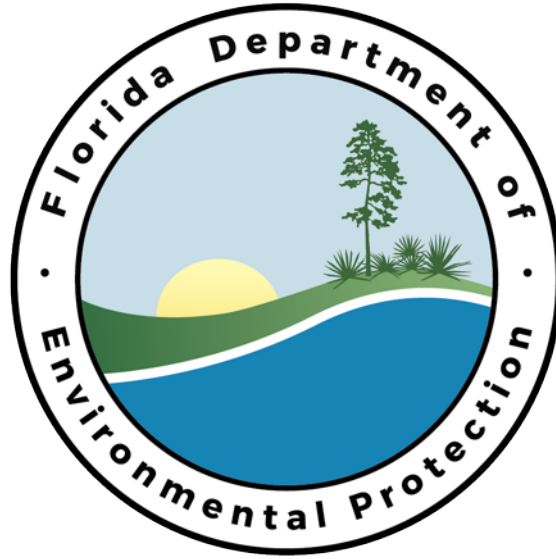




***Everglades West Coast
Final Update
Lee and Collier Counties, Florida***

***SIS Site Number 686-1
Issued February 2017***

***Florida Department of Environmental Protection
Site Investigation Section
David M. Phillips, Environmental Administrator
2600 Blair Stone Road
Tallahassee, Florida 32399***

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1.0 Introduction

As part of the implementation of restoration efforts addressing nutrient impairment in Hendry Creek, the Imperial River, Gordon River Extension and Lake Trafford, all located within the Everglades West Coast Basin, the Florida Department of Environmental Protection (DEP) initiated a study to better understand the influence of land uses on shallow ground water quality and impairment of these surface waters. DEP Total Maximum Daily Loads (TMDL) reports for these waters indicate that low levels of dissolved oxygen in the streams and eutrophication in Lake Trafford are associated with nutrient contributions from anthropogenic sources.

This study entails the collection and analyses of ground water samples on a quarterly basis from a network of approximately thirty shallow monitor wells. These monitor wells are located in areas with land uses that could potentially contribute nutrients including nitrogen and phosphorus to ground and surface water in the Hendry Creek and Imperial River watersheds and in the watersheds of the Gordon River and Lake Trafford, which were also being evaluated for nutrient impacts. Land usage includes agriculture (row crops, citrus, cattle, etc.), residential, recreational (golf courses and recreational parks) and commercial development. Sources of nutrients would include fertilizers, livestock waste, septic tanks and reclaimed water (treated domestic waste water) for irrigation purposes.

The network of monitor wells is comprised of previously existing monitor wells and wells newly installed for the purpose of this study, including seven monitor wells installed by the DEP Site Investigation Section (SIS). This report documents the results of nine quarterly sampling events conducted between March 2014 and March 2016.

Ground water samples were analyzed for nutrients and a variety of other analytes such as sucralose which was used to evaluate sources of nutrients in shallow ground water.

The study area ([Figure 1](#)) is subdivided into four areas representing individual river or lake basins. The Hendry Creek well group is located near the unincorporated community of Villas in central Lee County just south of Ft. Myers. Monitor wells in the Hendry Creek group are primarily located in residential areas and golf course communities.

The Imperial River well group is centrally located within the study area near the community of Bonita Springs in southern Lee County. Monitor wells in the Imperial River group were installed at locations that include a variety of land uses ranging from an isolated upland area to dense residential areas. One of these monitor wells (HR-3R) is located at Hunters Ridge Golf Course community which uses reclaimed water to irrigate the course.

Located approximately sixteen miles south of the Imperial River well group and east of Naples in Collier County is the Gordon River well group. Monitor wells in this group are primarily located in residential areas, golf course communities and recreational parks.

The Lake Trafford well group is located in northern Collier County just west of the town of Immokalee. Lake Trafford monitor wells are primarily located in citrus growing and cattle production areas.

The four areas and their associated network of monitor wells are presented in [Figures 2, 3, 4, and 5](#), respectively.

The Hendry Creek well group consists of seven monitor wells including MW-HC1A, MW-HC1B, MW-HC2, MW-HC3, MW-HC4A, MW-HC5 and MW-HC6.

Monitor well MW-HC4B was abandoned after the 4th sampling event.

The Imperial River well group consists of nine monitor wells including MW-IR5, MW-IR6, MW-IR7, MW-IR8, MW-IR9, MW-IR11, 254725 and 364725. Monitor well MW-IR12 was abandoned after the first sampling event and subsequently replaced by HR-3R during the 4th sampling event.

The Gordon River well group consists of nine monitor wells including MW-GR1, MW-GR2, MW-GR3, MW-GR4, MW-2, MW-4, MW-5, MWC-120091 and Anthony Park.

The Lake Trafford well group consists of five monitor wells including C-532, C-1078, MW-LT1, MW-LT2 and MW-LT3.

The latitude and longitude positions for the monitor wells can be found in [Table 1](#) while monitor well completion data is provided in [Table 2](#).

2.0 Site Investigation Activities

2.1 Installation of Direct Push Microwells

SIS installed seven monitor wells to complete the network of monitor wells to be used in this study. These wells included MW-IR8, MW-IR9, MW-IR11, MW-LT1, MW-LT2, MW-LT3 and MW-HC4A. To install the monitor wells, the SIS direct push rig advanced 2.25-inch diameter probe rods to depths ranging from 10 to 19.2 feet below land surface (BLS). After reaching the desired depth, a prepacked screen and casing

were lowered inside the probe rods. An expendable point on the lead rod was then dislodged and the rods retracted leaving the monitor well in place. The wells are constructed of ¾-inch Nominal Pipe Size (NPS) Schedule 40 PVC casing, with a five or ten foot section of prepacked screen. The prepacked screens consist of ¾-inch NPS Schedule 40 0.01-inch slotted screen with a wrap-around stainless steel mesh filled with 40-60 sieve size sand.

2.2 Ground Water Sampling

SIS collected ground water samples from the monitor well network during nine quarterly sampling events conducted between March 2014 and March 2016. Each well was sampled in accordance with DEP-SOP-001/01 FS 2200 and FQ1000 (DEP, 2012). Ground water parameters including temperature, specific conductivity, pH, dissolved oxygen, oxidation reduction potential (ORP) and turbidity were collected using a YSI water quality meter and a Hach turbidity meter ([Table 3](#)). All ground water samples were placed in laboratory provided clean bottles, preserved as required, placed on wet ice after collection and delivered by SIS under chain-of-custody to the DEP Central Laboratory in Tallahassee, Florida for the following analyses:

- Chloride in aqueous matrices by EPA 300.0;
- Total Recoverable Metals by EPA 200.7, specifically boron and potassium;
- Ammonia in aqueous matrices by EPA 350.1;
- Nitrite/Nitrate in aqueous matrices by EPA 353.2;
- Total Phosphorus in aqueous matrices by EPA 365.1;
- Sucralose in aqueous matrices by DEP SOP: LC-001-2;
- Total Kjeldahl Nitrogen (TKN) by EPA 351.2.

2.2 Surface Water Sampling

At a few locations, SIS collected water samples from surface water bodies such as canals and rivers that were located adjacent to monitor wells. These samples were collected with a peristaltic pump and analyzed for the same analytical suite as the ground water samples.

2.3 Quality Assurance/Quality Control Samples

Quality assurance and quality control (QA/QC) samples were collected during SIS field activities to evaluate the precision of the laboratory analyses (duplicate samples) and to evaluate the cleanliness of the sampling equipment (equipment blanks).

3.0 Site Investigation Results

3.1 Ground Water Parameter Data

Ground water purged from the wells prior to sampling was evaluated for temperature, specific conductance, pH, dissolved oxygen (DO), and oxidation reduction potential (ORP) as part of the standard well purging protocol ([Table 3](#)).

It should be noted that the average DO concentration in ground water samples from all four basins is hypoxic (less than 2 mg/L DO) and average ORP values indicate reducing conditions are present. This is significant as some portion of this hypoxic and reducing ground water is discharging into adjacent surface water bodies and could directly contribute to low DO concentrations in the receiving waters.

Wide ranges in specific conductance values in all four areas were also noted during this study, with some of these wells located in freshwater areas and others located

near saline or brackish surface waters. The table below provides the range and average value of ground water parameters for each well group.

Well Group	Temperature ° Centigrade	Specific Conductance mS/cm	pH standard units	DO % saturation	ORP mV
Hendry Creek	15.1 – 30.8 Avg. 25.7	258 – 3858 Avg. 1291	6.05 – 7.72 Avg. 6.83	0.2 – 33 Avg. 9.6	-233 – 106 Avg. -101
Imperial River	19.9– 30.6 Avg. 26.0	150 – 1048 Avg. 551	6.21 – 7.68 Avg. 6.99	0.01– 89 Avg. 13.8	-231 – 140 Avg. -32
Gordon River	18.7 – 32.2 Avg. 25.9	227 – 5871 Avg. 1305	5.75 – 7.26 Avg. 6.75	0.08 – 36.3 Avg. 9.7	-312 - 71 Avg. -120
Lake Trafford	14.6 – 28.8 Avg. 24.9	84 – 1060 Avg. 423	5.37 – 7.17 Avg. 6.38	1.5 – 46.7 Avg. 9.8	-192 - -10 Avg. -72

3.2 Ground Water Analytical Results

Table 4 provides a summary of all analytical data compiled during this study. The goal of this study was to monitor nutrients such as total phosphorus (TP) and nitrogen in the forms nitrite/nitrate (NO₂/NO₃), ammonia, total Kjeldahl nitrogen (TKN) and total nitrogen (TN) in shallow ground water. Total nitrogen (TN) is defined as the sum of TKN and NO₂/NO₃. Discharge of nutrients from ground water to surface water bodies could contribute to eutrophication. Eutrophication is the process by which a body of water becomes enriched with dissolved nutrients that stimulate the growth of aquatic plant life usually resulting in the depletion of DO (1).

Included in the Appendix are a series of graphs. These graphs present nitrite/nitrates, ammonia, total nitrogen, total phosphorus and sucralose results while **Table 5** documents the land use in the vicinity of impacted monitor wells and the potential source(s) of elevated concentrations of nutrients. On the graphs, the Imperial

River group monitor well MW-IR11 is noted as a background well. This well is located in a relatively undeveloped area, one of the most isolated areas covered by this study.

Typically, the most prevalent form of nitrogen found in ground water is NO₂/NO₃. An examination of the NO₂/NO₃ data ([Graph 1](#)) indicate that monitor well MWC-120091 in the Gordon River monitor well group exhibited the highest NO₂/NO₃ concentration in the monitoring network of 21 milligrams of nitrogen/liter (mg N/L) in a sample collected in October 2014. This monitor well is located in Fleischmann Park in Naples which includes baseball and soccer fields that are fertilized and use reclaimed water for irrigation. As a group, the Imperial River monitor wells presented the highest overall concentrations of NO₂/NO₃ with concentrations of approximately 1 mg N/L or greater reported in MW-IR5, MW-IR6, MW-IR7, 364725, MW-IR12 and HR-3R. Monitor wells MW-IR5, IR6 and 364725 are located in residential areas while monitor well MW-IR7 is located adjacent to both a vegetable farm and residential area.

Imperial River monitor wells MW-IR12 and HR-3R are located adjacent to the Hunters Ridge Golf Course, where fertilization of turf would occur and where reclaimed water is used for irrigation.

As a group, the Lake Trafford monitor wells, which are primarily located in agricultural areas, had the lowest NO₂/NO₃ concentrations. The background well MW-IR11 had concentrations of NO₂/NO₃ of less than 0.1 mg N/L.

[Table 4](#) illustrates that NO₂/NO₃ concentrations trended non-detect or at trace levels in 22 of the 32 wells included in this study.

Ammonia (NH₃) in ground water is usually a result of incomplete nitrification from a nitrogen source such as domestic wastewater or septic systems. Incomplete

nitrification often occurs where soils are poorly-drained and/or where the water table is very shallow. According to the USGS, ammonia is one of the primary forms of dissolved nitrogen in natural water. It is a compound of nitrogen in combination with hydrogen. Depending on the number of hydrogen atoms in the compound, ammonia in water may be ionic (having an electrical charge) or un-ionized (having no charge). The un-ionized form is more toxic to fish. Ammonia is soluble in water, but is not stable in most environments. It is easily transformed to nitrate in waters that contain oxygen and can be transformed to nitrogen gas in waters that are low in oxygen. The EPA has established criteria for maximum ammonia concentrations in surface water based on danger to aquatic organisms such as fish. These criteria vary with acidity and water temperature, which affect both the toxicity of ammonia and the form in which it occurs. In most natural surface waters, total ammonia concentrations greater than about 2 mg/L exceed the chronic exposure criteria for fish. In alkaline water at high temperature, the criteria can be exceeded by total ammonia concentrations less than 0.1 mg/L. The natural conversion of ammonia to nitrate in streams removes oxygen from water and, therefore, can also adversely affect fish. The USGS reports that background concentrations of ammonia in both surface water and ground water is less than 0.1 mg N/L (2).

Ammonia concentrations greater than 0.1 mg N/L were noted in 22 of the 32 monitor wells included in this study (Graph 2). The highest concentrations of ammonia were detected in the Gordon River monitor well MW-4 with an average concentration of ~ 5 mg N/L. Ammonia concentrations were also elevated in the Hendry Creek monitor wells MW-HC2 and MW-HC3 with average concentrations of ~ 3 mg N/L and 2 mg N/L, respectively. MW-4 and MW-HC3 are located in or approximate to a golf course while

MW-HC2 is located in a residential area. Ammonia concentrations in the background monitor well MW-IR11 ranged between less than 1 and 0.1 mg N/L. The table below illustrates that if elevated nitrogen was present in a well that is was in either in the form of ammonia or NO₂/NO₃ but not both. At monitoring locations where ammonia concentrations were highest, the water table was very shallow.

In the case of Hendry Creek, Imperial River and Gordon River Extension, DEP TMDL reports identified total nitrogen (TN) as the causative pollutant for the low DO. The TMDL target TN concentration for all three streams is 0.74 milligrams N per liter (mg N/L). For Lake Trafford, achieving the TMDL based on achieving a trophic state index target would occur at TN and TP concentrations of 1.09 mg N/L and 0.025 mg P/L, respectively.

A comparison of the average TN concentrations for ground water samples collected in the Hendry Creek, Imperial River, and Gordon River areas against the TN TMDL threshold of 0.74 mg N/L shows that ground water at most of these locations is less than or only minimally higher than the target concentration for the impaired waterbody ([Graph 3](#)). Average TN concentrations in ground water at ten of the stations are more than two times greater than the applicable TMDL threshold for their basin and at four of the stations the TN average was more than 5 times the threshold. Highest average TN concentrations were found at wells MW-HC2 and MW-HC3 in the Hendry Creek area (3.6 and 3.1 mg N/L, respectively); MW-IR12 and MW-HR3R in the Imperial River area (5.5 and 9.6 mg N/L, respectively), and MW-4 and MWC-120091 in the Gordon River area (5.7 and 8.4 mg N/L, respectively). With respect to land use, four of the wells noted above with the highest TN are located at golf courses, one at a

recreational park and one at a residence. The average TN concentration at the background well MW-IR11 was reported as 1.2 mg N/L.

A comparison of the average TN concentrations for ground water samples collected in the Lake Trafford area against the TMDL threshold of 1.09 mg N/L shows that ground water at four of the five monitor wells locations are less or minimally higher than 1.09 mg N/L. The highest concentration of TN in the Lake Trafford area was 1.8 mg N/L reported for monitor well C-532.

Phosphorus is a relatively immobile nutrient in ground water because soluble phosphorus reacts and binds with iron, manganese, aluminum and calcium coatings on soil particles to form compounds that are solids. Therefore, phosphorus concentrations in the ground water are typically much lower than nitrogen concentrations in areas of nutrient sources. Phosphorus can also occur naturally in ground water in areas where the geological material contains phosphate or where there is abundant organic material. DEP TDML reports indicate that total phosphorus (TP) is not a causative pollutant impacting Hendry Creek, the Imperial River or the Gordon River Extension. TP median concentrations reported in the TMDL documents for these streams were 0.03/0.54 mg P/L for Hendry Creek fresh/marine segments; 0.03 mg P/L for Imperial River and 0.07 mg P/L for Gordon River Extension. The target TP concentration for Lake Trafford in the TMDL document is 0.025 mg P/L. In the Hendry Creek area, 2 of the 8 monitoring wells (MW-HC3 and MW-HC4B) had TP concentrations consistently greater than the 0.03 mg P/L median for the freshwater segment ([Graph 4](#)). In the Imperial River area, 5 of the 10 wells had TP concentrations that were on more than one occasion greater than the Imperial River median of 0.03 mg P/L (with well 254725 having TP concentrations

consistently greater). In the Gordon River area, 3 of the 9 wells had TP concentrations greater than the 0.07 mg P/L median for Gordon River Extension (with highest and most consistently greater concentrations in MW-GR2 and MWC-120091). In the Lake Trafford area, 4 of the 5 wells had TP concentrations considerably higher than the TP restoration target of 0.25 mg P/L and one (C-532) had concentrations consistently higher than the 1998-2005 mean concentration of 0.221 mg P/L reported in the TMDL document. The highest TP concentration of 2.3 mg P/L was reported in a sample collected from Lake Trafford group monitor well C-1078 in October 2014. This monitor well is located within the town of Immokalee. Overall, the monitor wells located in the agricultural areas around Lake Trafford presented the highest concentrations of total phosphorus. Elevated concentrations of TP were also noted in MW-IR6, located in a residential area adjacent to the Imperial River and MWC-120091, the monitor well located in Fleischmann Park. Interestingly, many of the monitor wells with elevated total phosphorus such as the Lake Trafford group monitor wells did not show a corresponding elevated nitrogen component. However, monitor well MWC-120091 showed both an elevated NO₂/NO₃ and total phosphorus concentration. Total phosphorus concentrations measured in the background monitor well MW-IR11 were less than 0.1 mg P/L.

Sucralose analysis was used by SIS as an indicator for waste water contributions from either septic tanks or reclaimed water. Sucralose is the chemical name for the artificial sweetener Splenda. Sucralose is not metabolized by ingestion and is therefore considered a good tracer for waste water. Sucralose was present in all but nine monitor wells included in this study ([Graph 5](#)). Golf course and recreational park monitor wells located in the Gordon River group exhibited the overall highest sucralose concentrations

(ranging from ~ 1 to ~ 5 ug/L) which is from reclaimed water use at these sites. The single highest concentration of sucralose was reported in the Gordon River well Anthony Park at a concentration of 13 ug/L. Sucralose concentrations in the Hendry Creek monitor well MW-HC2 were also elevated with concentrations ranging between 1 and 10 ug/L of sucralose. Sucralose was not detected in the background monitor well MW-IR11.

3.2 Surface Water Analytical Results

The table below summarizes the analytical results and select ground water parameters from the surface water sampling conducted by SIS.

Sample ID	Nitrite/Nitrate mg N/L	Ammonia mg N/L	Total Nitrogen mg N/L	Sucralose ug/L	Total Phosphorus ~ mg P/L	DO %/mg/L	OR P mV	Location
HC-Canal	0.12	0.31	1.32	3.9	0.12	59.1/4.66	34.9	In canal adjacent to HC-6 in golf course community
IR-9 Canal	0.22	0.033	1.05	0.32	0.026	17.4/1.46	41.3	In canal adjacent to IR-9
Imperial River	0.17	0.13	1.17	0.029	0.029	28.3/2.43	31.6	River adjacent to MW-IR5

The table above presents contrasting data between the HC-Canal sample and the other two surface water samples. The HC-Canal sample with the highest reported total nitrogen, total phosphorus, ammonia and sucralose concentrations presented DO above hypoxic levels while the other two surface water samples with the lowest reported concentrations of nutrients is under hypoxic conditions. The reason for this is not

understood but may be due to a limited data set. This data set did indicate that TN levels in all surface water samples were above the 0.74 mg N/L target level.

4.0 Summary

Average DO and ORP values for ground water in all four basins indicate both hypoxic and reducing conditions. Direct discharge of low DO ground water to canals or streams could be an influence on DO concentrations in these waters.

Nitrogen is the causative pollutant for low DO in Hendry Creek, Imperial River, and Gordon River basins and contributes to eutrophic conditions in Lake Trafford. The form of nitrogen that is typically most prevalent in ground water samples is NO₂/NO₃. A review of analytical results indicates that NO₂/NO₃ concentrations in the majority of the ground water samples collected from the four areas were very low to non-detect. Ten monitor wells reported TN concentrations greater than twice the 0.74 mg N/L TMDL TN threshold for Hendry Creek, Imperial River, and Gordon River Extension. A comparison of the average TN concentrations for ground water samples collected in the Lake Trafford area against the TMDL threshold of 1.09 mg N/L shows that ground water at four of the five monitor wells locations were less than or minimally higher than 1.09 mg N/L.

The highest NO₂/NO₃ concentrations were reported in a few Imperial River group monitor wells and a Gordon River group monitor well installed at a recreational park which may include fertilizer use and irrigates with reclaimed water. Ground water samples from several of the well locations had detections of ammonia. Ammonia in

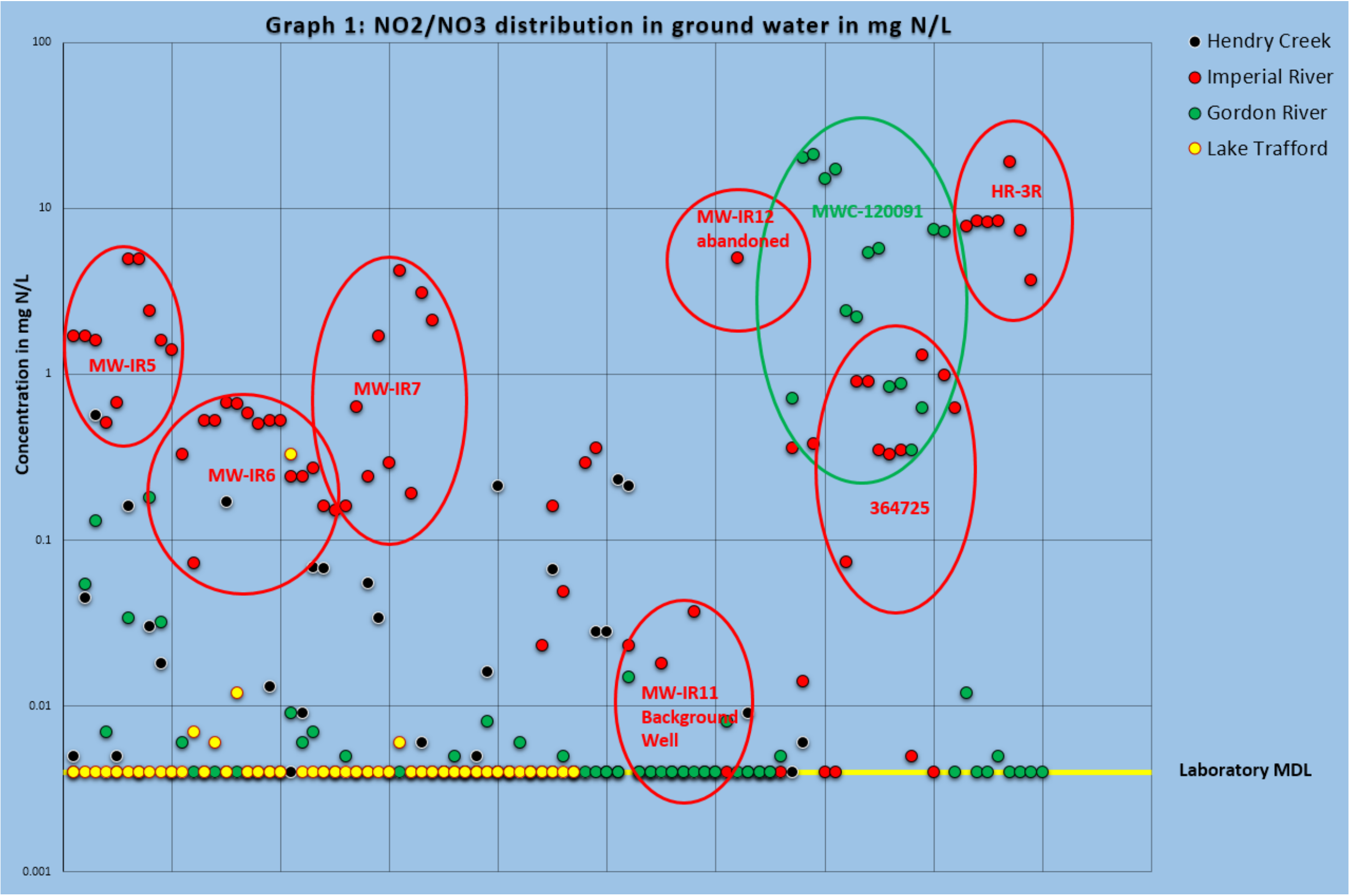
ground water typically occurs in poorly drained areas where the water table is high and nitrification is impeded.

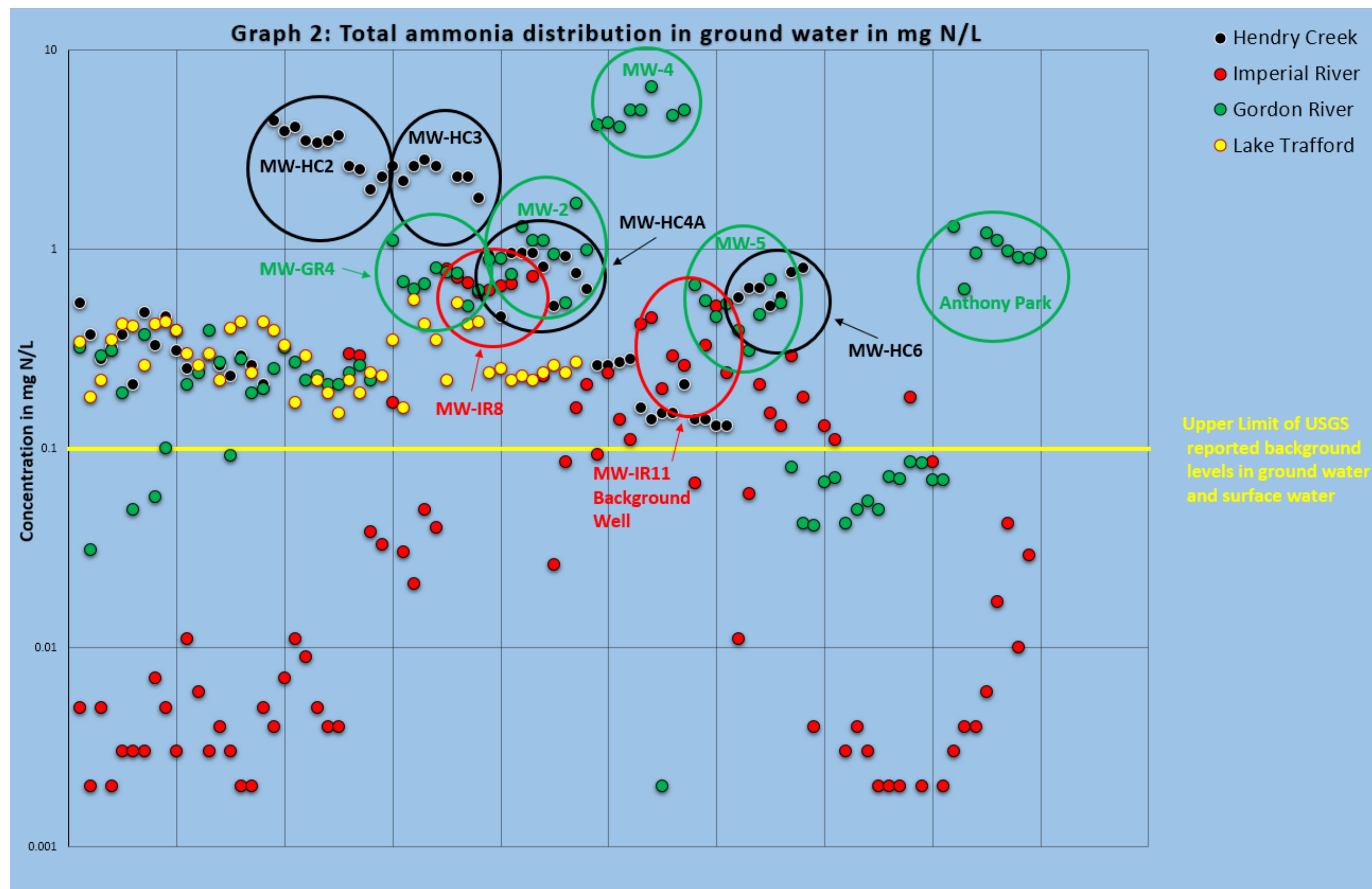
Total phosphorus was not determined to be a causative pollutant impacting Hendry Creek, the Imperial River or the Gordon River basins. TP median concentrations reported in the TMDL documents for these streams were 0.03/0.54 mg P/L for Hendry Creek fresh/marine segments; 0.03 mg P/L for Imperial River and 0.07 mg P/L for Gordon River Extension. The target TP concentration for Lake Trafford in the TMDL document is 0.025 mg P/L. TP concentrations at several well locations were higher than median values for the streams, but these do not necessarily indicate influence from a pollutant source. Land uses potentially related to the highest total phosphorus concentrations include agricultural, residential and recreational.

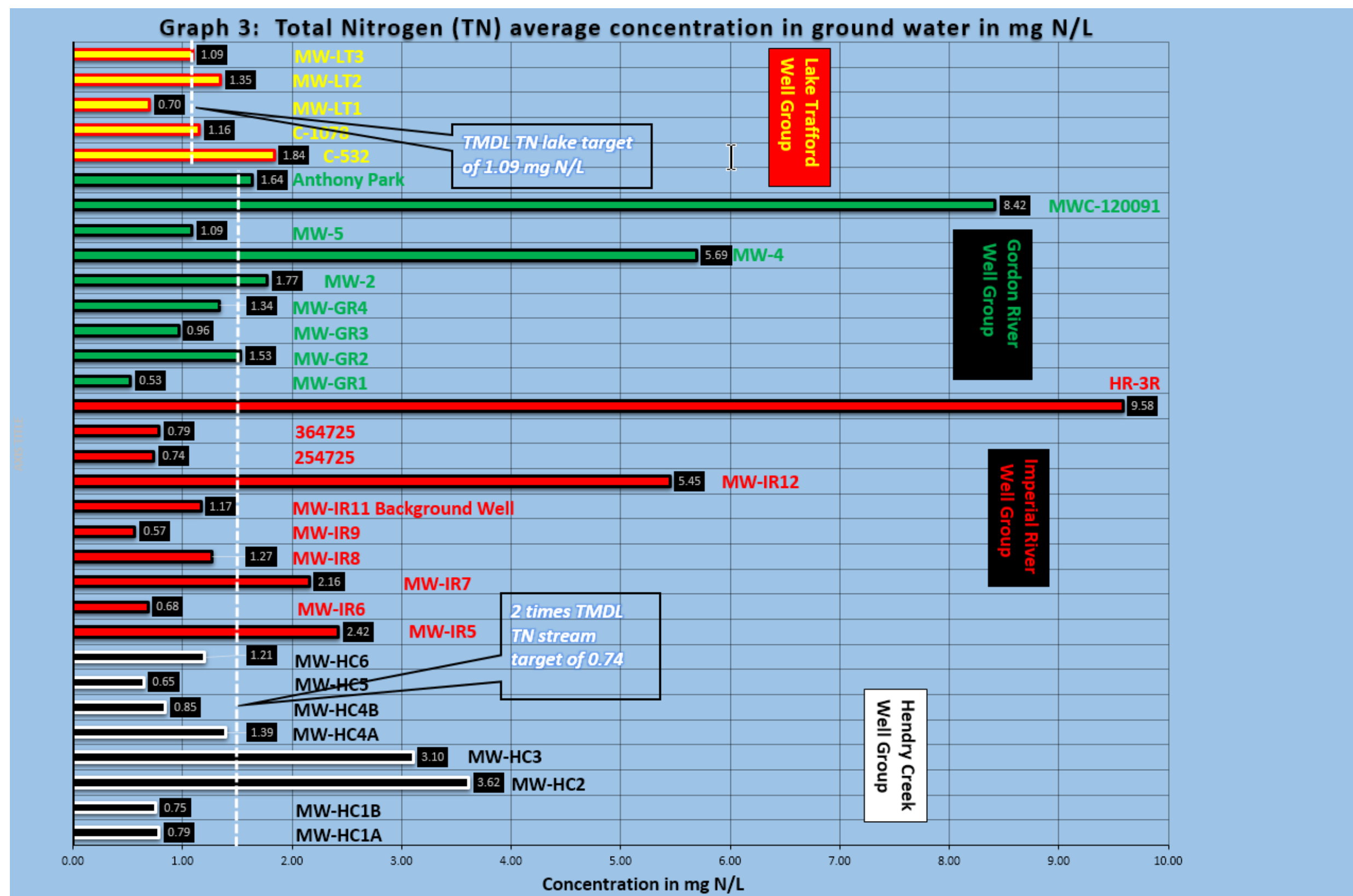
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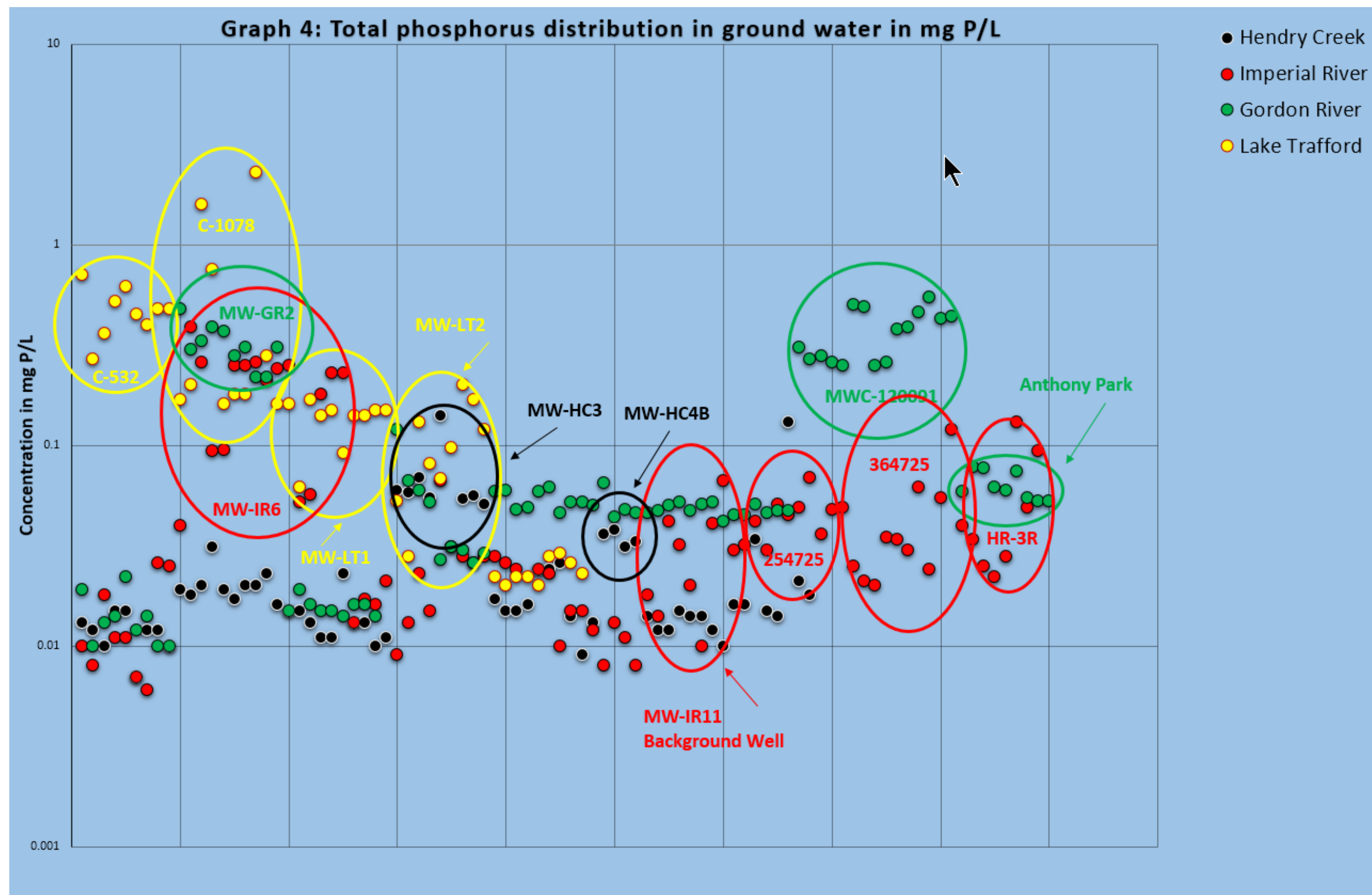
- 1) <http://www.merriam-webster.com/dictionary/eutrophication>
- 2) <http://pubs.usgs.gov/circ/circ1136/circ1136.html>
- 3) http://www.dep.state.fl.us/evergladesforever/restoration/quality_qa.htm#1
- 4) <http://www.dep.state.fl.us/water/tmdl/docs/tmdls/final/gp1/hendrydofinal091208.pdf>
- 5) <http://www.dep.state.fl.us/water/tmdl/docs/tmdls/final/gp1/imperialdofinal091208.pdf>
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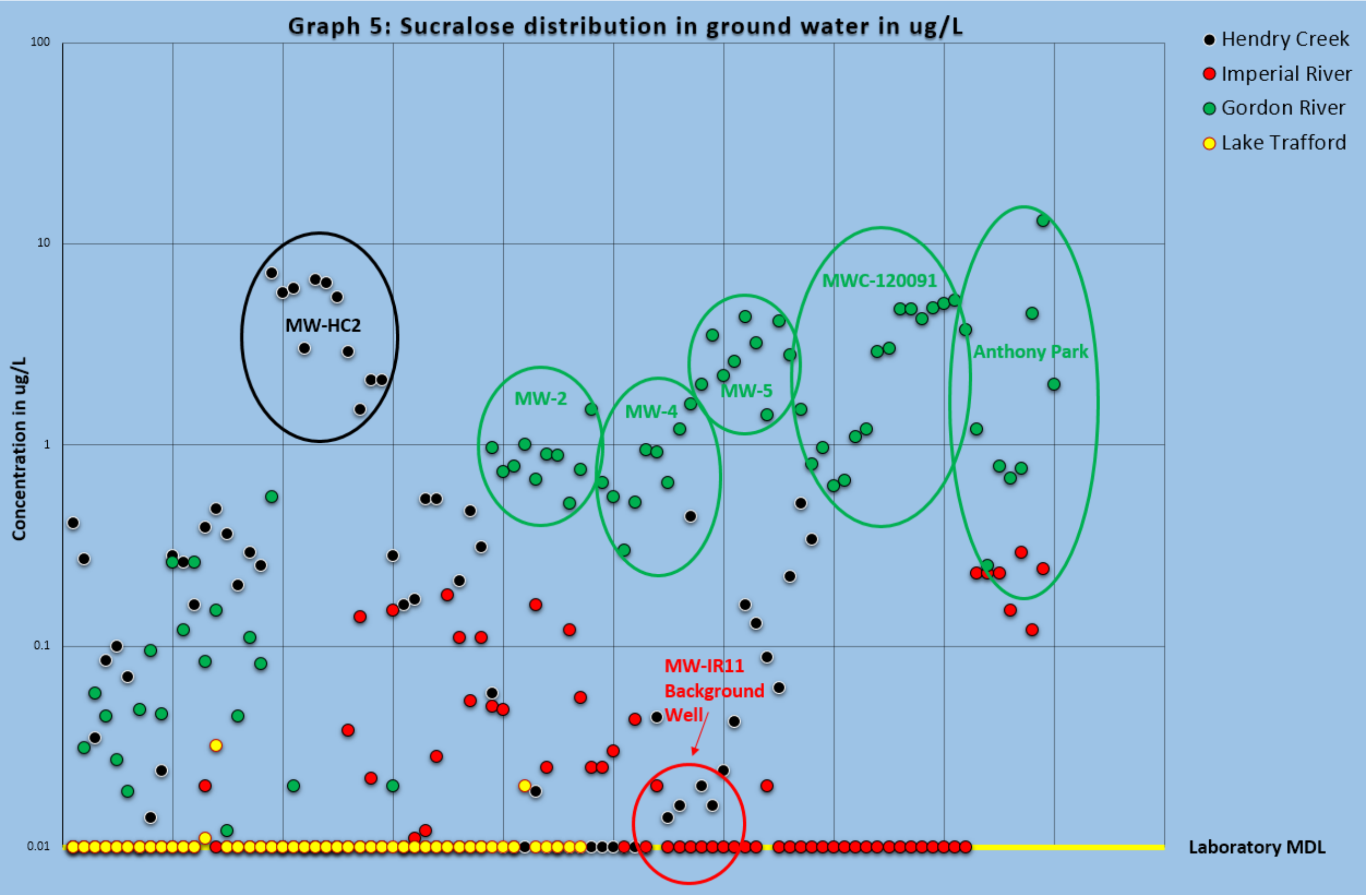
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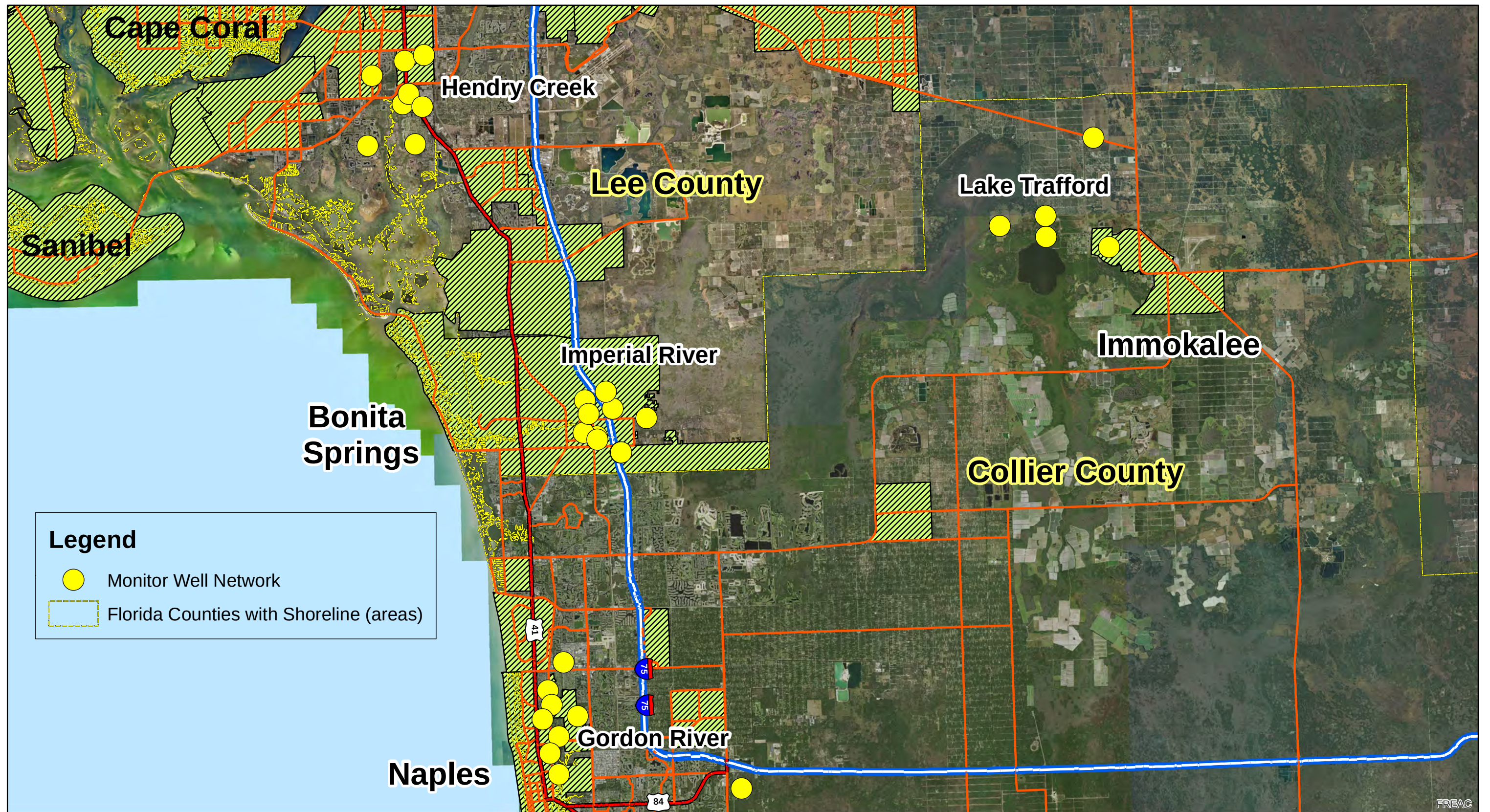


Figure 1: Location Map
Site # 686
Everglades West Coast
Lee and Collier Counties

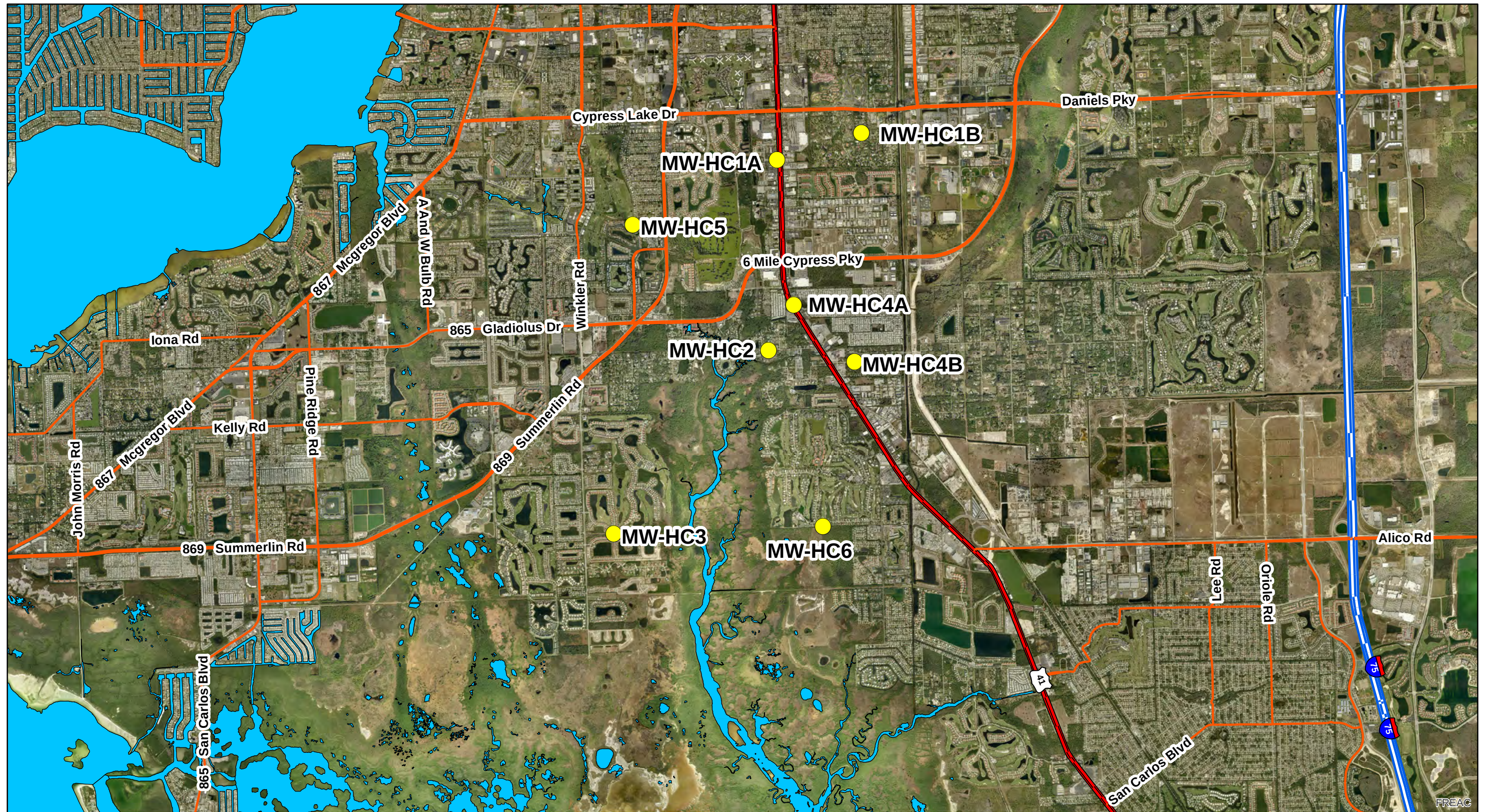
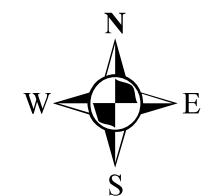
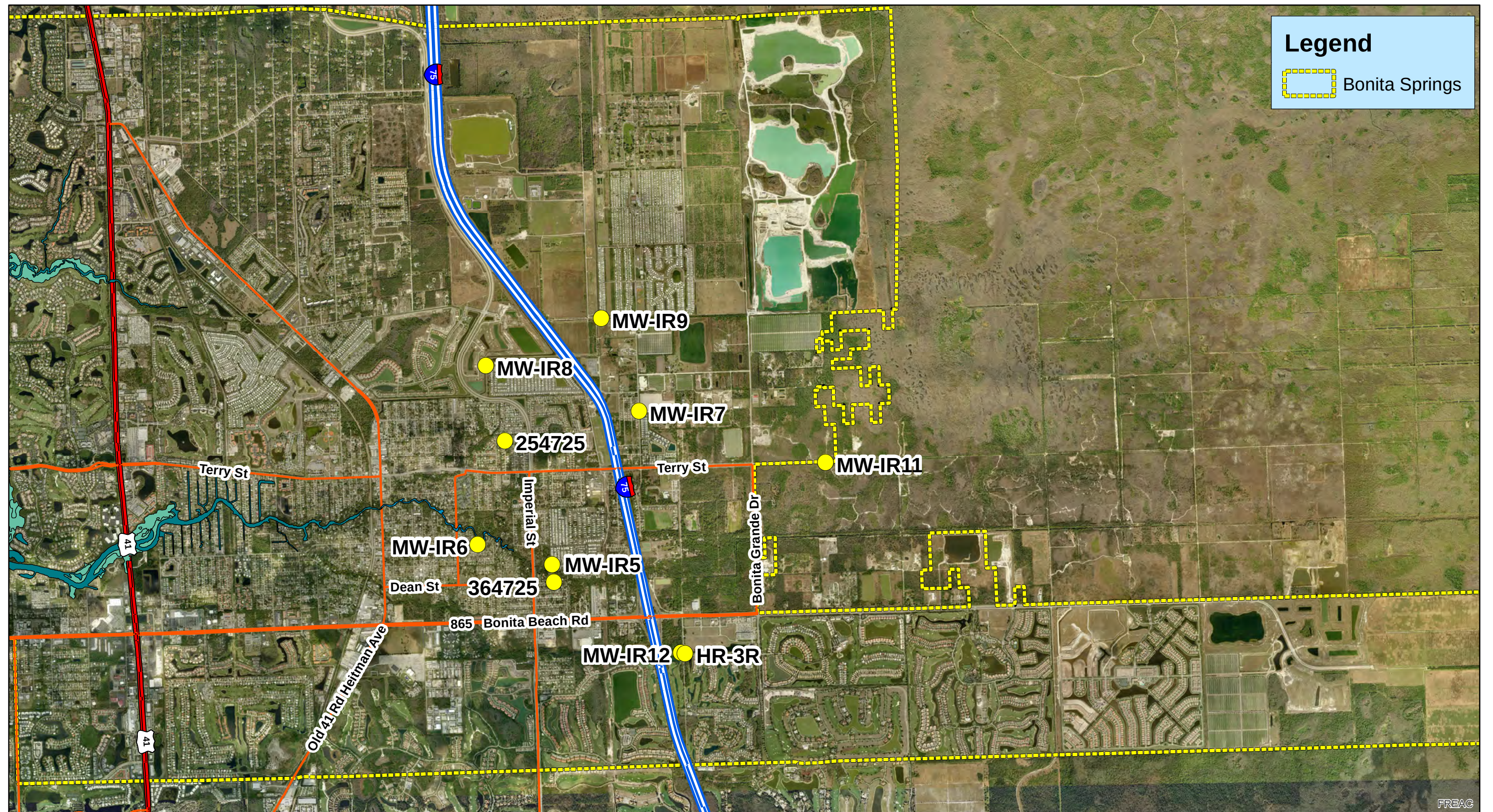
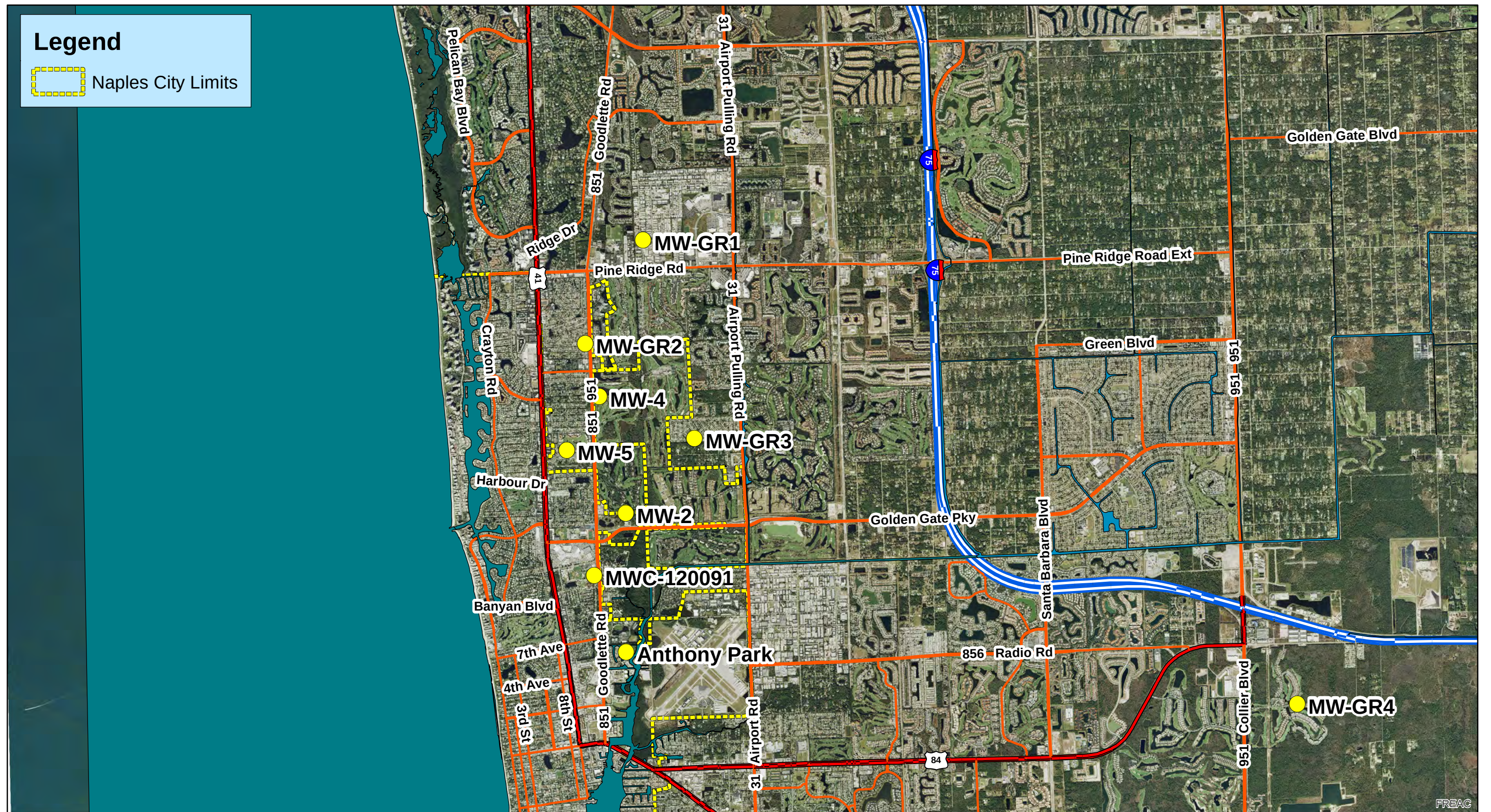


Figure 2: Hendry Creek Monitor Wells
SIS Site #686
Everglades West Coast
Lee County







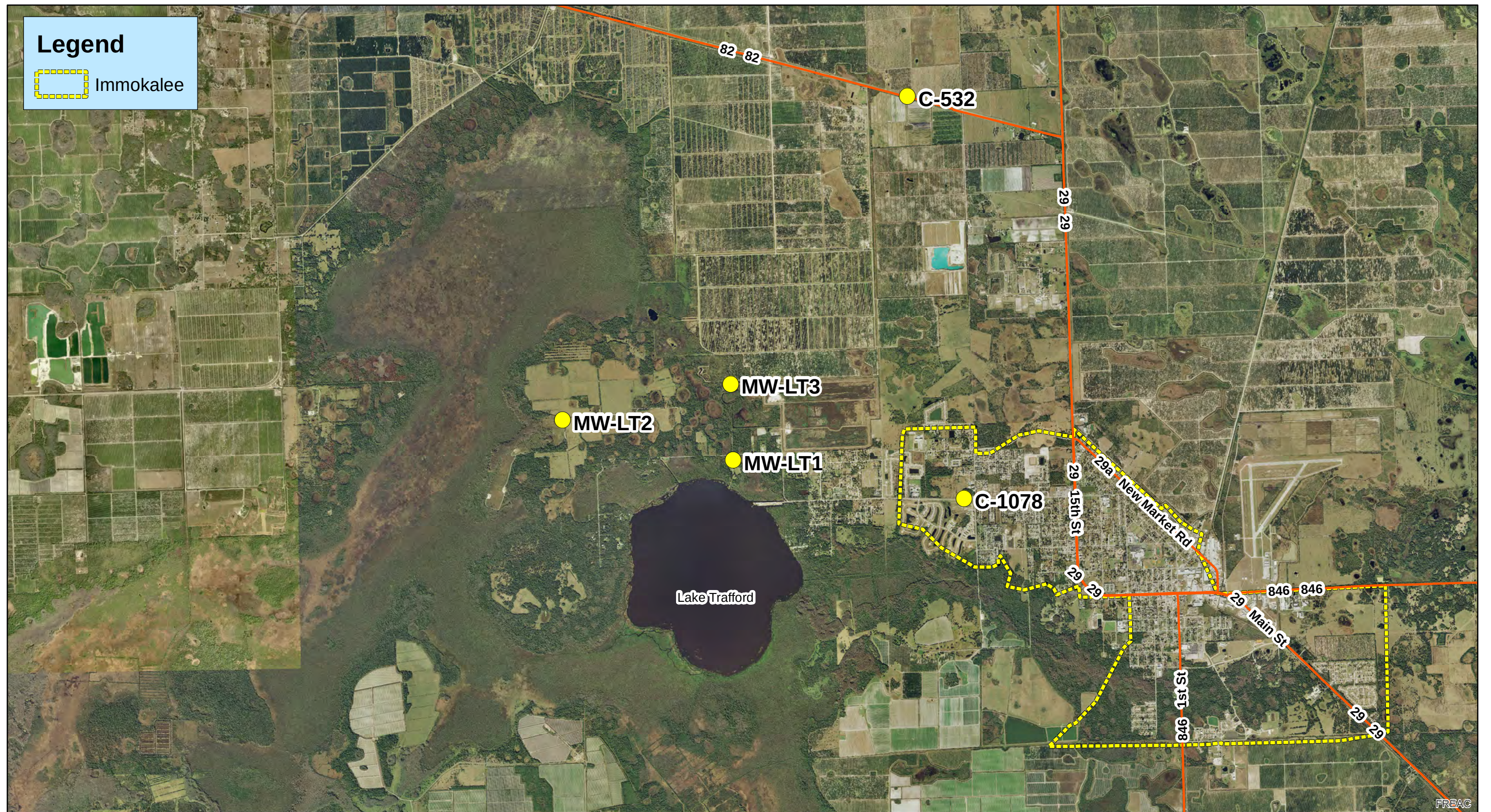


Figure 5: Lake Trafford Monitor Wells
SIS Site #686
Everglades West Coast
Collier County

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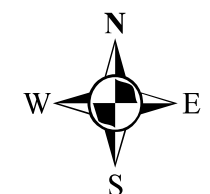


TABLE 1
LATITUDE AND LONGITUDE OF WELL LOCATIONS
Everglades West Coast
SIS Site #686

Hendry Creek			Gordon River		
Well ID	Latitude	Longitude	Well ID	Latitude	Longitude
MW-HC1A	26.54025	-81.8718	Anthony Park	26.1555	-81.7871
MW-HC1B	26.54335	-81.8603	MW-2	26.17575	-81.7867
MW-HC2	26.51708	-81.8734	MW-4	26.19288	-81.7907
MW-HC3	26.49507	-81.8949	MW-5	26.18513	-81.7961
MW-HC4A	26.52258	-81.8698	MWC-120091	26.16675	-81.792
MW-HC4B	26.51548	-81.8617	MW-GR1	26.21567	-81.7831
MW-HC5	26.53265	-83.8916	MW-GR2	26.20068	-81.7928
MW-HC6	26.4955	-81.8664	MW-GR3	26.18655	-81.7753
Imperial River			Lake Trafford		
Well ID	Latitude	Longitude	Well ID	Latitude	Longitude
254725	26.34885	-81.7655	C-1078	26.43306	-81.4519
364725	26.33495	-81.7604	C-532	26.49208	-81.4598
MW-IR11	26.34615	-81.7307	MW-LT1	26.43938	-81.4895
MW-IR12	26.32786	-81.7468	MW-LT2	26.44573	-81.5171
MW-IR5	26.33667	-81.7606	MW-LT3	26.45053	-81.4896
MW-IR6	26.33877	-81.7687			
MW-IR7	26.35148	-81.7509			
MW-IR8	26.35619	-81.7674			
MW-IR9	26.3606	-81.7548			
HR-3R	26.3279	-81.7464			

TABLE 2
WELL CONSTRUCTION DETAILS
Everglades West Coast
SIS Site #686

Well ID	Well Depth (feet)	Screen Length (feet)	Well Diameter (inches)
254725	23.9	**	4
364725	21.85	**	4
ANTHONY PARK	20	**	2
C-1078	18	**	4
C-532	14.5	**	4
IR-11*	15	10	0.75
IR-8*	19.2	10	0.75
LT-1*	15	10	0.75
LT-2*	15	10	0.75
LT-3*	14	10	0.75
MW-2	15	**	2
MW-4	26	**	2
MW-5	22	**	2
MWC-120091	25	**	2
MW-GR1	12	**	2
MW-GR2	12	**	2
MW-GR3	12	**	2
MW-HC1A	13	**	2
MW-HC1B	13	**	2
MW-HC2	12	**	2
MW-HC3	12	**	2
MW-HC4A*	10	5	0.75
MW-HC4B	13	**	2
MW-HC5	13	**	2
MW-HC6	**	**	2
HR-3R	13	10	4
MW-IR12	15	**	2
MW-IR5	14	**	2
MW-IR6	14	**	2
MW-IR7	12	**	2
MW-IR9*	14	10	0.75

*Monitor wells installed by SIS

**unknown

TABLE 3
GROUND WATER PARAMETERS
Everglades West Coast
SIS Site #686

Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Hendry Creek	MW-HC1A	1st qtr. 2014	5.81	7.04	21.8	779	12.50	0.66	37
		2nd qtr. 2014	5.00	6.95	30.5	828	3.10	2.39	-53
		3rd qtr. 2014	5.45	6.31	28.6	1167	15.50	0.9	-188
		4th qtr. 2014	6.30	6.99	22.7	2518	11.50	NA	-174
		1st qtr. 2015	5.00	6.55	27.4	838	2.60	16.8	-106
		2nd qtr. 2015	4.99	6.75	30.8	867	33.00	2.7	-136
		3rd qtr. 2015	5.58	6.9	30.5	258	1.90	3.97	-24
		4th qtr. 2015	5.46	6.98	24.4	656	9.80	4.12	-6
	MW-HC1B	1st qtr. 2016	5.97	6.55	25.8	792	0.20	NM	-64
		1st qtr. 2014	4.82	6.89	23.8	912	3.90	1.04	-72
		2nd qtr. 2014	3.00	6.98	27.5	1192	2.30	3.71	-87
		3rd qtr. 2014	3.55	6.26	28.7	1034	5.80	3.7	-161
		4th qtr. 2014	5.10	6.98	22.4	2416	11.10	NA	-183
		1st qtr. 2015	5.00	6.5	25.7	1041	26.30	NA	-94
		2nd qtr. 2015	2.26	6.83	28.4	1072	17.00	4.47	-122
		3rd qtr. 2015	3.09	6.92	28.5	307	1.70	1.68	-84
	MW-HC2	4th qtr. 2015	3.45	7.02	24.6	1086	12.90	2.28	-23
		1st qtr. 2016	4.66	6.65	24.5	868	0.50	NM	-124
		1st qtr. 2014	2.88	7.00	19.9	1118	24.50	0.50	106
		2nd qtr. 2014	2.00	6.88	28.3	1125	5.30	1.46	-46
		3rd qtr. 2014	2.30	6.16	28.7	1170	6.70	1.3	-225
		4th qtr. 2014	3.30	6.99	22.6	1066	12.60	NA	-197
		1st qtr. 2015	NA	NA	NA	NA	NA	NA	NA
		2nd qtr. 2015	1.36	6.9	30.2	1132	1.79	1.7	-213
	MW-HC3	3rd qtr. 2015	2.80	6.8	29.6	302	1.80	2.37	-57
		4th qtr. 2015	2.15	7.1	23.1	668	21.90	3.81	63
		1st qtr. 2016	3.22	6.54	25.2	1075	1.00	NM	-57
		1st qtr. 2014	2.09	7.72	23.8	1442	10.70	24.90	-34
		2nd qtr. 2014	1.50	6.92	26.9	1481	32.70	23.1	-217
		3rd qtr. 2014	1.75	6.29	25.3	1428	10.70	7.8	-233
		4th qtr. 2014	2.60	6.95	21.9	1493	22.30	NA	-193
		1st qtr. 2015	2.30	NA	NA	NA	NA	NA	NA
	MW-HC4A	2nd qtr. 2015	NS	NS	NS	NS	NS	NS	NS
		3rd qtr. 2015	2.40	6.9	26.3	1233	3.80	7.8	-150
		4th qtr. 2015	1.96	7	25.0	986	4.30	8.14	-94
		1st qtr. 2016	1.82	6.89	24.5	1200	NM	NM	-151
		1st qtr. 2014	5.99	6.99	20.5	796	19.20	10.50	92
		2nd qtr. 2014	3.00	7.14	29.1	1053	12.10	13.4	-27
		3rd qtr. 2014	5.74	6.05	28.7	851	11.20	3.6	-214
		4th qtr. 2014	6.55	6.95	21.1	935	12.60	NA	-160
	MW-HC4B	1st qtr. 2015	6.55	NA	NA	NA	NA	NA	NA
		2nd qtr. 2015	5.10	6.89	30.3	930	7.40	12.1	-166
		3rd qtr. 2015	5.45	6.92	28.6	824	8.90	2.2	-74
		4th qtr. 2015	5.56	7.05	23.4	646	17.00	3.47	44
		1st qtr. 2016	6.27	6.62	25.4	675	3.90	NM	-96
		1st qtr. 2014	4.51	7.18	15.1	1080	21.10	0.93	56
		2nd qtr. 2014	3.63	6.9	27.2	1361	9.40	2.53	-91
		3rd qtr. 2014	4.45	6.28	27.8	1527	8.10	0.9	-208
		4th qtr. 2014	Destroyed						
	MW-HC5	1st qtr. 2014	2.17	7.01	23.4	1313	9.60	3.09	-55
		2nd qtr. 2014	3.00	7.27	29.4	1347	3.50	2.31	-103
		3rd qtr. 2014	1.67	6.28	28.2	1293	6.10	0.8	-224
		4th qtr. 2014	3.50	7.06	23.3	1430	11.80	NA	-195
		1st qtr. 2015	5.00	6.58	26.0	1535	19.60	1.91	-77
		2nd qtr. 2015	1.00	7.03	30.3	1399	2.00	2.72	-152
		3rd qtr. 2015	2.00	7.02	28.3	1255	2.10	3.3	-93
		4th qtr. 2015	1.48	7.06	24.0	1105	17.00	1.76	16
		1st qtr. 2016	2.30	6.93	23.1	1175	1.10	NM	-12

TABLE 3
GROUND WATER PARAMETERS
 Everglades West Coast
 SIS Site #686

Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Hendry Creek	MW-HC6	1st qtr. 2014	1.88	6.76	16.9	3342	7.90	0.46	-11
		2nd qtr. 2014	1.50	7.05	26.4	3401	3.80	20	-90
		3rd qtr. 2014	1.87	6.44	26.3	3362	6.40	1.2	-210
		4th qtr. 2014	2.30	6.84	21.8	3858	2.60	NA	-215
		1st qtr. 2015	2.43	NA	NA	NA	NA	NA	NA
		2nd qtr. 2015	2.71	6.86	26.3	3838	1.49	11.5	-227
		3rd qtr. 2015	1.27	6.95	27.3	314	2.80	2.73	-80
		4th qtr. 2015	NS						
		1st qtr. 2016	NS						

TABLE 3
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Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Imperial River	MW-IR5	1st qtr. 2014	8.38	7.32	26.1	431	4.50	0.47	44
		2nd qtr. 2014	7.00	7.24	28.7	570	9.60	3.00	3
		3rd qtr. 2014	5.58	7.23	28.6	506	NA	0.33	NA
		4th qtr. 2014	8.55	7.34	23.2	470	22.90	0.94	50
		1st qtr. 2015	9.00	7.45	26.8	539	NA	7.47	-27
		2nd qtr. 2015	7.73	7.16	29.3	656	14.80	0.57	-105
		2nd qtr. 2015	7.73	7.16	29.3	656	14.80	0.57	-105
		3rd qtr. 2015	6.57	7.36	30.6	326	53.50	5.51	134
	MW-IR6	4th qtr. 2015	7.98	7.68	24.4	350	32.30	10.70	29
		1st qtr. 2016	7.85	7.34	26.1	305	8.30	15.00	116
		1st qtr. 2014	7.54	6.99	25.9	590	9.70	13.10	42
		2nd qtr. 2014	9.00	7.20	29.5	563	19.20	12.90	NA
		3rd qtr. 2014	5.12	7.41	26.1	591	24.70	4.80	-190
		4th qtr. 2014	8.28	7.14	22.3	561	19.00	12.50	51
		1st qtr. 2015	7.53	NA	26.6	611	17.50	16.90	-111
		2nd qtr. 2015	6.50	6.99	30.2	514	9.40	4.00	-162
	MW-IR7	2nd qtr. 2015	6.50	6.99	27.8	508	20.00	8.93	0
		3rd qtr. 2015	5.28	6.87	29.9	335	12.90	1.83	8
		4th qtr. 2015	6.45	6.23	27.1	519	4.90	NM	-12
		1st qtr. 2016	6.60	6.80	24.7	444	0.01	NM	-166
		1st qtr. 2014	6.03	6.91	24.3	690	7.40	0.50	126
		2nd qtr. 2014	5.70	6.84	27.4	670	6.90	4.50	3
		3rd qtr. 2014	1.95	6.88	27.4	607	NA	1.39	NA
		4th qtr. 2014	5.66	7.00	21.0	513	26.60	2.03	76
	MW-IR8	1st qtr. 2015	6.01	6.99	23.7	699	2.90	2.61	3
		2nd qtr. 2015	4.95	6.98	30.3	486	5.60	1.22	25
		3rd qtr. 2015	2.76	7.08	27.9	150	2.30	6.40	6
		4th qtr. 2015	3.66	7.16	21.4	548	26.00	2.55	-11
		1st qtr. 2016	4.76	6.75	23.6	461	1.30	NM	1
		1st qtr. 2014	6.10	6.79	24.3	702	5.80	10.70	-44
		2nd qtr. 2014	5.65	6.93	27.0	719	8.00	8.54	-74
		3rd qtr. 2014	3.79	6.69	26.1	638	NA	6.67	NA
	MW-IR9	4th qtr. 2014	5.45	6.78	24.5	637	5.60	11.70	NA
		1st qtr. 2015	5.90	6.80	23.8	658	14.10	10.40	-58
		2nd qtr. 2015	5.22	6.80	27.2	680	5.00	8.50	-93
		3rd qtr. 2015	4.29	6.76	26.8	686	3.40	8.26	-197
		4th qtr. 2015	NS						
		1st qtr. 2016	5.37	6.62	25.2	670	1.70	12.30	-58
		1st qtr. 2014	5.63	6.87	25.0	476	22.10	0.69	11
		2nd qtr. 2014	4.50	6.86	29.2	523	6.90	1.02	7
	MW-IR11	3rd qtr. 2014	5.49	6.86	28.1	522	NA	0.67	NA
		4th qtr. 2014	4.33	7.07	24.0	488	13.70	1.30	NA
		1st qtr. 2015	5.26	6.96	24.9	507	14.90	0.99	-78
		2nd qtr. 2015	4.31	6.80	30.0	427	4.10	0.65	-35
		3rd qtr. 2015	3.63	7.13	28.3	176	2.10	1.40	-41
		4th qtr. 2015	4.89	7.23	22.5	421	13.30	1.92	-75
		1st qtr. 2016	4.16	7.02	24.8	455	8.20	0.90	-19
		1st qtr. 2014	8.47	6.90	22.2	463	12.40	3.35	0
	MW-IR11	2nd qtr. 2014	2.00	7.20	26.5	528	20.90	NA	-53
		3rd qtr. 2014	2.50	6.66	26.1	578	NA	2.64	NA
		4th qtr. 2014	4.21	6.81	22.9	540	11.90	6.15	NA
		1st qtr. 2015	8.43	6.80	23.6	523	12.00	3.57	-19
		2nd qtr. 2015	6.85	6.72	27.7	375	13.40	6.23	6
		3rd qtr. 2015	4.40	6.83	27.3	202	3.60	1.37	-17
		4th qtr. 2015	7.52	6.78	19.9	691	15.90	3.63	-6
		1st qtr. 2016	4.30	6.46	22.3	501	0.01	NM	-154

TABLE 3
GROUND WATER PARAMETERS
Everglades West Coast
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Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Imperial River	MW-IR12	1st qtr. 2014	7.00	6.75	23.9	612	4.70	0.42	114
		2nd qtr. 2014	Destroyed						
	254725	1st qtr. 2014	8.87	6.80	24.5	737	3.60	1.25	-92
		2nd qtr. 2014	NA	6.96	26.9	936	16.10	1.79	-61
		3rd qtr. 2014	6.28	7.34	26.6	863	27.00	0.91	-229
		4th qtr. 2014	8.75	6.88	23.4	756	2.60	2.06	38
		1st qtr. 2015	9.00	6.91	25.5	854	2.90	3.19	-200
		2nd qtr. 2015	7.85	6.93	28.1	838	2.10	1.01	-97
		3rd qtr. 2015	6.50	7.40	28.6	836	28.80	0.00	-62
		4th qtr. 2015	7.80	6.21	27.6	922	3.00	NM	-200
		1st qtr. 2016	7.84	6.71	25.3	807	0.90	0.10	-51
	364725	1st qtr. 2014	11.80	7.34	25.9	333	12.80	3.58	-49
		2nd qtr. 2014	5.00	7.47	27.9	323	22.90	1.29	6
		3rd qtr. 2014	8.50	7.56	28.2	151.1	NA	19.60	NA
		4th qtr. 2014	14.21	7.55	24.6	267	21.20	10.00	48
		1st qtr. 2015	11.00	7.45	25.7	271	NA	5.13	-103
		2nd qtr. 2015	10.97	6.80	27.8	219	37.40	3.10	21
		3rd qtr. 2015	9.30	7.14	28.5	213	34.50	4.54	140
		4th qtr. 2015	11.22	6.74	27.4	432	34.00	20.00	73
		1st qtr. 2016	11.12	7.49	25.6	200	28.30	14.20	104
	HR-3R	New well							
		4th qtr. 2014	7.76	6.87	23.9	937	6.70	0.55	63
		1st qtr. 2015	NA	NA	NA	NA	NA	NA	NA
		2nd qtr. 2015	7.38	6.95	26.3	1003	1.60	1.11	-231
		3rd qtr. 2015	5.24	6.80	26.9	317	3.50	1.57	-12
		4th qtr. 2015	6.83	6.95	25.8	1048	5.60	1.63	-119
		1st qtr. 2016	6.93	6.65	24.3	978	89.00	NM	-119

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GROUND WATER PARAMETERS
Everglades West Coast
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Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Gordon River	MW-GR1	1st qtr. 2014	4.55	7.13	24.9	492	2.30	2.02	-100
		2nd qtr. 2014	3.50	7.24	28.0	537	31.00	0.94	NA
		3rd qtr. 2014	1.22	6.97	26.0	633	13.00	0.97	35
		4th qtr. 2014	3.60	7.15	21.9	535	15.60	0.72	37
		1st qtr. 2015	4.62	6.70	25.0	546	11.30	1.62	-62
		2nd qtr. 2015	1.96	7.10	30.7	562	1.60	4.79	-164
		3rd qtr. 2015	2.75	7.04	24.7	560	6.80	2.29	-13
		4th qtr. 2015	2.40	6.73	24.5	511	2.00	2.86	25
	MW-GR2	1st qtr. 2016	3.68	6.49	25.7	365	0.70	2.59	71
		1st qtr. 2014	4.60	6.91	22.5	379	2.00	0.90	-124
		2nd qtr. 2014	3.00	7.06	29.7	334	13.40	1.54	NA
		3rd qtr. 2014	1.00	6.80	25.8	429	9.50	2.89	-38
		4th qtr. 2014	3.80	6.84	22.5	488	26.60	3.39	-44
		1st qtr. 2015	4.36	6.42	27.3	255	2.80	2.76	-118
		2nd qtr. 2015	1.92	6.74	30.4	227	1.29	4.88	-204
		3rd qtr. 2015	1.79	6.76	26.8	427	14.50	3.67	-49
	MW-GR3	4th qtr. 2015	1.80	6.34	27.0	374	0.90	4.19	-167
		1st qtr. 2016	2.85	6.39	25.9	320	0.40	2.98	-103
		1st qtr. 2014	3.00	6.99	27.0	648	1.30	3.37	-167
		2nd qtr. 2014	1.50	7.26	31.5	641	9.10	10.70	NA
		3rd qtr. 2014	1.50	7.17	27.4	688	19.30	2.74	-103
		4th qtr. 2014	3.11	7.10	22.9	677	14.50	1.93	49
		1st qtr. 2015	3.34	6.70	27.1	639	11.20	1.85	-79
		2nd qtr. 2015	1.60	6.97	32.2	688	19.90	NA	-198
	MW-2	3rd qtr. 2015	2.21	7.09	30.9	934	2.50	3.05	-197
		4th qtr. 2015	1.40	6.75	24.8	690	17.50	1.66	30
		1st qtr. 2016	2.45	6.66	27.2	486	0.10	1.40	-174
		1st qtr. 2014	4.50	7.03	22.2	729	1.20	2.16	-172
		2nd qtr. 2014	6.00	7.15	26.5	667	17.70	6.55	NA
		3rd qtr. 2014	2.69	7.00	25.1	651	17.80	1.13	-148
		4th qtr. 2014	3.83	7.16	18.7	762	17.10	3.66	-2
		1st qtr. 2015	4.48	6.60	24.3	761	3.30	2.19	-110
	MW-GR4	2nd qtr. 2015	2.00	6.82	27.3	694	8.00	5.68	-236
		3rd qtr. 2015	2.82	6.97	25.9	735	4.50	1.37	-209
		4th qtr. 2015	2.70	6.51	23.6	677	16.60	2.93	-237
		1st qtr. 2016	2.90	6.50	22.3	477	0.10	2.12	-245
		1st qtr. 2014	NS	NS	NS	NS	NS	NS	NS
		2nd qtr. 2014	7.00	7.13	26.8	962	10.00	8.51	NA
		3rd qtr. 2014	2.25	6.86	25.7	714	4.00	17.10	-117
		4th qtr. 2014	5.43	6.90	23.9	887	7.00	16.30	-89
	MW-4	1st qtr. 2015	6.65	6.43	25.4	901	3.30	11.70	-118
		2nd qtr. 2015	4.55	6.76	27.9	822	27.50	NA	-202
		3rd qtr. 2015	3.80	6.79	23.7	954	14.10	1.23	-233
		4th qtr. 2015	2.90	6.54	22.1	833	10.40	0.94	-191
		1st qtr. 2016	4.95	6.49	24.0	575	0.10	1.87	-122
		1st qtr. 2014	4.00	6.66	23.4	1710	17.10	4.97	-38
		2nd qtr. 2014	4.00	6.94	26.0	1685	19.50	2.23	NA
		3rd qtr. 2014	2.73	6.75	26.9	1582	1.50	1.49	-81
	MW-5	4th qtr. 2014	3.98	6.79	22.9	1539	12.70	0.63	70
		1st qtr. 2015	4.15	6.35	25.7	1572	9.20	1.75	-37
		2nd qtr. 2015	3.05	6.69	26.0	1573	36.30	3.96	-178
		3rd qtr. 2015	3.24	6.81	26.6	1499	13.30	0.90	-85
		4th qtr. 2015	3.00	6.40	25.3	1570	0.80	1.63	-87
		1st qtr. 2016	3.39	6.34	25.1	1104	0.10	1.80	-34
		1st qtr. 2014	7.50	6.69	23.0	982	2.30	0.37	-209
		2nd qtr. 2014	8.00	7.26	28.3	940	8.70	0.21	NA
		3rd qtr. 2014	5.71	6.49	29.1	953	7.20	0.30	-177
		4th qtr. 2014	6.90	7.10	23.8	966	19.80	0.64	38
		1st qtr. 2015	7.00	6.22	27.9	951	1.30	1.54	-214
		2nd qtr. 2015	5.99	6.87	30.2	4178	22.70	2.67	-135
		3rd qtr. 2015	6.05	6.83	28.3	796	18.30	0.38	-179
		4th qtr. 2015	6.13	6.36	24.8	869	21.00	2.74	-164
		1st qtr. 2016	6.32	6.20	27.3	442	0.40	1.62	-178

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Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Gordon River	MWC-120091	1st qtr. 2014	8.50	6.13	24.9	768	3.40	9.58	-126
		2nd qtr. 2014	10.00	6.49	27.4	1084	11.10	7.36	
		3rd qtr. 2014	7.46	6.44	26.1	1000	19.10	5.98	-7
		4th qtr. 2014	8.12	6.93	20.9	1890	15.20	8.13	-41
		1st qtr. 2015	9.12	5.75	26.4	1137	4.20	3.23	-65
		2nd qtr. 2015	7.77	6.91	28.3	5445	23.30	5.76	-173
		3rd qtr. 2015	7.68	6.45	25.9	959	13.20	1.89	-13
		4th qtr. 2015	7.85	5.94	27.1	903	0.70	2.81	-203
		1st qtr. 2016	8.10	5.98	25.0	730	0.10	4.02	-135
	ANTHONY PARK	1st qtr. 2014	6.00	7.10	24.5	5770	0.70	9.29	-256
		2nd qtr. 2014	9.00	7.21	27.3	1848	15.60	6.33	NA
		3rd qtr. 2014	6.07	7.07	27.3	1160	9.60	14.20	19
		4th qtr. 2014	6.75	7.20	20.3	4768	4.20	7.87	-227
		1st qtr. 2015	7.14	6.56	25.8	5165	2.30	7.73	-258
		2nd qtr. 2015	6.46	6.83	27.1	5135	24.10	19.70	-221
		3rd qtr. 2015	6.75	7.01	29.6	5871	5.30	5.94	-255
		4th qtr. 2015	6.51	6.64	26.8	5096	1.10	5.28	-312
		1st qtr. 2016	6.82	6.66	25.2	3872	0.08	11.00	-271

TABLE 3
GROUND WATER PARAMETERS
Everglades West Coast
SIS Site #686

Basin	Well ID	Sample Date	Depth to Water	pH	Temperature	Specific Conductivity	Dissolved Oxygen	Turbidity	Oxidation Reduction Potential
			ft	Standard Units	Degrees Centigrade	Micro Siemens/Cm	%	NTU	Millivolts
Lake Trafford	C-532	1st qtr. 2014	4.50	5.98	21.0	238	3.70	1.86	-63
		2nd qtr. 2014	2.50	6.55	27.4	415	10.70	NA	-144
		3rd qtr. 2014	5.20	6.52	27.4	369	NA	0.43	NA
		4th qtr. 2014	7.98	5.86	23.0	210	12.90	2.42	-18
		1st qtr. 2015	5.30	5.83	25.1	232	20.00	1.94	-170
		2nd qtr. 2015	5.06	6.29	28.6	285	11.00	1.09	-121
		3rd qtr. 2015	5.12	6.31	27.0	430	16.20	1.00	-27
		4th qtr. 2015	4.42	6.04	24.8	314	0.47 mg/L	0.81	NM
		1st qtr. 2016	5.02	5.82	23.0	305	3.40	2.47	-12
		1st qtr. 2014	11.35	6.11	19.5	193	13.80	6.35	-24
	C-1078	2nd qtr. 2014	10.00	6.47	27.8	206	10.70	NA	-68
		3rd qtr. 2014	8.55	6.60	26.2	251	NA	20.00	NA
		4th qtr. 2014	15.90	6.28	25.8	257	5.60	17.70	-22
		1st qtr. 2015	13.91	6.10	26.1	190	13.60	10.50	-12
		2nd qtr. 2015	11.38	6.15	28.1	172	10.10	2.32	-93
		3rd qtr. 2015	6.81	5.97	28.8	182	38.10	2.09	-30
		4th qtr. 2015	7.72	5.92	25.9	239	0.02 mg/L	18.90	NM
		1st qtr. 2016	8.54	5.83	24.0	207	1.50	7.38	-85
		1st qtr. 2014	2.48	6.82	17.0	1030	8.30	1.20	-73
		2nd qtr. 2014	2.00	6.85	24.8	1060	6.70	NA	-44
	MW-LT1	3rd qtr. 2014	1.00	6.71	25.6	928	NA	0.97	NA
		4th qtr. 2014	1.79	6.84	24.4	781	4.60	3.23	-35
		1st qtr. 2015	3.80	6.83	24.5	806	NA	2.60	-80
		2nd qtr. 2015	2.23	6.87	27.5	736	4.10	3.00	-85
		3rd qtr. 2015	1.13	6.80	26.0	792	7.40	0.84	-18
		4th qtr. 2015	1.11	6.74	24.3	796	0.10 mg/L	1.26	NM
		1st qtr. 2016	1.52	6.81	23.4	810	3.60	5.95	-27
		1st qtr. 2014	1.85	6.94	14.6	689	16.90	3.97	-84
		2nd qtr. 2014	2.00	7.17	25.7	431	4.70	NA	-85
		3rd qtr. 2014	0.50	6.95	25.6	647	NA	3.21	NA
	MW-LT2	4th qtr. 2014	1.40	6.94	24.2	645	3.90	12.00	-91
		1st qtr. 2015	3.19	7.05	24.6	654	3.10	6.08	-165
		2nd qtr. 2015	1.11	7.10	26.4	458	4.90	3.28	-162
		3rd qtr. 2015	0.90	6.98	26.2	600	2.90	1.98	-75
		4th qtr. 2015	0.85	6.99	23.9	589	0.11 mg/L	2.29	NM
		1st qtr. 2016	1.22	6.84	24.0	671	5.90	13.20	-58
		1st qtr. 2014	5.35	5.76	19.6	153	7.50	4.82	-11
		2nd qtr. 2014	2.00	5.37	25.9	126	13.50	NA	-143
		3rd qtr. 2014	4.15	5.57	26.5	124	NA	7.85	NA
		4th qtr. 2014	5.20	6.10	25.0	185	6.40	9.06	-40
	MW-LT3	1st qtr. 2015	6.14	5.95	25.5	168	46.70	7.04	-192
		2nd qtr. 2015	5.20	6.21	27.9	128	5.70	15.60	-109
		3rd qtr. 2015	4.59	5.62	27.1	84	4.20	13.30	-10
		4th qtr. 2015	4.70	5.48	25.0	112	0.07 mg/L	5.38	NM
		1st qtr. 2016	4.94	5.53	23.7	129	1.80	27.50	-54

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Hendry Creek	MW-HC1A	1	3/26/2014	28.9		67		0.54		0.005	I	1.5		0.86		0.41		0.013	
		2	7/1/2014	33.1		53		0.37		0.045		2.1		0.65		0.27		0.012	
		3	10/7/2014	41.9		34		0.28		0.56		2.4		0.66		0.035	I	0.01	
		4	1/14/2015	33.2		50		0.32		0.004	U	1.7		0.57		0.085		0.015	
		5	4/13/2015	33.9		87		0.37		0.005	I	1.6		0.76		0.1		0.015	
		6	7/20/2015	36.7		58		0.21		0.16		2.6		0.59		0.07		0.007	
		7	10/20/2015	35.9		58		0.48		0.004	U	2.5		0.83		0.01	U	0.012	
		8	12/9/2015	34.5		59		0.33		0.03		2.1		0.64		0.014	I	0.012	
		9	3/29/2016	34.8		75		0.46		0.018		2.1		0.7		0.024	I	0.01	
	MW-HC1B	1	3/26/2014	74		92		0.31		0.004	U	6.5		0.75		0.28		0.019	
		2	7/1/2014	70.6		120		0.25		0.004	U	6.5		0.67		0.26		0.018	
		3	10/7/2014	75.6		130		0.26		0.004	U	6.4		0.76		0.16	J	0.02	
		4	1/14/2015	27.2		120		0.3		0.004	U	6.6		0.71		0.39		0.031	
		5	4/13/2015	72		140		0.26		0.004	U	5.6		0.73		0.48		0.019	
		6	7/20/2015	87.1		130		0.23		0.17		8		0.68		0.36		0.017	
		7	10/20/2015	88.6		160		0.29		0.004	U	7.6		0.82		0.2		0.02	
		8	12/8/2015	80.9		150		0.26		0.004	U	6.9		0.75		0.29		0.02	
		9	3/29/2016	69.8		110		0.21		0.004	U	7		0.71		0.25		0.023	
	MW-HC2	1	3/26/2014	143		110		4.4		0.013		9.7		4.8		7.1		0.016	
		2	7/1/2014	140		88		3.9		0.004	U	9.3		4		5.7		0.015	
		2	7/1/2014 Duplicate	137		89		4.1		0.004	U	9.4		4		6		0.015	
		3	10/7/2014	139		97		3.5		0.009	I	8.8		3.7		3		0.013	
		4	1/14/2015	132		110		3.4		0.068		8.7		4		6.6		0.011	
		4	1/14/2015	134		110		3.5		0.067		9.1		3.8		6.4		0.011	
		5	4/13/2015	149		110		3.7		0.004	U	9.3		4		5.4		0.023	
		6	7/20/2015	128		95		2.6		0.004	U	7.7		3.2		2.9		0.013	
		7	10/20/2015	121		110		2.5		0.004	U	7.3		3		1.5		0.013	
		8	12/8/2015	112		96		2		0.055		6.7		2.4		2.1		0.01	
		9	3/29/2016	109		110		2.3		0.034		7.6		2.6		2.1		0.011	
	MW-HC3	1	3/26/2014	168		180		2.6		0.004	U	18.1		3.2		0.28		0.06	
		2	7/2/2014	153		170		2.2		0.004	U	17.4		2.8		0.16	J	0.058	
		3	10/7/2014	176		190		2.6		0.004	U	19.5		3.5		0.17	J	0.069	
		4	1/14/2015	168		190		2.8		0.006	I	19.6		3.4		0.54		0.055	
		5	4/15/2015	189		200		2.6		0.004	U	20.8		3.7		0.54		0.14	
		6	Not Sampled																
		7	10/21/2015	142		140		2.3		0.004	U	16.1		2.8		0.21		0.054	
		8	12/9/2015	146		140		2.3		0.004	U	16.2		3.1		0.47		0.056	
		9	3/30/2016	105		130		1.8		0.005	I	12.2		2.3		0.31		0.051	

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Hendry Creek	MW-HC4A	1	3/26/2014	37.4		30		0.93		0.016		4.5		1.4		0.058		0.017	
		2	7/1/2014	47.9		29		0.46		0.21		4.2		0.99		0.01	U	0.015	
		3	10/7/2014	52.8		35		0.95		0.004	U	4.3		1.5		0.01	UJ	0.015	
		3	10/7/2014 Duplicate	48.7		35		0.95		0.004	U	4.2		1.6		0.01	U	0.016	
		4	1/14/2015	43		35		0.96		0.004	U	4		1.5		0.019	I	0.024	
		5	4/15/2015	41.9		38		0.81		0.004	U	3.7		1.3		0.01	U	0.024	
		6	7/22/2015	50.1		35		0.52		0.066		3.4		1.1		0.01	U	0.026	
		7	10/21/2015	33.2		9.1		0.92		0.004	U	2		1.8		0.01	U	0.014	
		8	12/9/2015	39.3		23		0.76		0.004	U	2.7		1.3		0.01	U	0.009	
	9	3/29/2016	34.3		26		0.63		0.004	U	2.5		1.1		0.01	U	0.013		
	MW-HC4B Abandoned 5th Sampling Event	1	3/26/2014	52.3		130		0.26		0.028		9.4		0.73		0.01	U	0.036	
		2	3/26/2014	53.1		130		0.26		0.028		9.4		0.75		0.01	U	0.038	
		3	7/1/2014	57.7		200		0.27		0.23		9		0.68		0.01	U	0.031	
		4	10/7/2014	77.1		260		0.28		0.21		9.3		0.73		0.01	UJ	0.033	
	MW-HC5	1	3/26/2014	84		200		0.16		0.004	U	7.2		0.73		0.01	U	0.014	
		2	7/1/2014	82.8		190		0.14		0.004	U	7.5		0.64		0.044	I	0.012	
		3	10/7/2014	86.6		210		0.15		0.004	U	7.4		0.62		0.014	IJ	0.012	
		4	1/14/2015	78.2		230		0.15		0.004	U	7.2		0.63		0.016	I	0.015	
		5	4/13/2015	82.2		280		0.21		0.004	U	7.9		0.74		0.44		0.014	
		6	7/22/2015	80.5		230		0.14		0.004	U	7.1		0.66		0.02	I	0.014	
		7	10/21/2015	75.8		190		0.14		0.004	U	6.5		0.59		0.016	I	0.012	
		8	12/8/2015	73.9		160		0.13		0.004	I	5.8		0.6		0.024	I	0.01	
	9	3/30/2016	71.5		170		0.13		0.004	U	6.1		0.58		0.042		0.016		
	MW-HC6	1	3/26/2014	248		740		0.57		0.004	U	17.9		1.2		0.16		0.016	
		2	7/1/2014	240		770		0.64		0.009	I	19.8		1.1		0.13		0.034	
		3	10/7/2014	241		860		0.64		0.004	U	21.5		1.1		0.088	J	0.015	
		4	1/14/2015	231		870		0.52		0.004	U	19.1		1.1		0.062		0.014	
		5	4/15/2015	219		830		0.58		0.004	U	21.6		1.2		0.22		0.13	
		6	7/22/2015	246		900		0.77		0.004	U	23.7		1.4		0.51		0.021	
		7	10/20/2015	232		840		0.8		0.006	I	22.4		1.3		0.34		0.018	
		8	Not Sampled																
	9	Not Sampled																	
	HC-Canal	7	10/20/2015	169		430		0.31		0.12		15.6		1.2		3.9		0.12	
8		Not Sampled																	
9		Not Sampled																	

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Imperial River	MW-IR5	1	3/25/2014	35.7		16		0.005		1.7		2.3		0.28		0.01	U	0.01	
		2	7/2/2014	45		22		0.002	U	1.7		2.6		0.24		0.01	U	0.008	
		3	10/8/2014	60		14		0.005		1.6		3.7		0.55		0.01	U	0.018	
		4	1/14/2015	40.7		17		0.002	I	0.51		2.7		0.21		0.01	U	0.011	
		5	4/13/2015	34.9		23		0.003	I	0.67		2.2		0.23		0.01	U	0.011	
		6	7/20/2015	50.6		40		0.003	I	4.9		3.3		0.3		0.01	U	0.007	
		6	7/22/2015	46.1		44		0.003	I	4.9		3.2		0.33		0.01	U	0.006	
		7	10/20/2015	33.4		5.3		0.007		2.4		2.1		0.21		0.01	U	0.026	
		8	12/8/2015	34.4		5.9		0.005		1.6		2.1		0.17		0.01	U	0.025	
		9	3/28/2016	25.7		7.5		0.003	I	1.4		1.9		0.33		0.01	U	0.04	
	MW-IR6	1	3/25/2014	315		100		0.011		0.33		2.9		0.43		0.01	U	0.39	
		2	7/2/2014	378		98		0.006		0.072		3.5		0.21		0.01	U	0.26	
		3	10/8/2014	314		83		0.003		0.52		3.1		0.26		0.02	U	0.094	
		3	10/8/2014 Duplicate	315		82		0.004		0.52		3.1		0.28		0.01	U	0.095	
		4	1/14/2015	338		110		0.003	I	0.67		3.8		0.29		0.01	U	0.25	
		4	1/14/2015 Duplicate	357		110		0.002	I	0.66		4		0.29		0.01	U	0.25	
		5	4/13/2015	321		100		0.002	I	0.58		4.1		0.38		0.01	U	0.26	
		6	7/20/2015	329		91		0.005	I	0.5		4.4		0.22		0.01	U	0.21	
		6	7/22/2015	379		91		0.004	I	0.52		4.5		0.27		0.01	U	0.24	
		6	7/22/2015 Duplicate	366		91		0.007		0.52		4.5		0.24		0.01	U	0.25	
		7	10/20/2015	78		9.2		0.011		0.24		3.8		0.16		0.01	U	0.052	
		7	10/20/2015 Duplicate	83.3		9.4		0.009		0.24		3.8		0.17		0.01	U	0.057	
		8	12/8/2015	64.9		23		0.005		0.27		3		0.31		0.01	U	0.18	
		9	3/29/2016	146		49		0.004	I	0.16		3.5		0.38		0.01	U	0.23	
		9	3/29/2016 Duplicate	151		48		0.004	I	0.15		3.5		0.41		0.01	U	0.23	
	MW-IR7	1	3/25/2014	33.1		20		0.3		0.16		4.2		1		0.038	I	0.013	
		2	7/1/2014	47.2		19		0.29		0.63		5.5		1		0.14		0.017	
		3	10/7/2014	39.7		12		0.038		0.24		3.9		0.69		0.022	IJ	0.016	
		4	1/14/2015	25.8		7.9	A	0.033		1.7		1.8		0.69		0.01	U	0.021	
		5	4/15/2015	25.9		19		0.17		0.29		1.8		0.92		0.15		0.009	
		6	7/20/2015	37		4.8		0.03		4.2		2.1		0.71		0.01	U	0.013	
		7	10/20/2015	27.4		4		0.021		0.19		1.7		0.46		0.011	I	0.023	
		8	12/8/2015	31.4		5.8		0.049		3.1		2.1		0.71		0.012	I	0.015	
		9	3/28/2016	22.5		11		0.04		2.1		1.8		0.64		0.028	I	0.067	
	MW-IR8	1	3/25/2014	40.2		22		0.79		0.004	U	2.2		1.3		0.18		0.031	
		2	7/2/2014	39.3		21		0.72		0.004	U	1.9		1.3		0.11		0.028	
		3	10/7/2014	38.6		21		0.68		0.004	U	1.9		1.3		0.053	J	0.026	
		4	1/12/2015	35		21		0.61		0.004	U	1.8		1.2		0.11		0.028	
		5	4/15/2015	44.2		20		0.62		0.004	U	1.8		1.2		0.05		0.028	
		6	7/22/2015	42.4		20		0.65		0.004	U	1.8		1.3		0.048	I	0.026	
		7	10/19/2015	36		19		0.67		0.004	U	1.8		1.2		0.01	U	0.024	
		8	Not Sampled																
		9	3/28/2016	33.2		23		0.73		0.004	U	1.7		1.3		0.16		0.024	

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Imperial River	MW-IR9	1	3/25/2014	14.2		4.6		0.23		0.023		0.81	I	0.56		0.025	I	0.023	
		2	7/1/2014	15.4		1.8		0.026		0.16		0.4	I	0.28		0.01	U	0.01	
		3	10/7/2014	15.3		9.6		0.086		0.049		1.3		0.42		0.12		0.015	
		4	1/12/2015	13.4		9.1		0.16	U	0.004		0.89	I	0.44		0.055		0.015	
		5	4/15/2015	19		6.3		0.21		0.29		1	I	0.58		0.025	I	0.012	
		6	7/20/2015	13.8		13		0.093		0.36		0.4	I	0.4		0.025	I	0.008	
		7	10/20/2015	14.2		23		0.24	U	0.004		1	I	0.76		0.03	I	0.013	
		8	12/8/2015	12.3		1.9		0.14	U	0.004		0.55	I	0.38		0.01	U	0.011	
		9	3/28/2016	10.3		8		0.11		0.023		0.8		0.36		0.043		0.008	
	IR-9 Canal	7	10/20/2015	32.8		22		0.031		0.22		4		0.9		0.14		0.027	
		8	12/8/2015	39.1		30		0.033		0.22		5.1		0.76		0.32		0.026	
		9	Not Sampled																
	MW-IR11	1	3/26/2014	24.5		16		0.42		0.004	U	1		1.3		0.01	U	0.018	
		2	7/1/2014	27.8		17		0.45		0.004	U	2.2		1.2		0.02	U	0.014	
		3	10/7/2014	36.8		21		0.2		0.018		2.9		1.2		0.01	U	0.042	
		4	1/12/2015	27.6		21		0.29	U	0.004		2.3		1.2		0.01	U	0.032	
		5	4/15/2015	29.3		20		0.26	U	0.004		2.2		1.1		0.01	U	0.02	
		6	7/20/2015	31.6		9.4		0.067		0.037		1.8		0.82		0.01	U	0.01	
		7	10/20/2015	25.7		9.1		0.33	U	0.004		1.6		1		0.01	U	0.041	
		8	12/8/2015	21.9		16		0.52	U	0.004		1.9		1.6		0.01	U	0.067	
		9	3/28/2016	21.6		22		0.24	U	0.004		3.1		1		0.01	U	0.03	
	MW-IR12 Abandoned	1	3/26/2014	89		16		0.011		5		10.5		0.45		0.01	U	0.032	
	254725	1	3/25/2014	116		37		0.059		0.004	U	1.7		0.63		0.01	U	0.042	
		2	7/1/2014	125		80		0.21		0.004	U	1.9		0.73		0.02	U	0.03	
		3	10/8/2014	131		62		0.15		0.004	U	3.9		0.81		0.01	U	0.051	
		4	1/14/2015	183		78		0.13		0.004	U	2.7		0.79		0.01	U	0.045	
		5	4/13/2015	130		72		0.29		0.36		3.1		0.41		0.01	U	0.049	
		6	7/22/2015	162		60		0.18		0.014		3.7		0.9		0.01	U	0.069	
		7	10/20/2015	148		68		0.004	I	0.38		4		0.08	U	0.01	U	0.036	
		8	12/8/2015	162		83		0.13		0.004	U	4.5		0.76		0.01	U	0.048	
		9	3/29/2016	139		54		0.11		0.004	U	4.5		0.76		0.01	U	0.049	
	364725	1	3/25/2014	6.8	I	1.6		0.003	I	0.074	I	0.51	I	0.17	I	0.01	U	0.025	I
		2	7/2/2014	6.1	I	2.2		0.004	I	0.9		0.59	I	0.15	I	0.01	U	0.021	
		2	7/2/2014 Duplicate	6.1	I	2.3		0.003	I	0.9		0.6	I	0.14	I	0.01	U	0.02	
		3	10/8/2014	7.5	I	0.43	I	0.002	U	0.35		0.86	I	0.11	I	0.01	U	0.035	
		3	10/8/2014 Duplicate	6.9	I	0.44	I	0.002	U	0.33		0.83	I	0.12	I	0.01	U	0.034	
		4	1/14/2015	7.4	I	1.2		0.002	U	0.35		0.67	I	0.08	U	0.01	U	0.03	
		5	4/13/2015	7.3	I	1.3		0.18		0.005	I	0.55	I	0.86		0.01	U	0.062	
		6	7/22/2015	5.9	I	1.6		0.002	U	1.3		0.45	I	0.08	U	0.01	U	0.024	
		7	10/19/2015	7.3		0.46	I	0.086		0.004	U	1.1	I	0.69		0.01	U	0.055	
		8	12/8/2015	11		2.4		0.002	U	0.99		1.3		0.29		0.01	U	0.12	
		9	3/29/2016	4.6		1.5		0.003	I	0.62		0.77	I	0.15	I	0.01	U	0.04	
	HR-3R	4	1/14/2015	151		69		0.004		7.80		15.4		0.65		0.23		0.034	
		5	4/15/2015	133		70		0.004		8.30		12.6		0.57		0.23		0.025	
		5	4/15/2015 Duplicate	134		70		0.006		8.20		12.4		0.58		0.23		0.022	
		6	7/22/2015	130		73		0.017		8.30		12.4		0.6		0.15		0.028	
		7	10/20/2015	183		72		0.042		19.00		19.7		0.86		0.29		0.13	
		8	12/8/2015	153		61		0.01		7.30		14.7		0.64		0.12		0.049	
		9	3/29/2016	132		62		0.029		3.70		14.9		0.59		0.24		0.094	
	Imperial River	8	12/8/2015	37.1		27		0.13		0.17		4.9		1		0.029	I	0.029	

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Gordon River	MW-GR1	1	3/26/2014	22.8		6.1		0.32		0.004	U	0.91	I	0.64		0.01	U	0.019	
		2	7/1/2014	25.9		3.4		0.031		0.054		0.92	I	0.31		0.031	I	0.01	
		3	10/7/2014	50.6		9.7		0.29		0.13		1.5		0.64		0.058		0.013	
		4	1/14/2015	41.1		10		0.31		0.007	I	1.3		0.51		0.045	I	0.014	
		5	4/15/2015	34.8		12	A	0.19		0.004	U	1.1	I	0.55		0.027	I	0.022	
		6	7/21/2015	37.8		6.4		0.049		0.034		0.5	I	0.35		0.019	I	0.012	
		7	10/20/2015	42.1		9.2		0.37		0.004	U	1.4		0.61		0.048	I	0.014	
		8	12/8/2015	24.7		7.4		0.057		0.18		1.2		0.36		0.095		0.01	
		9	3/29/2016	24.4		8.6		0.1		0.032		1.2	I	0.33		0.046		0.01	
	MW-GR2	1	3/26/2014	27.3		25		0.39		0.004	U	2.1		1.3		0.26		0.48	
		2	7/1/2014	33.9		21		0.21		0.006	I	3.7		0.91		0.12		0.3	
		3	10/8/2014	25.8		4.2	A	0.24		0.004	U	0.57	I	1.8		0.26		0.33	
		4	1/14/2015	15.6		8.7	A	0.39		0.004	U	1.2		1.4		0.084		0.39	
		5	4/15/2015	20.9		15		0.27		0.004	U	1.2	I	0.96		0.15		0.37	
		6	7/21/2015	23.8		8.4		0.092		0.004	I	1.5		0.77		0.012	I	0.28	
		7	10/20/2015	19.2		2.5		0.28		0.004	U	0.44		1.3		0.045	I	0.31	
		8	12/8/2015	16.7		4.4		0.19		0.004	U	0.67		1.2		0.11		0.22	
		8	12/8/2015 Duplicate	15.9		4.4		0.2		0.004	U	0.61		1.3		0.081		0.22	
		9	3/29/2016	17.4		15		0.25		0.004	U	0.81	I	1		0.55		0.31	
	MW-GR3	1	3/26/2014	32.7		35	A	0.32		0.004	U	2.5		1.2		0.01	U	0.015	
		2	7/1/2014	36.9		38		0.27		0.009	I	2.4		0.97		0.02	U	0.019	
		3	10/8/2014	42.4		48		0.22		0.006	I	2.4		0.91		0.01	U	0.016	
		4	1/14/2015	35.1		41		0.23		0.007	I	2.3		0.97		0.01	U	0.015	
		5	4/15/2015	39.8		38		0.21		0.004	U	2.2		0.86		0.01	U	0.015	
		6	7/21/2015	40.2		47		0.21		0.004	U	2.3		0.93		0.01	U	0.014	
		7	10/20/2015	38.7		42		0.24		0.005	I	2.3		0.85		0.01	U	0.016	
		8	12/8/2015	38.8		44		0.26		0.004	U	2.4		1		0.01	U	0.016	
		9	3/29/2016	37.1		44		0.22		0.004	U	2.1		0.94		0.01	U	0.014	
	MW-GR4	1	3/26/2014	NS		NS		NS		NS		NS		NS		NS		NS	
		2	7/1/2014	42.3		38		1.1		0.004	U	10.1		1.8		0.02	U	0.12	
		3	10/7/2014	42		31	A	0.69		0.004	U	7.7		1.3		0.01	UJ	0.067	
		4	1/14/2015	37.4		33		0.63		0.004	U	9.2		1.2		0.01	U	0.06	
		5	4/16/2015	44.4		35		0.67		0.004	U	8.8		1.3		0.01	U	0.052	
		6	7/21/2015	38.3		32		0.8		0.004	U	8.2		1.5		0.01	U	0.027	
		7	10/21/2015	42.4		38		0.77		0.004	I	8.9		1.3		0.01	U	0.031	
		7	10/21/2015 Duplicate	41.5		38		0.76		0.005	I	8.8		1.3		0.01	U	0.03	
		8	12/8/2015	31.7		21		0.52		0.004	U	6.4		1.1		0.01	U	0.026	
		9	3/29/2016	29.1		39		0.62		0.004	U	7.4		1.2		0.01	U	0.029	
	MW-2	1	3/26/2014	78		90		0.89		0.008	I	5.5		1.7		0.96		0.059	
		1	3/26/2014 Duplicate	77		92		0.9		0.004	U	5.5		1.7		0.73		0.06	
		2	7/2/2014	76.7		86		0.75		0.004	U			1.4		0.78	J	0.048	
		3	10/8/2014	75.6		96		1.3		0.006	I	6.5		2		1	J	0.049	
		4	1/15/2015	71.6		78		1.1		0.004	U	5.8		1.7		0.67		0.059	
		5	4/15/2015	79		78		1.1		0.004	U	5.6		1.9		0.9		0.062	
		6	7/22/2015	70.6		76		0.94		0.004	U	8.1		1.8		0.88		0.046	
		7	10/21/2015	80.6		76		0.54		0.005	I	4.9		1.2		0.51		0.052	
		8	12/8/2015	73.6		68		1.7		0.004	U	4.9		2.5		0.75		0.052	
		9	3/29/2016	50.5		70		0.99		0.004	U	4.6		1.8		1.5		0.05	

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Gordon River	MW-4	1	3/27/2014	182		230		4.2		0.004	U	37.9		5.7		0.65		0.065	
		2	07//02/14	174		220		4.3		0.004	I			5.4		0.55		0.044	
		3	10/7/2014	164		220		4.1		0.004	U	37.8		5.1		0.3	J	0.048	
		4	1/14/2015	150		210		5		0.015		37.9		5.5		0.52		0.046	
		5	4/16/2015	156		200		5		0.004	U	36.3		6.2		0.94		0.046	
		6	7/22/2015	132		190		6.5		0.004	I	35.3		5.9		0.92		0.047	
		7	10/21/2015	139		190		0.002	U	0.004	U	35.5		5.2		0.65		0.05	
		8	12/9/2015	136		190		4.7		0.004	U	33.9		6.1		1.2		0.052	
		9	3/29/2016	127		180		5		0.004	U	34.9		6.1		1.6		0.047	
	MW-5	1	3/26/2014	143		140		0.66		0.004	U	6.6		1.3		2		0.051	
		2	7/1/2014	157		170		0.55		0.004	U	9.6		1.1		3.5		0.052	
		3	10/7/2014	139		180		0.46		0.004	U	10.4		1		2.2		0.042	
		4	1/14/2015	112		140		0.53		0.008	I	7.2		1		2.6		0.045	
		5	4/15/2015	144		170		0.39		0.004	U	8.9		1		4.3		0.045	
		6	7/22/2015	151		170		0.31		0.004	U	10.3		1		3.2		0.051	
		7	10/20/2015	111		140		0.47		0.004	U	8.4		0.94		1.4		0.046	
		8	12/8/2015	88.5		130		0.7		0.004	U	6.4		1.3		4.1		0.047	
		9	3/30/2016	70		67		0.54		0.005	I	4.9		1.1		2.8		0.047	
	MWC-120091	1	3/26/2014	159		140		0.08		0.71		16.1		1.1		1.5		0.31	
		2	7/1/2014	113		150		0.042		20		16.7		1.7		0.8		0.27	
		2	7/1/2014 Duplicate	116		150		0.041		21		16.7		1.7		0.96		0.28	
		3	10/7/2014	136		160		0.068		15		30.5		1.6		0.62	J	0.26	
		3	10/7/2014 Duplicate	138		160		0.071		17		30.8		1.8		0.66	J	0.25	
		4	1/15/2015	143		140		0.042		2.4		22.8		1.1		1.1		0.5	
		4	1/15/2015 Duplicate	145		140		0.049		2.2		23		1.1		1.2		0.49	
		5	4/15/2015	122		200		0.054		5.4		22.7		1.4		2.9		0.25	
		5	4/15/2015 Duplicate	117		200		0.049		5.7		22.3		1.3		3		0.26	
		6	7/22/2015	157		180		0.072		0.84		19		1.1		4.7		0.38	
		6	7/22/2015 Duplicate	158		180		0.07		0.88		18.8		1		4.7		0.39	
		7	10/20/2015	186		180		0.086		0.35		18.8		1		4.2		0.46	
		8	12/9/2015	169		170		0.084		0.62		16.2		1.1		4.8		0.55	
		9	3/30/2016	117		190		0.069		7.4		17.5		1.3		5		0.43	
		9	3/30/2016 Duplicate	117		190		0.069		7.2		17.4		1.3		5.2		0.44	
	ANTHONY PARK	1	3/26/2014	295		1700		1.3		0.004	U	28.6		1.9		3.7		0.059	
		2	7/1/2014	205		330		0.63		0.012		30.7		1.4		1.2		0.078	
		3	10/7/2014	177		790		0.95		0.004	U	23.7		1.8		0.25	J	0.077	
		4	1/15/2015	245		1.40E+03		1.2		0.004	U	24.6		1.6		0.78		0.062	
		5	4/16/2015	258		1.50E+03		1.1		0.005	I	26.7		1.8		0.68		0.06	
		6	7/22/2015	313		1.50E+03		0.98		0.004	U	28.3		1.7		0.76		0.074	
		7	10/20/2015	239		1.50E+03		0.91		0.004	U	23.1		1.4		4.5		0.055	
		8	12/9/2015	238		1.40E+03		0.9		0.004	U	21.8		1.6		13		0.053	
		9	3/30/2016	225		1.50E+03		0.96		0.004	U	21.7		1.5		2		0.053	

TABLE 4: EWC Analytical Data

Basin	Well ID	Sampling Event	Sample Date	Boron ug/L	Lab Qual	Chloride mg Cl/L	Lab Qual	NH3 mg N/L	Lab Qual	NO2/NO3 mg N/L	Lab Qual	Potassium mg/L	Lab Qual	TKN mg N/L	Lab Qual	Sucralose ug/L	Lab Qual	Total P mg P/L	Lab Qual
GCTL				1400		250		2.8		10		NA		NA		NA		NA	
Lake Trafford	C-532	1	3/26/2014	18.1		10	A	0.34		0.004	U	0.49	I	1.7		0.01	U	0.71	
		2	7/1/2014	17.5		20		0.18		0.004	U	0.49	I	1.5		0.01	U	0.27	
		3	10/7/2014	23.3		9		0.22		0.004	U	0.68	I	2.1		0.01	U	0.36	
		4	1/13/2015	23.4		16		0.35		0.004	U	0.59	I	1.9		0.01	U	0.52	
		5	4/14/2015	22.9		19		0.42		0.004	U	0.61	I	2		0.01	U	0.62	
		6	7/21/2015	24.5		28		0.41		0.004	U	0.58		1.8		0.01	U	0.45	
		7	10/20/2015	22.8		11		0.26		0.004	U	0.58	I	2		0.01	U	0.4	
		8	12/8/2015	24		22		0.42		0.004	U	0.58		1.7		0.01	U	0.48	
		9	3/29/2016	19.9		23		0.43		0.004	U	0.72		1.8		0.01	U	0.48	
	C-1078	1	3/26/2014	18.8		6.7		0.39		0.004	U	0.3	U	1.3		0.01	U	0.17	
		2	7/1/2014	20.9		6		0.3		0.004	U	0.39	I	1.1		0.01	U	0.2	
		3	10/7/2014	28		25		0.26		0.007	I	0.79	I	1.1		0.01	UJ	1.6	
		4	1/13/2015	25.8		14		0.3		0.004	U	0.44	I	1.1		0.011	I	0.75	
		5	4/14/2015	21.3		4.2		0.22		0.006	I	0.31	I	1.2		0.032	I	0.16	
		6	7/21/2015	20.9		3.9		0.4		0.004	U	0.3	U	1.3		0.01	U	0.18	
		7	10/20/2015	23.2		4.2		0.43		0.012		0.33	I	1.2		0.01	UJ	0.18	
		8	12/9/2015	27.9		20		0.24		0.004	U	0.67		0.76		0.01	U	2.3	
		9	3/29/2016	20.3		6.3		0.43		0.004	U	0.4	I	1.3		0.01	U	0.28	
	MW-LT1	1	3/26/2014	30.8		86		0.39		0.004	U	3.2		0.99		0.01	U	0.16	
		1	3/26/2014 Duplicate	30.1		86		0.33		0.004	U	3		0.91		0.01	U	0.16	
		2	7/1/2014	36.9		77		0.17		0.33		3.2		0.63		0.01	U	0.062	
		3	10/7/2014	40.3		44		0.29		0.004	U	3.1		0.78		0.01	UJ	0.17	
		4	1/13/2015	31.7		32		0.22		0.004	U	2.2		0.65		0.01	U	0.14	
		5	4/14/2015	32.8		30		0.19		0.004	U	2.1		0.59		0.01	U	0.15	
		6	7/21/2015	35.1		24		0.15		0.004	U	2		0.46		0.01	U	0.092	
		7	10/20/2015	37.5		21		0.22		0.004	U	2.2		0.49		0.01	U	0.14	
		8	12/8/2015	32.1		21		0.19		0.004	U	1.9		0.62		0.01	U	0.14	
		9	3/29/2016	28.6		25		0.24		0.004	U	2		0.64		0.01	U	0.15	
		9	3/29/2016	28.7		25		0.23		0.004	U	2		0.59		0.01	U	0.15	
	MW-LT2	1	3/26/2014	81		29		0.35		0.004	U	3.6		1.2		0.01	U	0.053	
		2	7/1/2014	57.9		11		0.16		0.006	I	3.5		0.81		0.01	U	0.028	
		3	10/7/2014	65.3		33		0.56		0.004	U	5.4		1.8		0.01	UJ	0.13	
		4	1/13/2015	60.3		29		0.42		0.004	U	2.5		1.3		0.01	U	0.081	
		5	4/14/2015	71		33		0.35		0.004	U	3.8		1.3		0.01	U	0.068	
		6	7/21/2015	59.4		14		0.22		0.004	U	3.7		1.1		0.01	U	0.098	
		7	10/20/2015	56.9		24		0.54		0.004	U	6.3		1.4		0.01	U	0.2	
		8	12/8/2015	58.9		36		0.42		0.004	U	10.4		1.9		0.01	U	0.17	
		9	3/29/2016	54.8		30		0.43		0.004	U	4.8		1.3		0.01	U	0.12	
	MW-LT3	1	3/26/2014	23.3		17		0.24		0.004	U	2.8		0.98		0.01	U	0.022	
		2	7/1/2014	25		17		0.25		0.004	U	2.5		0.94		0.01	U	0.02	
		3	10/7/2014	30.6		16		0.22		0.004	U	2.7		1.1		0.01	UJ	0.022	
		4	1/13/2015	27.8		18		0.23		0.004	U	2.5		1.1		0.02	U	0.022	
		5	4/14/2015	26.3		17		0.22		0.004	U	2.6		1.2		0.01	U	0.02	
		6	7/21/2015	25.5		18	A	0.24		0.004	U	3		1.1		0.01	UJ	0.028	
		7	10/20/2015	28.7		15		0.26		0.004	U	2.5		0.95		0.01	UJ	0.029	
		8	12/8/2015	27.4		13		0.24		0.004	U	2.4		1.2		0.01	U	0.026	
		9	3/29/2016	27.4		18		0.27		0.004	U	3.2		1.2		0.01	U	0.023	

TABLE 5
Potential Ground Water Influence
Everglades West Coast
SIS Site # 686

Monitor Well ID	Nitrite/Nitrate ~ 1 mg/N/L or greater	Ammonia above background concentrations	Total Nitrogen 2 or more times above target level	Sucralose above 1 ug/L	Total Phosphorus ~ 0.1 mg P/L	Land Use	Potential Ground Water Influence
MW-HC2		Yes	Yes	Yes		Residential	Septic Tanks, Fertilizer
MW-2		Yes	Yes	Yes		Golf Course	Fertilizer, Reclaimed Water
MW-4		Yes	Yes	Yes		Golf Course	Fertilizer, Reclaimed Water
MW-5		Yes		Yes		Golf Course	Fertilizer, Reclaimed Water
MWC-120091	Yes		Yes	Yes	Yes	Rec. Park	Fertilizer, Reclaimed Water
Anthony Park		Yes	Yes	Yes	Yes	Rec Park	Fertilizer, Reclaimed Water
MW-HC3		Yes	Yes		Yes	Golf Course	Fertilizer, Reclaimed Water
MW-GR4		Yes				Golf Course	Fertilizer
MW-IR8		Yes				Residential	Fertilizer
MW-HC4A		Yes				Urban	Fertilizer
MW-HC6		Yes				Golf Course	Fertilizer, Reclaimed Water
MW-IR5	Yes		Yes			Residential	Fertilizer
MW-IR6	Yes				Yes	Residential	Fertilizer
MW-IR7	Yes		Yes			Residential/Agricultural	Fertilizer
MW-IR12	Yes		Yes			Golf Course	Fertilizer, Reclaimed Water
364725	Yes					Residential	Fertilizer
HR-3R	Yes		Yes		Yes	Golf Course	Fertilizer, Reclaimed Water
C-532					Yes	Agricultural	Fertilizer
C-1078					Yes	Urban	Fertilizer
MW-LT1					Yes	Agricultural	Fertilizer
MW-LT2					Yes	Agricultural	Fertilizer
MW-GR2					Yes	Residential	Fertilizer