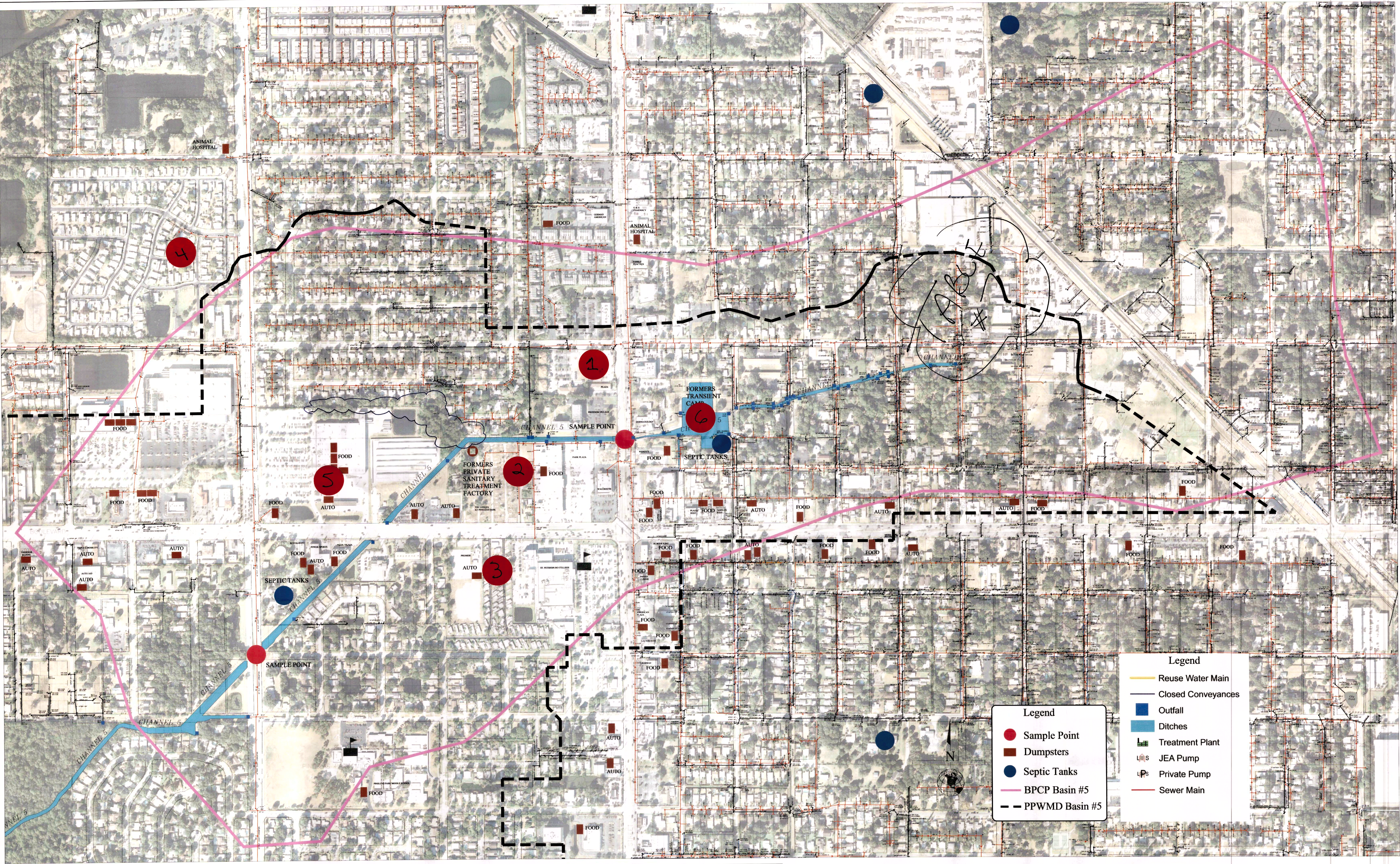
⑳ OVERGROWTH

㉑ POSSIBLE DISCHARGE / STREETING

㉒ STAGNET WATER

listen. think. deliver.

cdmsmith.com



Legend

- Sample Point
- Dumpsters
- Septic Tanks
- BPCP Basin #5
- - - PPWMD Basin #5

Legend

- Reuse Water Main
- - - Closed Conveyances
- Outfall
- Ditches
- Treatment Plant
- JEA Pump
- Private Pump
- Sewer Main

NO.	REVISION	DATE

Table
7

CITY OF PINELLAS PARK



PUBLIC WORKS DEPARTMENT
CITY OF PINELLAS PARK, FLORIDA
ENGINEERING SERVICES DIVISION

PPWMD Channel No. 5
Stormwater and Sanitary

SCALE:	N.T.S.	DESIGNED BY:	CVQ	DATE:	4-15-15
HORZ.	N/A	DRAWN BY:	CVQ	DATE:	4-15-15
VERT.	N/A	CHECKED BY:	AP	DATE:	4-15-15
SHEET 1 OF 1					

TABLE #7

RANDY ROBERTS PPWMD
CHIP HEINZ P.C.
DAVE FLOYD P.P.

- 1) OLD MHP SITE
- 2) OLD MHP SITE
- 3) CURRENT MHP
- 4) CURRENT MHP
- 5) PRIOR JUNK YARD
- 6) BAT BOXES & POND

Name: Randal A. Roberts

Entity/Department: Pinellas Park Water Management District.

Title: Exec. Dir.

Phone: 727-528-8022

Email: randy@ppwmd.com

Are you attending the walk the waterbody?:

Name: DAVE FLOYD

Entity/Department: PINELLAS PARK ENGINEERING DIV.

Title: ENGINEERING INSPECTOR

Phone: 727-647-0581

Email: dfloyd@pinellas-park.com

Are you attending the walk the waterbody?: YES

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

Maps on the Table Meeting 5/13/2015

Name: WILLIAM HEINTZ

Entity/Department: PINELLAS COUNTY PUBLIC WORKS

Title: NPDES INSPECTOR

Phone: 727-464-4793

Email: cheintz@pinellascounty.org

Are you attending the walk the waterbody?:

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

Name:

Entity/Department:

Title:

Phone:

Email:

Are you attending the walk the waterbody?:

APPENDIX 2

Walk the Waterbody Exercise Meeting Minutes

MEETING MINUTES



To: Aaron Petersen, City of Pinellas Park
From: Justin V. Keller, P.E., Advanced Engineering & Design, Inc. (AED)
CC: File
Date: December 19, 2016
Re: Channel 5 Bacterial Pollution Control Plan – Walk the Waterbody Exercise

On 11/16/2016, the below-listed parties attended a Walk the Watershed field exercise. Attendees met at Pinellas Park's Technical Services Building at 8:30 AM.

Aaron Petersen, City of Pinellas Park
Kyle Arrison, City of Pinellas Park
Yosvany Naranjo, City of Pinellas Park
Robert Grund, City of Pinellas Park
Randy Roberts, Pinellas Park Water Management District (PPWMD)
Michelle Robertson, Pinellas County
Chip Heintz, Pinellas County
Joseph Thames, Pinellas County
Justin Keller, AED

A brief overview of the stormwater sampling performed to date, the general observation process for the day's field activity and a listing of possible fecal contaminant sources was provided prior to boarding the City's recreation bus.

A pre-determined route was developed through review of the stormwater sampling performed to date. A copy of this summary provided to the attendees is attached to this document. Sampling locations were ranked based upon the overall averages and revised averages with the peak reading removed from the dataset. This assessment found that sampling location 1, 2 & 6 recorded the highest counts for fecal coliform.

The approx. basin area for each sampling point was identified prior to performing this field exercise and extensive field observation was proposed for the basins upstream of sampling points 1, 2 & 6. Field observation activities commenced at the upstream limits of the watershed (sampling location's 6 basin) and proceeded downstream. Please reference below to view a summary of the locations the team visited, the reasoning behind selecting these sites and the findings.

Sampling Point Basin: 6

<i>Location:</i>	<i>Davis Field Complex / McDevitt Park (60th Street & 76th Avenue)</i>
Reasoning:	Homeless Activity Reported During Maps on the Table (MOTT) Meeting Excessive Trash/Debris after Special Events Reported During MOTT Believed Dog Walking Activities near Stormwater Ponds
Observations:	"Doggie bag" dispenser located away from main park entrance Apparent transient gathering observed at pavilion Chickens observed within fenced in confines of home near inlet Private dumpster bottom found to be rusted and leaking (6085 Park Blvd.) Dumpster at City facility missing lid
Action Items:	Evaluate possible relocation of "doggie bag" dispenser to improve visibility Determine if additional inspection is needed where transients may gather Determine if additional inspection is needed where livestock is housed Report dumpster concerns to appropriate public / private representative
<i>Location:</i>	<i>75th Avenue between 61st Street & 62nd Street</i>
Reasoning:	Stormwater collection structures located near multiple commercial dumpsters
Observations:	Private dumpster bottom found to be rusted and leaking (6162 76 th Ave.) Standing water near inlet with foul odor; adjacent to possible washdown area Organic trash on ground adjacent to dumpster at 6125 Park Blvd. Private dumpster bottom found with no drain (6101 Park Blvd.)
Action Items:	Report dumpster concerns to appropriate public / private representative Outreach to businesses where washdown may be occurring near inlet Outreach to businesses where trash was found near, but not in, dumpster
<i>Location:</i>	<i>Upstream Limits at Channel 5 (62nd Way due south of 78th Avenue)</i>
Reasoning:	Multi-family dumpster adjacent to open channel section
Observations:	No reportable issues observed.
Action Items:	N/A

Sampling Point Basin: 5

Location:	<i>Open Channel Sections Between Upstream Start of Channel and Ph. II Pond</i>
Reasoning:	Believed location of dog walking activities Possible location of livestock
Observations:	Apparent transient gathering location at Ph. II pond pavilion Minor amounts of inorganic trash found near 7736 63 rd Street Dumpster Sediment observed within stormwater structures along 64 th Street Grass clippings found near inlet located in private yard
Action Items:	Determine if additional inspection is needed where transients may gather Report dumpster concerns to dumpster users Clean stormwater structures where sediment was found Evaluate public outreach opportunities for landscaping BMPs

Sampling Point Basin: 4

Location:	<i>75th Avenue Between 65th Way & 65th Street</i>
Reasoning:	Stormwater collection structures located near multiple commercial dumpsters
Observations:	Leakage observed from dumpster at 6525 Park Blvd. Plug missing from dumpster at 7575 65 th Way.
Action Items:	Report dumpster concerns to appropriate public / private representative

Location:	<i>65th Street South of the Pond</i>
Reasoning:	Possible residential properties on septic
Observations:	Unable to visually confirm if properties were on septic.
Action Items:	Determine if properties can be connected to City's sanitary sewer.

Sampling Point Basin: 3

Location:	<i>N/A; sample point basin is small and readings appear to be within allowable tolerance</i>
Reasoning:	N/A
Observations:	N/A
Action Items:	In order to prevent dog waste from entering the Phase II pond, the City recently installed a "doggie bag" dispenser adjacent to the pond's top of bank.

Sampling Point Basin: 2

Location: *Luby's Ditch (Due east of 67th Street between 78th Avenue & Channel)*

Reasoning: Open Ditch where dog walking may be occurring
Limited access ditch where trash/debris may be present

Observations: Pinellas Park Office Park pond (adjacent to ditch) found in poor condition
Minor amounts of inorganic debris located in channel bottom

Action Items: Contact pond owner to discuss maintenance requirements
Coordinate with appropriate City department to remove debris from ditch

Location: *Open Channel Sections of Channel 5 Between Sample Points*

Reasoning: Possible location of illicit discharges
Homes adjacent to ditch may house livestock
Possible location of large domestic animal concentration

Observations: Tree fallen into ditch

Action Items: Report fallen tree to appropriate maintenance entity

Location: *Fairlawn Park Ditch (South of 77th Terrace and west of 67th Way)*

Reasoning: Homeless Activity Reported During Maps on the Table (MOTT) Meeting

Observations: Apparent transient gathering location observed at ditch / Channel 5 confluence
Inorganic debris observed in channel
Debris mound adjacent to storage complex at ditch top of bank
Extensive tree cover and shading of water

Action Items: Determine if additional inspection needed where transients may gather
Coordinate with appropriate City department to clear vegetation
Contact storage unit owner and have debris mound removed
Coordinate with appropriate City department to remove debris from ditch

Location: *Sam's Club Dumpsters (7001 Park Blvd.)*

Reasoning: Historical Complaints Reported During Maps on the Table (MOTT) Meeting

Observations: Dumpster area well maintained

Action Items: N/A

Sampling Point Basin: 1

Location: *Barclay Woods Neighborhood (North of 71st Avenue between 69th & 70th St.)*

Reasoning: Privately owned & maintained stormwater pond with direct discharge to channel

Observations: Landscape debris found stored within dry pond

Action Items: Coordinate with appropriate City department to remove debris from pond

Location: *Open Channel Sections of Channel 5 Between Sample Points*

Reasoning: Possible location of illicit discharges
Homes adjacent to ditch may house livestock
Possible location of large domestic animal concentration
Homeless Activity Reported During Maps on the Table (MOTT) Meeting

Observations: Spent motor oil container found without lid (7000 Park Blvd.)
Dumpster found without plug (7000 Park Blvd.)
Debris found within stormwater pond (7000 Park Blvd.)
Dumpster found with rusted out bottom (6980 Park Blvd.)
Stormwater pond found with excessive vegetation overgrowth (6980 Park Blvd.)
Debris near top of bank suggests possible homeless activity

Action Items: Coordinate with appropriate City department to remove debris from pond
Coordinate with appropriate City department to remove vegetation from pond
Report dumpster concerns to appropriate public / private representative
Coordinate with property owner to relocate & cover spend motor oil container
Determine if additional inspection is needed where transients may gather

Location: *Four (4) Privately Owned Stormwater Ponds Between 70th & 71st Avenue*

Reasoning: Privately owned & maintained stormwater pond with direct discharge to channel

Observations: Shading, due to tree cover and algae growth, observed at downstream pond

Action Items: Coordinate with appropriate County department to improve pond condition

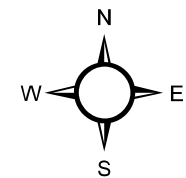
City of Pinellas Park

PPWMD Channel 5 BPCP





Pre-WTW Sampling Summary

Sample Site	Sample Dates (Fecal Only) (Counts/100 mL)					Summary		
	5/24/2016	6/28/2016	7/26/2016	8/22/2016	9/19/2016	Max.	Avg.	Min.
PPD5-1	680	3,200	12,000	1,000	2,800	12,000	3,936	680
PPD5-2	1,200	2,800	7,900	5,900	3,400	7,900	4,240	1,200
PPD5-3	130	470	520	170	440	520	346	130
PPD5-4	0	0	2,300	67	5,600	5,600	2,656	67
PPD5-5	180	500	1,900	270	1,900	1,900	950	180
PPD5-6	860	1,200	3,000	1,200	30,000	30,000	7,252	860

PPD#5: Locations of Sampling Sites and Possible Sources for Impairment



Legend

-  PPD5_Sampling_Sites
-  Wildlife_Habitats
-  Possible_Pet_Waste_Source
-  Direct_Discharge
-  Possible_Private_Sewage_Source
-  Possible_Municipal_Sewage_Source
-  Possible_Human_Waste_Source
-  Possible_Food_Waste_Source
-  Basins
-  PPD#5

