Appendix F

FDEP Impaired Waterbodies in the CHSJS

CHSJS water bodies determined to be impaired under Florida's IWR.						
WBID	**Waterbody Segment**	**Water Body Class (M = marine, F = freshwater)**	**Parameters Assessed Using the Impaired Waters Rule (IWR)**	**Concentration Causing Impairment**	**Priority for TMDL Development**	**Comment**
1440A	ANCLOTE RIVER BAYOU COMPLEX (SPRING BAYOU)	3M	Dissolved Oxygen	< 4.0 mg/L	High	Chl-a was identified as the causative pollutant based on Chl-a data/nutrient impairment verification.
1508	KLOSTERMAN BAYOU RUN TIDAL	3M	Dissolved Oxygen	< 4.0 mg/L	High	Nutrients were identified as the causative pollutant based on Chl-a data/nutrient impairment verification.
1512Z	WALL SPRING (Health Springs)	3F	Dissolved Oxygen	< 5.0 mg/L	Medium	Nutrients were identified as the causative pollutant. The verified period total nitrogen median = 5.53 mg/l (27 values), total phosphorus median = 0.11 mg/l (28 values), and BOD median = 0.755 mg/l (6 values). Note that this is a spring.
1538	CURLEW CREEK TIDAL	3M	Dissolved Oxygen	< 4.0 mg/L	High	Nutrients were identified as a causative pollutant based on Chl-a data/nutrient impairment verification.
1556	CEDAR CREEK TIDAL	3M	Dissolved Oxygen	< 4.0 mg/L	High	Nutrients were identified as a causative pollutant based on Chl-a data/nutrient impairment verification.
1567	STEVENSON CREEK TIDAL	3M	Dissolved Oxygen	< 4.0 mg/L	High	Nutrients were identified as a causative pollutant based on Chl-a data/nutrient impairment verification.
1567B	SPRING BRANCH	3F	Dissolved Oxygen	< 5.0 mg/L	Medium	Impaired for DO Cat 5 with BOD as causative pollutant. TN median = 1.2 mg/L, TP median = 0.2 mg/L, BOD median = 4 mg/L
1614	BELLEAIR GOLF CLUB RUN	3F	Dissolved Oxygen	< 5.0 mg/L	Medium	Nutrients were identified as a causative pollutant. The verified period total nitrogen median = 2.45 mg/l, total phosphorus median = 0.185 mg/l), and BOD median = 2 mg/l.
1633	MCKAY CREEK TIDAL	3M	Dissolved Oxygen	< 4.0 mg/L	High	Nutrients were identified as a causative pollutant based on Chl-a data/nutrient impairment verification.
1633B	MCKAY CREEK FRESHWATER SEGMENT	3F	Dissolved Oxygen	< 5.0 mg/L	Medium	This listing may be removed because the Department has not been able to determine a causative pollutant for DO. Note that the WBID is not impaired for Chl-a. The verified period total nitrogen median = 1.095 mg/l, total phosphorus median = 0.07 mg/l, and BOD median = 2 mg/l.

1508	KLOSTERMAN BAYOU RUN TIDAL	3M	Nutrients (chla and Historic chla)	Median TN = 1.665 mg/L	High	Annual average Chl-a values exceeded 11 ug/l in 1999 - 2005, and values were 27.9, 32.44, 30.02, 22.67, 49.07, 38.14 and 45.29 ug/l, respectively. For the historical listing, annual average Chl-a values in the verified period exceeded the minimum historical annual average value of 21.12 ug/l for 1990-1994 by more than 50% in 2004 (38.14 ug/l), and 2005 (45.28 ug/l). Nitrogen is the limiting nutrient based on a median TN/TP ratio of 3.16. The verified period total nitrogen median = 1.665, total phosphorus median = 0.59 mg/l, and the BOD median = 3.25 mg/l.
1440A	ANCLOTE RIVER BAYOU COMPLEX (SPRING BAYOU)	3M	Nutrients (chla)	Median TN = 0.77 mg/L	High	Annual average Chl-a values exceeded 11 ug/l in 1999, 2001, and 2002, and values were 13.48, 14.89, and 12.26 ug/l, respectively. Nitrogen is the limiting nutrient based on a median TN/TP ratio of 8.2. Verified period total nitrogen median = 0.77 mg/L, total phosphorus = 0.1, and BOD median = 2 mg/l.
1538	CURLEW CREEK TIDAL	3M	Nutrients (chla)	Median TN = 1.65 mg/L	High	Annual average Chl-a values exceeded 11 ug/l in all years from 1999-2004, and the values were 27.29, 32.09, 35.35, 15.15, and 24.51 ug/l, respectively. Nitrogen is the limiting nutrient based on a median TN/TP ratio of 7.9. The verified period total nitrogen median = 1.65 mg/l, total phosphorus median = 0.22 mg/l, and the BOD median = 2.6 mg/l.
1556	CEDAR CREEK TIDAL	3M	Nutrients (chla)	Median TN = 1.05 mg/L	High	Annual average Chl-a values exceeded 11 ug/l in 1999 - 2005, and values were 13.91, 31.74, 12.85, 23.44, 3.363, 11.26 and 5.108 ug/l, respectively. Nitrogen is the limiting nutrient based on a median TN/TP ratio of 6.89. The verified period total nitrogen median = 1.05 mg/l, total phosphorus median = 0.15 mg/l, and the BOD median = 3 mg/l.
1567	STEVENSON CREEK TIDAL	3M	Nutrients (chla)	Median TN = 1.29 mg/L	High	pp = Potentially impaired; vp = Verified impaired. Annual average Chl-a values exceeded 11 ug/l in 1999 - 2002 and 2004, and values were 16.08, 32.74, 59.37, 24.75 and 42.81 ug/l, respectively. Nitrogen is the limiting nutrient based on a median TN/TP ratio of 5.79 (116 values). The verified period total nitrogen median = 1.29 mg/l, total phosphorus median = 0.22 mg/l, and BOD median = 2 mg/l.
1633	MCKAY CREEK TIDAL	3M	Nutrients (chla)	Median TN = 1.04 mg/L	High	Annual average Chl-a values exceeded 11 ug/l in 1999-2000, 2002, and 2004, and values were 12.22, 13.85, 11.48 and 21.52 ug/l, respectively. Nitrogen is the limiting nutrient based on a TN/TP ratio of 5.05. Verified period total nitrogen median = 1.04 mg/L, total phosphorus median = 0.2, and BOD = 2 mg/l.

1508	KLOSTERMAN BAYOU RUN TIDAL	3M	Coliform (Fecal Coliform)	> 400 colonies/100 ml	High	pp = 6 / 57; vp = 7 / 37.
1527	SUTHERLAND BAYOU (SMITH CREEK)	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = No data; vp = 17 / 39
1538A	CURLEW CREEK FRESHWATER SEGMENT	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = 17 / 18; vp = 21 / 47
1556A	CEDAR CREEK FRESHWATER	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = No Data; vp = 16 / 34
1567B	SPRING BRANCH	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = No Data; vp = 13 / 22
1567C	STEVENSON CREEK	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = 1 / 1; vp = 11 / 28
1614	BELLEAIR GOLF CLUB RUN	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = 34 / 36; vp = 21 / 24
1633	MCKAY CREEK TIDAL	3M	Coliform (Fecal Coliform)	> 400 colonies/100 ml	High	pp = 34 / 36; vp = 1 / 11; Sufficient PP/VP data to assess. PP & most recent 20 samps (9/20) trigger VL; Assessment based on Period of Record data.
1633B	MCKAY CREEK FRESHWATER SEGMENT	3F	Coliform (Fecal Coliform)	> 400 colonies/100 ml	Low	pp = 6 / 36; vp = 13 / 52
1440	ANCLOTE RIVER TIDAL	3M	Mercury (in fish tissue)	Exceeds DOH threshold (> 0.43 mg/kg)	High	Data verified to be within the last 7.5 years. Confirmed recent data for fish advisories for King Mackerel (n=87 samples) and Bullshark (n=28 samples) in the Verified Period. Average Hg levels in king mackerel were 0.67 mg/kg and 1.85 mg/kg in bull sharks which exceeded the threshold of 0.43 mg/kg.
1450B	LAKE NASH	3F	Mercury (in Fish Tissue)	Exceeds DOH threshold (> 0.43 mg/kg)	High	Data verified to be within the last 7.5 years. In 2002, 2003/2004, 87 king mackerel and 28 bull shark had an average mercury concentration of 0.67 and 1.85 mg/kg, respectively. These levels exceeded the threshold of 0.43 mg/kg.