

# Quarry Community Development District

## Board of Supervisors

Timothy B. Cantwell, Chairman  
Dean Britt, Vice Chairman  
William Patrick, Assistant Secretary  
Mel Stuckey, Assistant Secretary  
Rick Fingeret, Assistant Secretary

## District Staff

Justin Faircloth, District Manager  
Wes Haber, District Counsel  
Albert Lopez, District Engineer

## Meeting Agenda

Monday January 9, 2023 at 1:00 p.m.

Quarry Golf Club

8950 Weathered Stone Drive, Naples, FL 34120

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1. **Call to Order**
2. **Pledge of Allegiance**
3. **Approval of Agenda**
4. **Public Comments on Agenda Items**
5. **Organizational Matters**
  - A. Resolution 2023-01, Appointment of Officers
6. **Engineer's Report**
  - A. Stormwater Rules and Guidelines Exhibit
  - B. Phase I & II Update
    - i. Erosion Issues Update
  - C. 2022 Shoreline Phase I & II Vegetation Monitoring Report
  - D. October 2022 Water Quality Monitoring Report
7. **New Business**
8. **Old Business**
9. **District Manager's Report**
  - A. Approval of the December 12, 2022 Minutes
  - B. Acceptance of the Financial Report, and Approval of the Check Register and Invoices as of December 2022
  - C. December 2022 Field Management Report
  - D. Follow-up Items
10. **Attorney's Report**
11. **Supervisor Requests**
12. **Audience Comments**
13. **Adjournment**

**Next meeting: Monday February 13, 2023 at 1:00 p.m.**

# **Fifth Order of Business**

**5A**

**RESOLUTION 2023-01**

**A RESOLUTION OF QUARRY COMMUNITY  
DEVELOPMENT DISTRICT APPOINTING OFFICERS OF  
THE BOARD OF SUPERVISORS**

WHEREAS, the Board of Supervisors of Quarry Community Development District at a regular business meeting, held on January 9, 2023, following the General Election, desires to appoint the below recited persons to the offices specified.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD  
OF SUPERVISORS OF QUARRY COMMUNITY  
DEVELOPMENT DISTRICT:**

1. The following persons were appointed to the offices shown, to wit:

_____	Chairman
_____	Vice Chairman
<u>Justin Faircloth</u>	Secretary
<u>Stephen Bloom</u>	Treasurer
_____	Assistant Treasurer
_____	Assistant Secretary
_____	Assistant Secretary
_____	Assistant Secretary

**PASSED AND ADOPTED THIS, 9<sup>th</sup> DAY OF JANUARY, 2023.**

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Justin Faircloth  
Secretary



## **Sixth Order of Business**

**6C**

**THE QUARRY  
COMMUNITY DEVELOPMENT DISTRICT  
COLLIER COUNTY, FLORIDA**

**2022 SHORELINE (PHASE I & II)  
VEGETATION MONITORING REPORT**

**NOVEMBER 2022**



*Engineers  
Architects  
Planners  
Surveyors  
Landscape Architects  
Traffic/Transportation  
Environmental Scientists  
Construction Management*

CPH, LLC  
2216 Altamont Ave.  
Fort Myers, FL 33901  
(239) 332-5499

## **1.0 INTRODUCTION**

CPH, LLC (CPH) is providing construction administration and inspection services as the Engineer of Record for The Quarry Community Development District 2022 Shoreline Project (Phase I & II). CPH Environmental Services is monitoring the survival and growth of littoral plantings installed as part of the project. As of July 1, 2022, eleven (11) CDD lakes had littoral plantings installed. The contractor, Glase Golf, LLC, has submitted documents showing that 3,614 1-gal plants and 19,548 2-inch liner plants were installed at Lakes 30, 32, 34, 36, 38, 40, 41, 42, 44, 47 and 50. Although called for in the plans, the CDD instructed the contractor not to install plants above the control elevation for any of the lakes. This report presents a summary of the statistical analysis performed using the collected data, with respect to the density of planted material and overall vegetative cover within the littoral planting zones, including naturally recruited desirable and undesirable species. Species deemed undesirable are those listed as invasive, exotic species by the Florida Exotic Pest Plant Council (FLEPPC). The first monitoring event was conducted on September 7 & 8, 2022.

## **2.0 METHODOLOGY**

Permanent belt transects were established at the 11 lakes with littoral plantings. Transects are two meters wide and 30 meters long except for Transects 34, 42A and 47D which were adjusted based on the length of the littoral planting zone in those locations. Transects 34 and 47D are 15 meters long and Transect 42A is 60 meters long. The monitoring transect locations are shown on **Figure 1** in **Appendix A**. Sample plots of 2 meters x 1 meter were established at random intervals within each transect. The number of sample plots in the transects ranged from two to ten depending on the length of the transect. The 2-meter length of the sample plots was used so that both upper and lower portions of the planting zones would be evaluated. At each sample plot, the number and areal coverage of installed plants was recorded by species. In addition, naturally recruited vegetation within the sample plot was identified and the areal coverage, by species, was recorded.

Representative photographs of each transect were taken and are presented in **Appendix B**.

## **3.0 RESULTS AND DISCUSSION**

During the September 2022 monitoring event the water level in all lakes was at or near the control elevation, meaning the water was at maximum height.

The observed density of installed plants within each transect is presented in **Table 1**. The observed density indicates the density at which the plants were installed and/or the survival rate of the installed plants. **The sample plots in all lakes except Lake 47 and Lake 50 had a shortage of planted species when compared to the expected density based on the details in the construction plans.** The shortages ranged from 4% to 72%. The shortage of planted vegetation may be due to the plants being spaced too widely when they were installed, or due to mortality since the planting occurred. Lakes with a shortage of planted vegetation are highlighted in Table 1.

**Table 1. Observed Density of Planted Vegetation**

Lake	Transect	Stem Count Planted Species	Number of 1 sq m Plots in Transect	Observed Density - Planted Species (#/sq m)	<sup>1</sup> Plan Density - Planted Species (#/sq m)	<sup>2</sup> Percent Difference	<sup>3</sup> Lake Shortage/ Overage
30	30A	0	6	0.0	2.7	-100%	-72%
	30B	9	6	1.5	2.7	-44%	
32	32A	9	6	1.5	2.7	-44%	-44%
34	34	9	4	2.3	2.7	-17%	-17%
36	36A	20	6	3.3	2.7	23%	23%
38	38A	13	6	2.2	2.7	-20%	-20%
40	40A	12	6	2.0	2.7	-26%	-26%
47	47A	48	6	8.0	2.7	196%	42%
	47B	16	6	2.7	2.7	-1%	
	47C	25	6	4.2	2.7	54%	
	47D	17	4	4.3	2.7	57%	
	47E	17	6	2.8	2.7	5%	
	47F	7	6	1.2	2.7	-57%	
44	44A	8	6	1.3	2.7	-51%	-51%
	44B	4	3	1.3	2.7	-51%	
42	42A	12	9	1.3	2.7	-51%	-51%
41	41	9	4	2.3	2.7	-17%	-17%
50	50A	20	6	3.3	2.7	23%	-4%
	50B	11	6	1.8	2.7	-32%	

1. Plan density is based on 24" spacing. 24" On Center = 2.7 plants per sq meter

2. Percent difference is the difference between the observed density and the plan density

3. The apparent deficit or excess of installed plants, based on the observed density, expressed as a percentage

The percent cover of installed plants and other naturally recruited plants are provided in **Table 2**. Percent cover is a visual estimate of the total area within a sample plot that is covered by vegetation. It is indicative of the size and vigor of the plants. In the CDD lakes, greater cover is desirable because plants help prevent erosion, improve water quality and provide habitat for aquatic organisms. Percent cover of desirable plant species ranged from 0% to 37.2%. The percent cover was generally low but this is expected since the planting occurred recently.

**Table 2. Percent Cover of Desirable and Undesirable Vegetation**

Lake	Transect	% Cover Planted Species	% Cover Other Species - Desirable	Total Estimated % Cover Desirable Species	% Cover Undesirable Species
30	30A	0	0	0	0
	30B	2.5%	0.0%	2.5%	0.8%
	Average for Lake 30			1.3%	0.4%
32	32A	4.3%	0.0%	4.3%	5.0%
34	34	4.3%	0.0%	4.3%	28.0%
36	36A	2.8%	0.0%	2.8%	0.0%
38	38A	11.3%	0.0%	11.3%	36.7%
40	40A	5.8%	2.0%	7.8%	12.0%
47	47A	20.2%	6.2%	26.3%	0.0%
	47B	9.2%	0.8%	10.0%	3.3%
	47C	35.0%	2.2%	37.2%	3.3%
	47D	7.0%	0.0%	7.0%	3.3%
	47E	6.3%	0.8%	7.2%	0.3%
	47F	2.5%	2.2%	4.7%	3.2%
	Average for Lake 47			15.4%	2.2%
44	44A	3.3%	0.0%	3.3%	0.8%
	44B	2.0%	2.0%	4.0%	10.3%
	Average for Lake 44			3.7%	5.6%
42	42A	2.3%	1.0%	3.3%	2.0%
41	41	3.8%	0.0%	3.8%	2.5%
50	50A	5.2%	1.5%	6.7%	4.3%
	50B	2.7%	1.3%	4.0%	2.8%
	Average for Lake 50			5.3%	3.6%

Table 2 also provides the percent cover of undesirable species that were observed within the sample plots. This information may be useful for the CDD in their lake management program. Most species of undesirable aquatic vegetation are non-native and invasive. They grow aggressively and displace native vegetation degrading the habitat value for wildlife. They can grow excessively, clogging drainage structures and possibly degrading water quality. Undesirable species observed include torpedograss (*Panicum repens*), pondweed (*Potamogeton illinoensis*), coontail (*Ceratophyllum demersum*), hydrilla (*Hydrilla verticellata*) and nutgrass (*Cyperus rotundus*). **Transects 34, 38, 40 and 44B had more than 10% cover of undesirable species.** These transects are highlighted in Table 2.

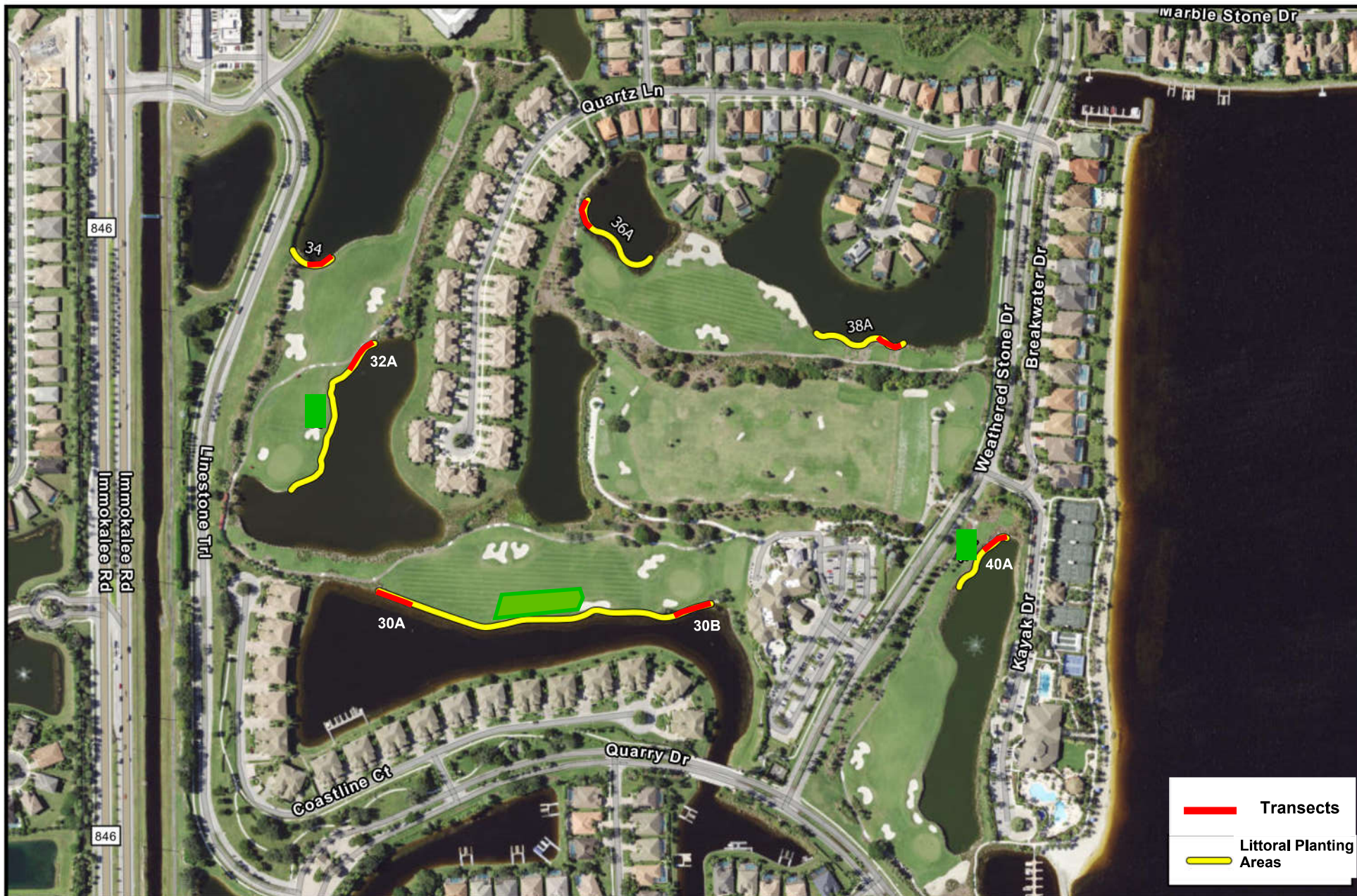


## **APPENDIX A**

### **FIGURES**

**The Quarry CDD  
Shoreline  
September 2022  
Vegetation Monitoring Report**





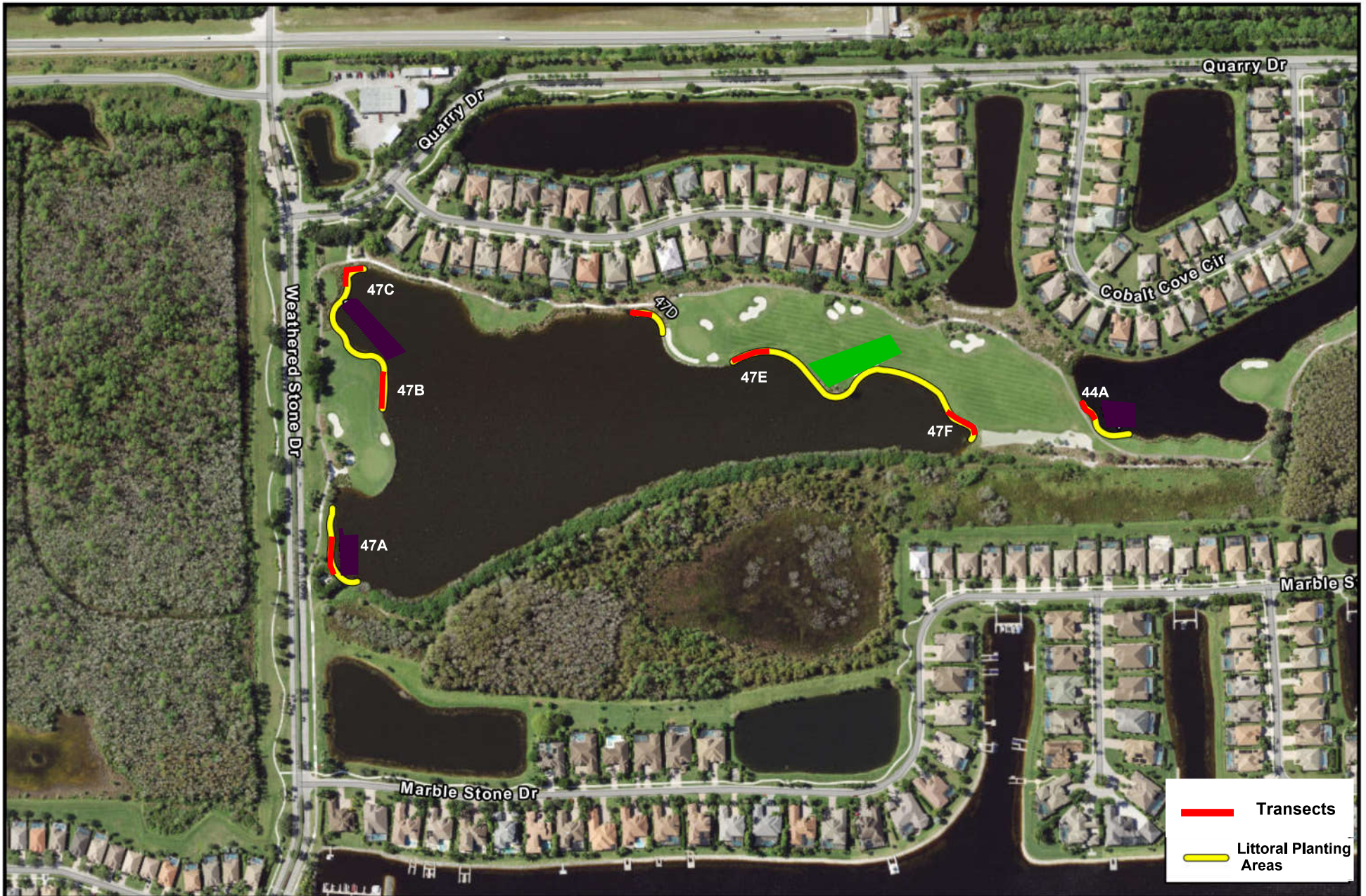
Scale: 1 in = 400 ft  
 Date: 11/11/2022  
 Photo Date: 2021  
 Project No.: Q0513  
 Biologist: DL GIS: ACV



**TRANSECT LOCATION MAP**  
 THE QUARRY  
 SECTION 14 & 23, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
1A**





Scale: 1 in = 400 ft  
 Date: 11/11/2022  
 Photo Date: 2021  
 Project No.: Q0513  
 Biologist: DL GIS: ACV



# TRANSECT LOCATION MAP THE QUARRY SECTION 14 & 23, TOWNSHIP 48 SOUTH, RANGE 26 EAST COLLIER COUNTY, FLORIDA

**FIGURE**  
**1B**





Scale: 1 in = 400 ft  
 Date: 11/11/2022  
 Photo Date: 2021  
 Project No.: Q0513  
 Biologist: DL GIS: ACV



# TRANSECT LOCATION MAP THE QUARRY SECTION 14 & 23, TOWNSHIP 48 SOUTH, RANGE 26 EAST COLLIER COUNTY, FLORIDA

**FIGURE**  
**1C**



## **APPENDIX B**

### **Transect Photographs**

**The Quarry CDD  
Shoreline  
September 2022  
Vegetation Monitoring Report**





**Transect 30A**



**Transect 30 B**



**Transect 32A**





**Transect 34**



**Transect 36A**



**Transect 38A**





**Transect 40A**



**Transect 47A**



**Transect 47B**





**Transect 47C**



**Transect 47D**



**Transect 47E**



**Transect 47F**



**Transect 44A**



**Transect 44B**

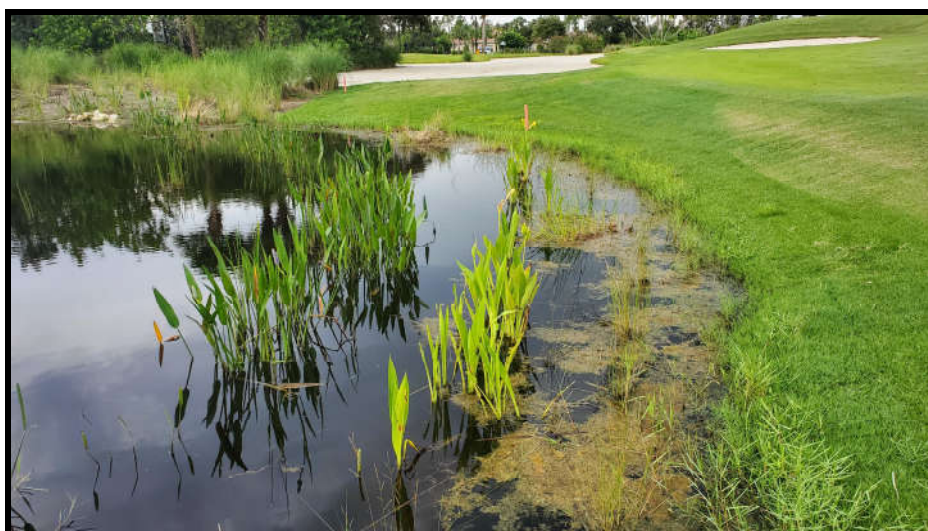




**Transect 42A**



**Transect 41**



**Transect 50A**



**Transect 50B**

**6D.**

**THE QUARRY  
COMMUNITY DEVELOPMENT DISTRICT  
COLLIER COUNTY, FLORIDA**

**WATER QUALITY MONITORING REPORT**

**OCTOBER 2022**



*Engineers  
Architects  
Planners  
Surveyors  
Landscape Architects  
Traffic/Transportation  
Environmental Scientists  
Construction Management*

CPH, LLC  
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Fort Myers, FL 33901  
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# **WATER QUALITY MONITORING REPORT OCTOBER 2022**

## **THE QUARRY COMMUNITY DEVELOPMENT DISTRICT COLLIER COUNTY, FLORIDA**

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FIGURE 8	Chlorophyll a Measurements October 2021 – October 2022
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#### **APPENDIX B – PHOTOGRAPHS OF SAMPLING LOCATIONS**

## INTRODUCTION

The Quarry is a residential development in northwestern Collier County (**Figure 1, Appendix A**). The Community Development District (CDD) maintains a stormwater management system which serves the community and the golf course. The system consists of inlet structures, conveyance pipes, control structures and man-made lakes. The CDD selected 28 lakes for water quality monitoring. The water chemistry parameters measured are intended to assist with the characterization of conditions in the lakes to evaluate the water quality and its effect on the type of plants that grow in the lakes, the rate of growth, and the suitability of the lakes for fish and other wildlife. The South Florida Water Management District (SFWMD) permit authorizing development of the community requires perpetual maintenance of the stormwater management system so that it continues to function as designed. The permit also makes the permittee responsible for ensuring that the system does not cause violations of state water quality standards. This report provides the results of the October 2022 monitoring event and provides a comparison to the results from the October 2021 and April 2022 events.

## DATA COLLECTION

The field measurements and sample collection were conducted on October 4 and 5, 2022. All samples were collected and analyzed per Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOP). Samples were collected from the photic zone, the surface layer where sunlight can influence growth of plants and algae. Samples were collected as grab samples at 1-2 feet from the surface as per FDEP aqueous sampling SOP. Disturbing sediments in the immediate area of sample collection was avoided. The locations of sampling points in each lake are depicted in **Figure 2, Appendix A**. At the request of the CDD board, a second sampling location in Lake 30 was added beginning in March 2022. Temperature, pH, dissolved oxygen, conductivity and salinity are measured in the field using a YSI Model 30, YSI Ecosense DO200A and a ThermoFisher Elite pH meter. Conductivity, salinity and pH are not expected to vary greatly but are measured to establish background levels and monitored so that any significant changes will be detected. Water samples are collected at each location, packed in ice and shipped overnight, or hand delivered to the laboratory for measurement

of nutrients and chlorophyll *a*.

## **RESULTS**

The results of the field measurements and laboratory testing are presented in **Table 1**. Photographs of the sample sites are provided in **Appendix B**. Lake levels appeared high in October 2022.

**Table 1. October 2022 Water Quality Test Results**

CDD Lake No.	Sample Date	Sample Time	Sample Depth (ft.)	pH	Temp (°C)	DO (ppm)	Salinity (ppt)	Conductivity (µS/cm)	Chlorophyll a (mg/m <sup>3</sup> )	Phosphorus (mg/L)	Kjeldahl N (mg/L)	Nitrate, Nitrite as N (mg/L)	Total Nitrogen (mg/L)	Aquatic Vegetation Observations
30	10/5/22	915	1.5	8.2	27.9	9.29	0.2	404	6.5	U	0.59		0.59	Canna, Pondweed, Torpedograss, Hydrilla, Primrose, Spikerush, Arrowhead,
30x	10/4/22	1610	2	8.2	28.2	7.63	0.2	433	6.6	U	0.27		0.27	Pondweed
31	10/5/22	1350	1.5	8.8	29.1	9.51	0.1	229	8.1	U	0.55		0.55	Hydrilla
32	10/5/22	1300	1.5	8.8	28.4	9.12	0.1	295	16.0	U	0.26		0.26	Pondweed, Sand Cordgrass, Algae
33	10/5/22	1330	1.5	9.0	28.6	10.44	0.1	245	13.0	0.11	0.25		0.25	Sago Pondweed, Torpedograss, Algae
34	10/5/22	1315	1.5	9.1	28.6	11.45	0.1	255	9.9	U	U		U	Torpedograss, Fanwort, Sago Pondweed, Algae
35	10/5/22	1240	1.5	9.4	28.6	14.83	0.1	270	34.0	U	0.62		0.62	Primrose, Hydrilla, Algae
36	10/5/22	1010	1.5	8.6	27.0	8.67	0.1	296	31.0	U	0.20		0.20	Spikerush, Saltmeadow Cordgrass, Hydrilla
37	10/5/22	1000	1.5	8.5	26.2	7.3	0.1	261	8.8	U	0.23		0.23	Hydrilla
38	10/5/22	940	1.5	8.8	26.9	10.15	0.1	290	10.0	U	0.61		0.61	Fanwort, Torpedograss, Hydrilla
40	10/4/22	1230	1.5	8.5	27.9	14.5	0.1	249	15.0	U	0.49		0.49	Pondweed, Canna, Hydrilla, Arrowhead, Torpedograss, Primrose
41	10/4/22	1640	1.5	8.2	30.9	9.05	0.2	389	74.0	U	1.10		1.10	Pondweed, Spikerush, Torpedograss, Hydrilla, Algae
42	10/4/22	1655	1.5	7.9	28.8	7.49	0.2	393	29.0	U	0.70		0.70	Torpedograss, Hydrilla,
44	10/4/22	1705	1.5	8.1	28.4	9.98	0.2	422	25.0	U	0.79		0.79	Red Ludwigia, Torpedograss, Pickerelweed, Hydrilla, Algae

**Qualifiers**

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J3 = Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.

U = The compound was analyzed for but not detected.

V = The analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

Spikerush = *Eleocharis cellulosa*, Arrowhead = *Sagittaria* sp., Pickerelweed = *Pontederia cordata*, Pondweed = *Potamogeton illinoensis*, Sago Pondweed = *Stuckenia pectinata*, Fanwort = *Cabomba caroliniana*, Water Lily = *Nymphaea odorata*, Fireflag = *Thalia geniculata*, Red Ludwigia = *Ludwigia repens*, Sand Cordgrass = *Spartina bakeri*, Saltmeadow Cordgrass = *Spartina patens*, Torpedograss = *Panicum repens*, Primrose = *Ludwigia octovalvis*, Canna = *Canna* sp., Alligatorweed = *Alternanthera hydropiperoides*, Hydrilla = *Hydrilla verticillata*



**Table 1. October 2022 Water Quality Test Results (Continued)**

CDD Lake No.	Sample Date	Sample Time	Sample Depth (ft.)	pH	Temp (°C)	DO (ppm)	Salinity (ppt)	Conductivity (µS/cm)	Chlorophyll a (mg/m <sup>3</sup> )	Phosphorus (mg/L)	Kjeldahl N (mg/L)	Nitrate, Nitrite as N (mg/L)	Total Nitrogen (mg/L)	Aquatic Vegetation Observations
45	10/4/22	1715	1.5	8.3	30.0	9.70	0.2	458	24.0	U	1.20		1.20	Spikerush, Red Ludwigia, Torpedograss, Hydrilla, Algae
46	10/4/22	1725	1.5	8.3	30.6	10.60	0.2	428	21.0	U	0.47		0.47	Spikerush, Red Ludwigia, Hydrilla, Algae
47	10/4/22	1800	1.5	8.5	29.6	9.97	0.2	418	24.0	U	0.70		0.70	Arrowhead, Rush, Canna, Saltmeadow Cordgrass,
48	10/4/22	1745	1.5	8.2	30.5	7.65	0.2	431	7.1	U	0.55		0.55	Pondweed, Red Ludwigia, Hydrilla
50	10/4/22	1630	1.5	8.2	30.0	5.31	0.2	451	43.0	U	0.72		0.72	Spikerush, Red Ludwigia, Fanwort, Hydrilla, Nitella, Bladderwort
53	10/4/22	1550	1.5	8.5	30.1	8.93	0.1	259	2.7	U	0.24		0.24	Rush, Algae
54	10/5/22	0920	1.5	7.6	26.9	5.52	0.2	450	12.0	U	0.62		0.62	Spikerush, Red Ludwigia, Fanwort, Hydrilla
55	10/5/22	0905	1.5	8.1	26.9	6.96	0.1	308	21.0	U	0.68		0.68	Arrowhead, Hydrilla, Torpedograss
56	10/5/22	0850	1.5	8.2	26.6	6.67	0.2	399	21.0	U	0.74		0.74	Pondweed, Spikerush, Hydrilla
58	10/4/22	1600	1.5	8.3	29.6	10.68	0.2	494	20.0	U	0.84		0.84	Pondweed, Water Lily
61	10/4/22	1530	1.5	8.2	30.8	8.05	0.2	392	11.0	U	0.55		0.55	Pondweed
62	10/4/22	1520	1.5	7.7	27.2	1.02	0.2	388	19.0	U	0.69		0.69	Pondweed, Water Lily, Torpedograss
63	10/4/22	1306	1.5	8.0	28.8	3.75	0.2	397	1.4	U	1.10		1.10	Pondweed, Fireflag
63A	10/4/22	1330	1.5	7.6	27.2	0.60	0.2	338	10.0	U	0.88		0.88	Spikerush, Fireflag, Water Lily, Hydrilla
63B	10/4/22	1315	1.5	7.7	27.1	1.00	0.1	322	1.3	U	0.83		0.83	Spikerush, Pondweed, Water Lily

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## **Temperature**

Normal temperature for freshwater lakes in Florida ranges from 24° - 30° Celsius (annual average). Temperature is used in analysis of dissolved oxygen values. Extremely high temperature can contribute to low oxygen levels, leading to fish kills. Extremely low temperature could kill aquatic organisms. Lake temperatures in October 2022 ranged from 26.2 – 30.9°C, which is normal for the time of year. The temperature measurements in all lakes for the last three monitoring events are shown in **Figure 3, Appendix A**.

## **pH**

pH is an expression of the amount of hydrogen ions (H<sup>+</sup>) in the water. Distilled water has a pH of 7, which has equal amounts of hydrogen (H<sup>+</sup>) and hydroxide (OH<sup>-</sup>) ions. In southwest Florida lakes, pH can range between 4.44 and 10.04 with a median value of 7.29 (Romie, 2000).

The pH of the CDD lakes during the October 2022 monitoring event were within the normal range for south Florida lakes, ranging from 7.6 to 9.4. The pH of all lakes for the last three monitoring events are shown in **Figure 4, Appendix A**.

## **Dissolved Oxygen**

The amount of oxygen that can be dissolved in water depends on several factors, including water temperature, salinity, and atmospheric pressure. On a relative scale, the amount of oxygen dissolved in saturated water will be greater in cooler waters than in warmer ones.

Oxygen enters waterbodies primarily by transfer from the atmosphere across the air-water interface and to a lesser extent by the action of photosynthetic organisms. DO levels typically follow a diurnal cycle – higher at the end of the day and lower at dawn. Fish typically require DO concentrations of approximately 5 parts per million (ppm) for optimum health. Exposure to DO levels below 2 ppm for 1 – 4 days will kill many aquatic organisms (Wilson, 2014).

During the monitoring event in October 2022, DO levels in the lakes ranged from 0.60 – 14.83 parts per million (ppm). The observed DO concentrations were normal and

sufficient to sustain fish and other aquatic organisms in all lakes except Lake 62, 63, 63A and 63B which had DO levels below 4 ppm. These four lakes are on the eastern edge of the community. The results of any laboratory measurement are a snapshot of the conditions at the time the sample was collected. As mentioned previously, the amount of oxygen in a water body is variable over time and can be affected by numerous external factors. The October 2022 monitoring was conducted approximately one week after Hurricane Ian passed through southwest Florida, bringing high wind and extremely high rainfall. Localized flooding was widespread and evidence of flooding was observed in the conservation area near the lakes with low DO levels. Flooding due to the hurricane may have contributed to a temporary drop in DO levels. During the October 2022 water quality sampling, there was no visible evidence that low oxygen was affecting aquatic life in any of the CDD lakes.

The dissolved oxygen levels in all lakes for the last three monitoring events are shown in **Figure 5, Appendix A.**

### **Phosphorus**

Phosphorus is usually not available in the environment. Although natural phosphorus levels in surface water bodies are very low, human sources or activities such as fertilizer application, sewage spills and soil erosion can overload lakes with available phosphorus. Excess phosphorus (even in very small amounts) introduced to a lake provides food for plants and algae and can increase the vegetation growth within a lake and have a negative impact on water quality.

The October 2022 sampling results show undetectable levels of phosphorus in all of the CDD lakes except Lake 33, which had a very low level of 0.11 mg/L. The phosphorus levels in all lakes for the last three monitoring events are shown in **Figure 6, Appendix A.**

### **Nitrogen**

Nitrogen is necessary for many natural biological processes. Excess nitrogen in the lakes can fuel the growth of excess algae or other undesirable plants. Total nitrogen

concentration can be used in conjunction with other parameters including chlorophyll and phosphorus to determine a lake's trophic state - the degree of biological productivity of a waterbody. Trophic state determinations are based on regular, frequent monitoring for an extended period (typically at least two years). Generally speaking, total nitrogen concentrations of approximately 2 mg/m<sup>3</sup> are indicative of trophic states with "good" water quality (wateratlas.org, 2021).

In October 2022, the nitrogen levels observed in all lakes were within the normal range for Florida lakes, ranging from 0 – 1.2 mg/L. The total nitrogen levels in all lakes for the last three monitoring events are shown in **Figure 7, Appendix A**.

Phosphorus and Nitrogen are nutrients that support growth of plants including large rooted plants, algae and microscopic phytoplankton. Fertilizers, yard and pet waste and certain soaps and detergents contain nitrogen and phosphorus, and can contribute to nutrient pollution if not properly used or disposed (Fairchild, 2006). Atmospheric nitrogen is transferred to water bodies and deposited on hard surfaces where it can be carried into lakes by stormwater runoff. It is worth noting that the Quarry lakes are constructed for the purpose of detaining stormwater runoff so that pollutants, including nutrients, can be removed from the water through natural physical, chemical and biological processes. Therefore, it is expected that nutrients will be found in the lakes as part of their normal function. However, nutrients can fuel excessive macroalgae and phytoplankton growth. Plants produce oxygen through photosynthesis, but they also consume oxygen by respiration in the absence of sunlight. In addition, decaying plant matter consumes oxygen. While nutrients enter the lakes by design, the nutrient load can be managed through the efforts and practices of the CDD, landscape workers, golf course groundskeepers and residents. Limiting the addition of nutrients from fertilizers, pet waste, detergents and yard waste will help keep the lakes functioning and more aesthetically pleasing.

### **Chlorophyll a**

Chlorophyll a is an indicator of the abundance of planktonic algae found in the water column. Elevated chlorophyll a levels are directly correlated with reduced water clarity,

odor and the potential for algae blooms. Chlorophyll *a* values can be expected to rise during the warmer months. Chlorophyll concentration is also used in conjunction with other parameters including nitrogen and phosphorus to determine a lake's trophic state - the degree of biological productivity of a waterbody. Trophic state determinations are based on regular, frequent monitoring for an extended period (typically at least two years). Generally speaking, chlorophyll *a* concentrations less than 20 mg/m<sup>3</sup> are indicative of trophic states with "good" water quality. Chlorophyll *a* concentrations between 20 and 40 mg/m<sup>3</sup> are indicative of "fair" water quality (wateratlas.org, 2021). Therefore 40 mg/m<sup>3</sup> is considered the maximum desirable chlorophyll *a* concentration.

During the October 2022 sampling, the chlorophyll *a* levels in Lakes 30, 31, 33, 34, 37, 38, 40, 48, 53, 54, 61, 63, 63A and 63B were in the low range of 0 – 15 mg/m<sup>3</sup>. Lakes 32, 35, 36, 42, 44, 45, 46, 47, 55, 56, 58 and 62 were in the moderate range of 15.1 – 40 mg/m<sup>3</sup>. Lakes 41 and 50 were above 40 mg/m<sup>3</sup> at 74 mg/m<sup>3</sup> and 43 mg/m<sup>3</sup>, respectively. During the monitoring event, lake observations appeared normal and healthy. Chlorophyll *a* levels in all lakes for the last three monitoring events are shown in **Figure 8, Appendix A**.

### **Salinity**

The salt concentration is usually expressed in parts per thousand (ppt) or parts per million (ppm). Water salinity based on dissolved salts classifies a water body into three categories:

- Fresh water < 0.5 ppt
- Brackish water 0.5–30 ppt
- Saline water 30–50 ppt

The salinity found in the CDD lakes is within the normal range for man-made freshwater ponds in this region of Florida. In October 2022, salinity was low (0.1 - 0.2 ppt) as expected in all 28 lakes. The salinity measurements recorded in all lakes for the last three monitoring events are shown in **Figure 9, Appendix A**.

## **Conductivity**

Conductivity measures the capacity of water to conduct an electric current and indirectly measures the concentration of ionized substances in water. Approximately 80% of Florida lakes have conductivity between 90 and 1000  $\mu\text{S}/\text{cm}$  (Hand, 2004).

Conductivity values during the October 2022 monitoring event ranged from 229 – 494  $\mu\text{S}/\text{cm}$ . These values are in the normal range for man-made lakes in this region of Florida. The conductivity measurements recorded in all lakes for the last three monitoring events are shown in **Figure 10, Appendix A**.

## **SUMMARY**

In summary, the October 2022 water quality monitoring event shows:

- Lake temperatures were normal for the time of year.
- pH values were within the normal range for Florida lakes in this region. The pH range for the CDD lakes ranged from 7.6 to 9.4.
- The observed DO concentrations in Lakes 62, 63, 63A and 63B were below 4 ppm. Sustained or chronically low DO levels are not conducive to a healthy population of aquatic organisms. During the October 2022 water quality sampling, there was no visible evidence that low dissolved oxygen was affecting aquatic life. The low DO levels observed in these four lakes may be attributable to extremely high rainfall and flooding that occurred in the week prior to the monitoring event. Therefore, no action is recommended at this time.
- Phosphorus was not detected in any of the CDD lakes except Lake 33, which had a very low level of 0.11 mg/L.
- Nitrogen levels observed in all lakes were within the normal range for Florida lakes.

- The chlorophyll a level in Lakes 41 and 50 was above 40mg/m<sup>3</sup>. However, during the monitoring event, lake observations appeared normal and healthy. Therefore, no action is recommended at this time.
- Salinity and conductivity in all lakes were normal for freshwater lakes in Florida. Salinity values were similar in all lakes with a value of 0.1 - 0.2 ppt. Conductivity values ranged from 229 – 494 µS/cm.
- Based on visual observation, the lakes appear healthy with normal water levels and clarity. Nuisance vegetation management appears effective in the 28 CDD lakes monitored.

CPH has been conducting a similar monitoring program in the adjoining Heritage Bay community for several years. In general, the results of the October 2022 monitoring event indicate The Quarry lakes have similar conditions to the Heritage Bay lakes.

## CITATIONS

Romie, Kenneth, *Water Chemistry of Lakes in the Southwest Florida Water Management District*, Resource Management Department, Southwest Florida Water Management District, February 2000.

Wilson, P. Chris, *Water Quality Notes: Dissolved Oxygen*, document SL313, Soil and Water Science Department, UF/IFAS Extension. Original publication date December 2009. Revised August 2014.

Hand, Joe, *Typical Values for Water Quality Parameters for Florida's Lakes, Streams and Estuaries*, Watershed Assessment Section, Bureau of Watershed Management Florida Department of Environmental Protection. October 2004.

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Florida LAKEWATCH, *A Beginner's Guide to Water Management in Florida Lakes; Fish Communities and Trophic State*, Information Circular 110, Department of Fisheries and Aquatic Sciences, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Florida, April 2007.

wateratlas.org, USF Water Institute, School of Geosciences, College of Arts and Sciences, University of South Florida, Tampa, Florida.

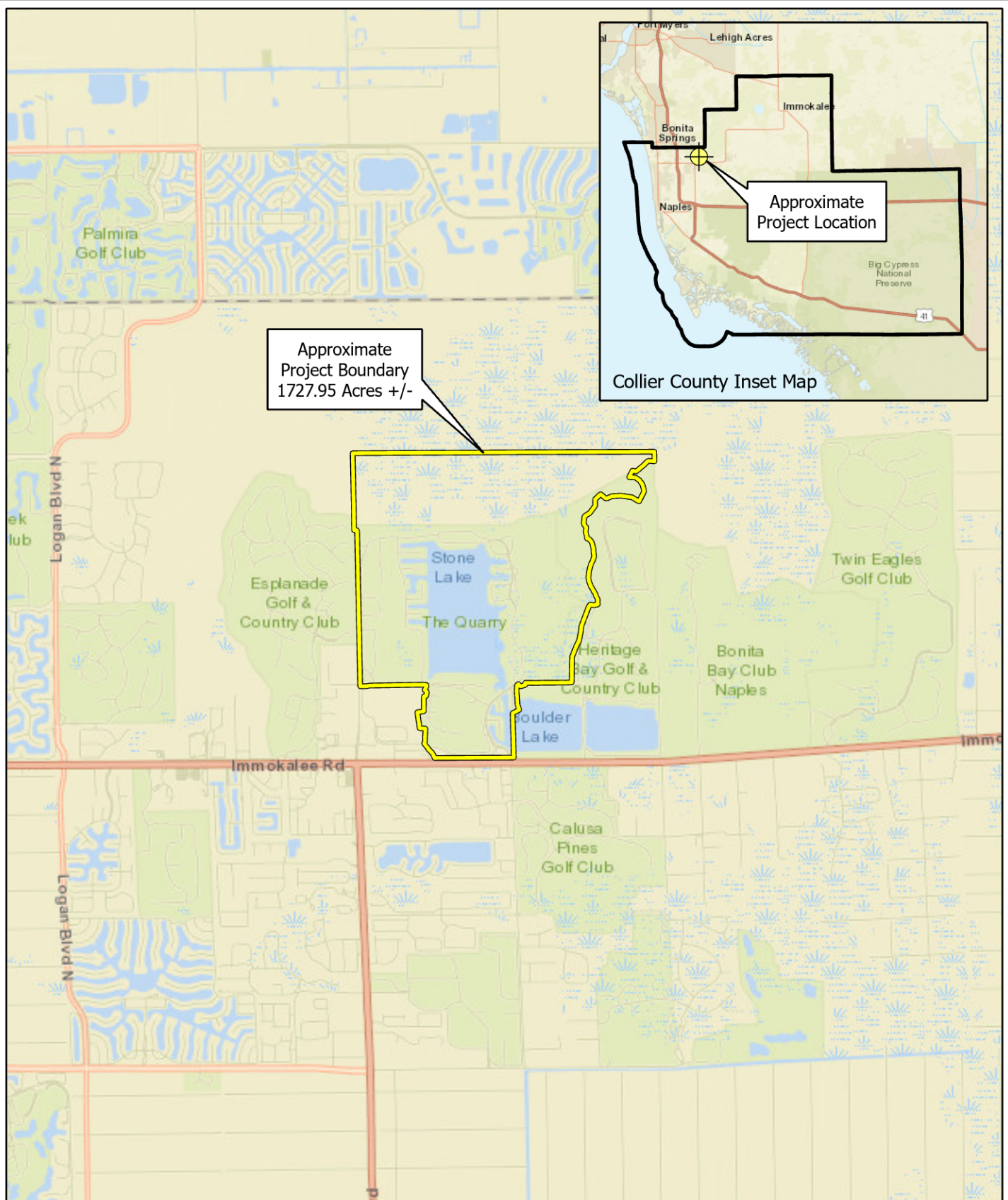




## **APPENDIX A**

### **Figures**

**The Quarry CDD  
October 2022  
Water Quality Monitoring Report  
Collier County, Florida**



Scale: 1 inch = 1 mile  
 Date: 10/20/2021  
 Photo Date: N/A  
 Project No. Q0505.1  
 Biologist: DL GIS: JOG



## LOCATION MAP

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
1**





Scale: 1 inch = 1,000 feet  
 Date: 4/5/2022  
 Photo Date: 2019  
 Project No. Q0505.1  
 Biologist: DL GIS: JOG



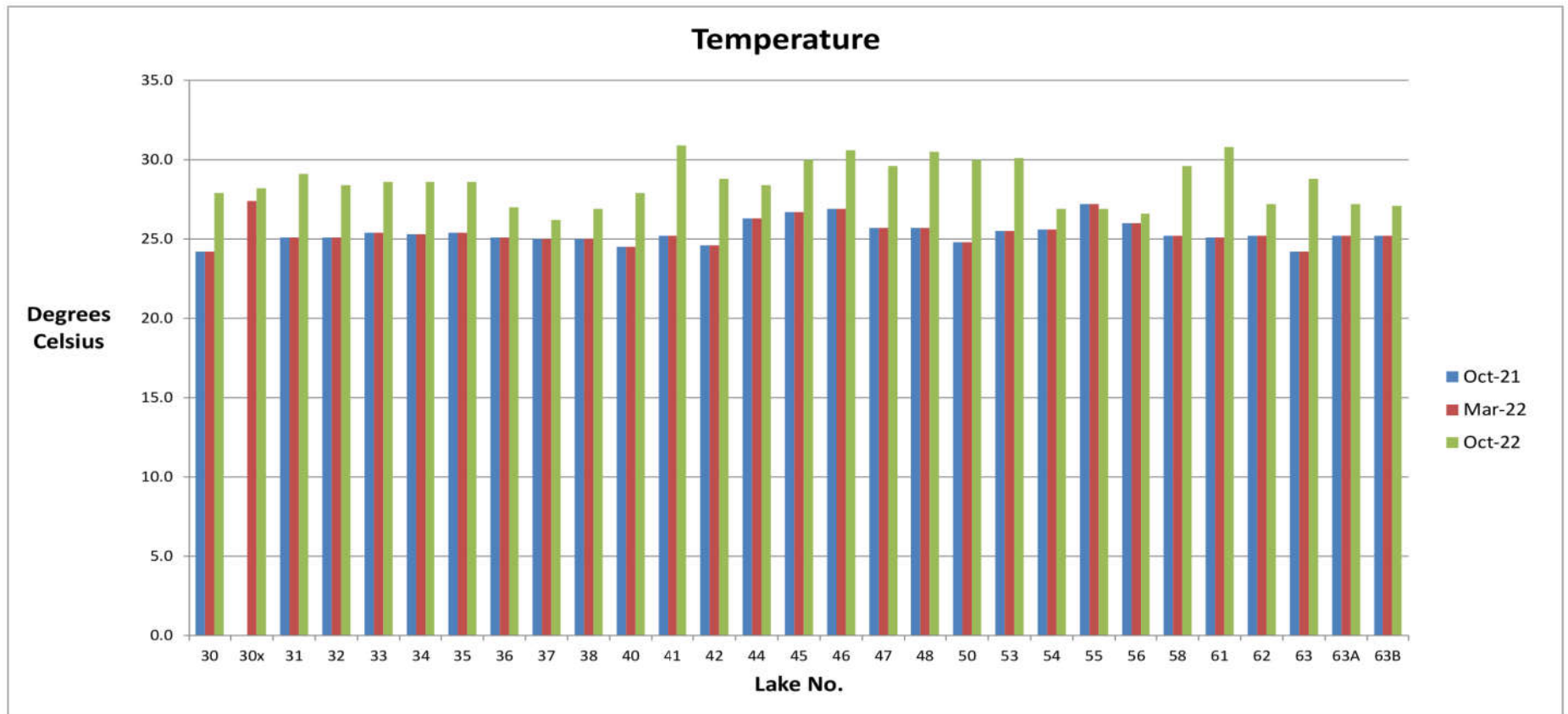
## LAKE SAMPLING LOCATIONS MAP

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
2**



Normal Range = 24 Degrees - 30 Degrees C (Annual Average)

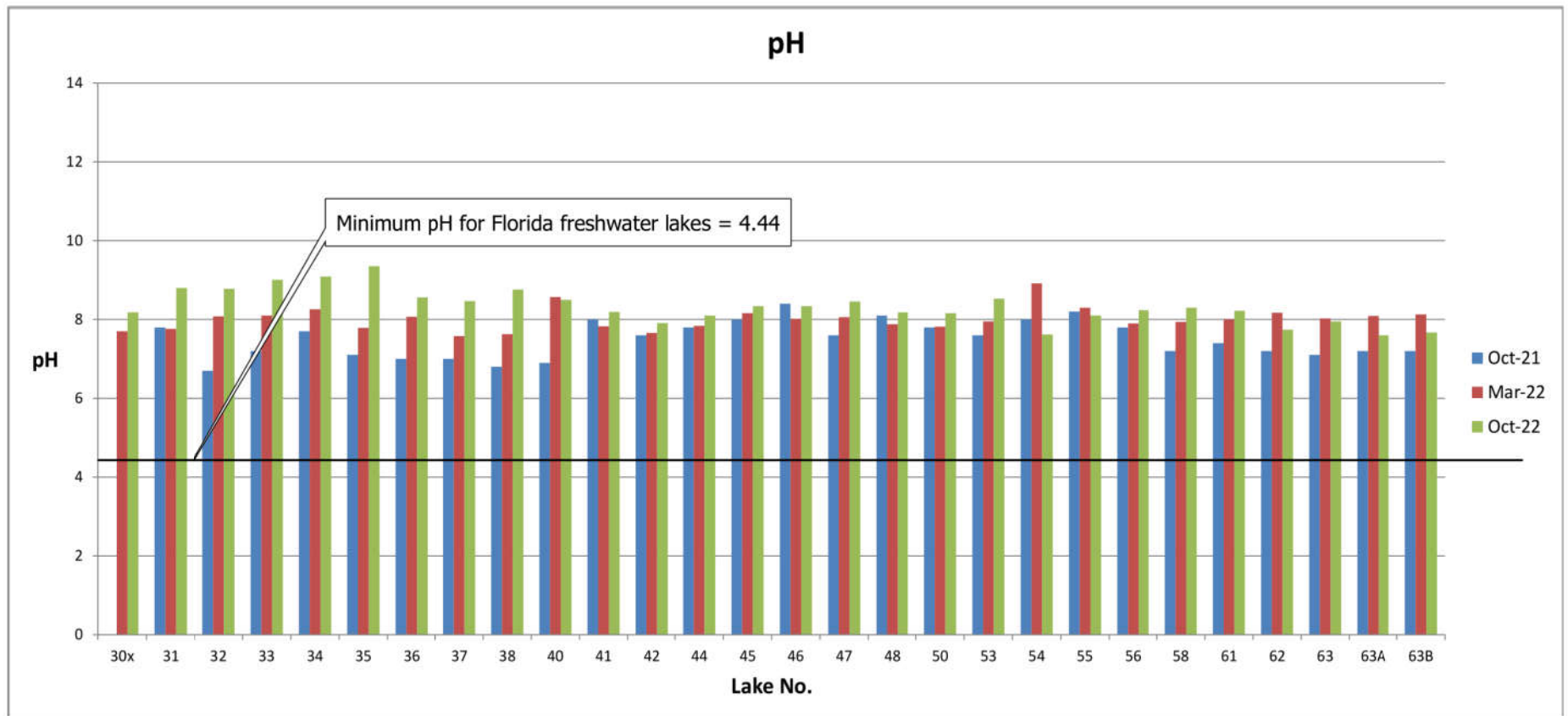


Scale: N/A  
 Date: 11/2/2022  
 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL GIS: ACV

#### TEMPERATURE MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
3**

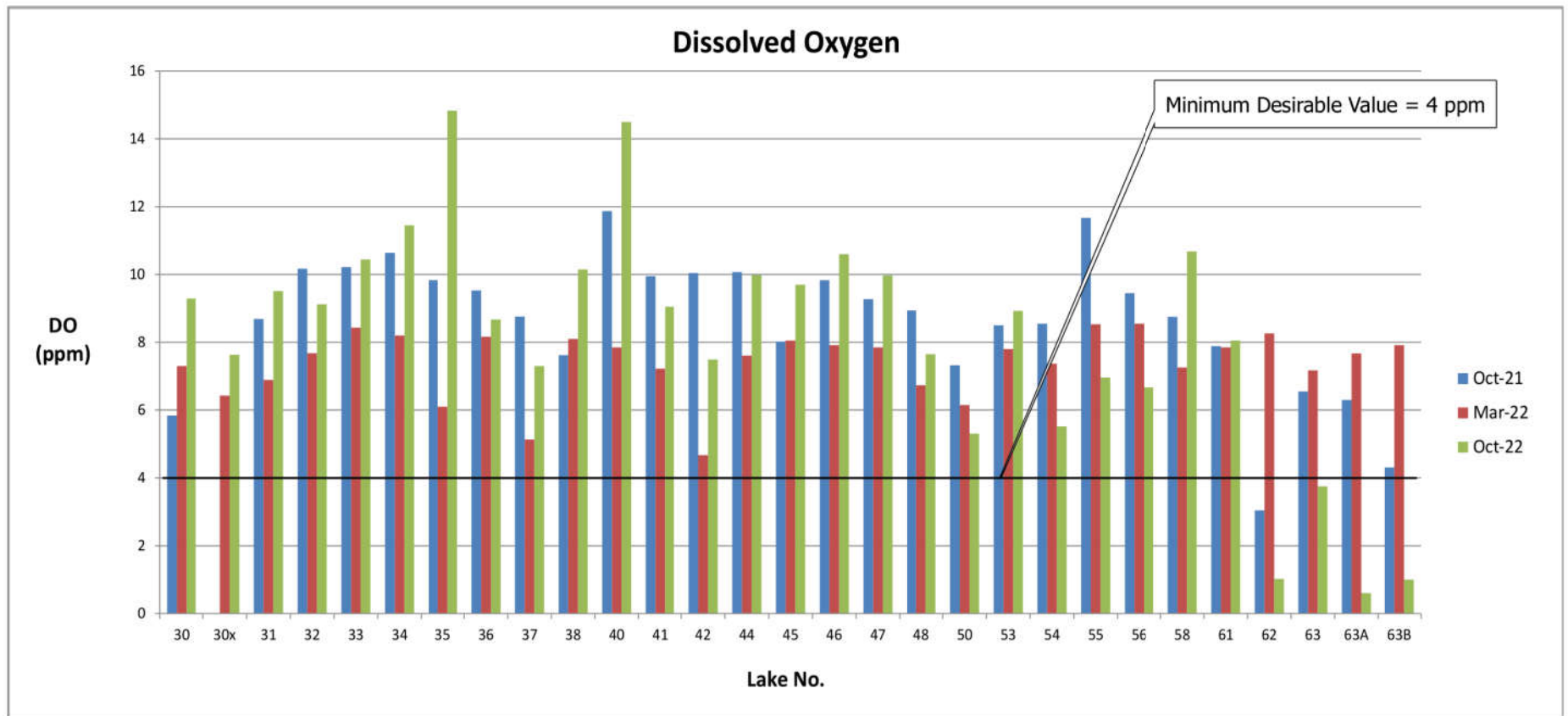


Scale: N/A  
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 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL GIS: ACV

## PH MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
4**

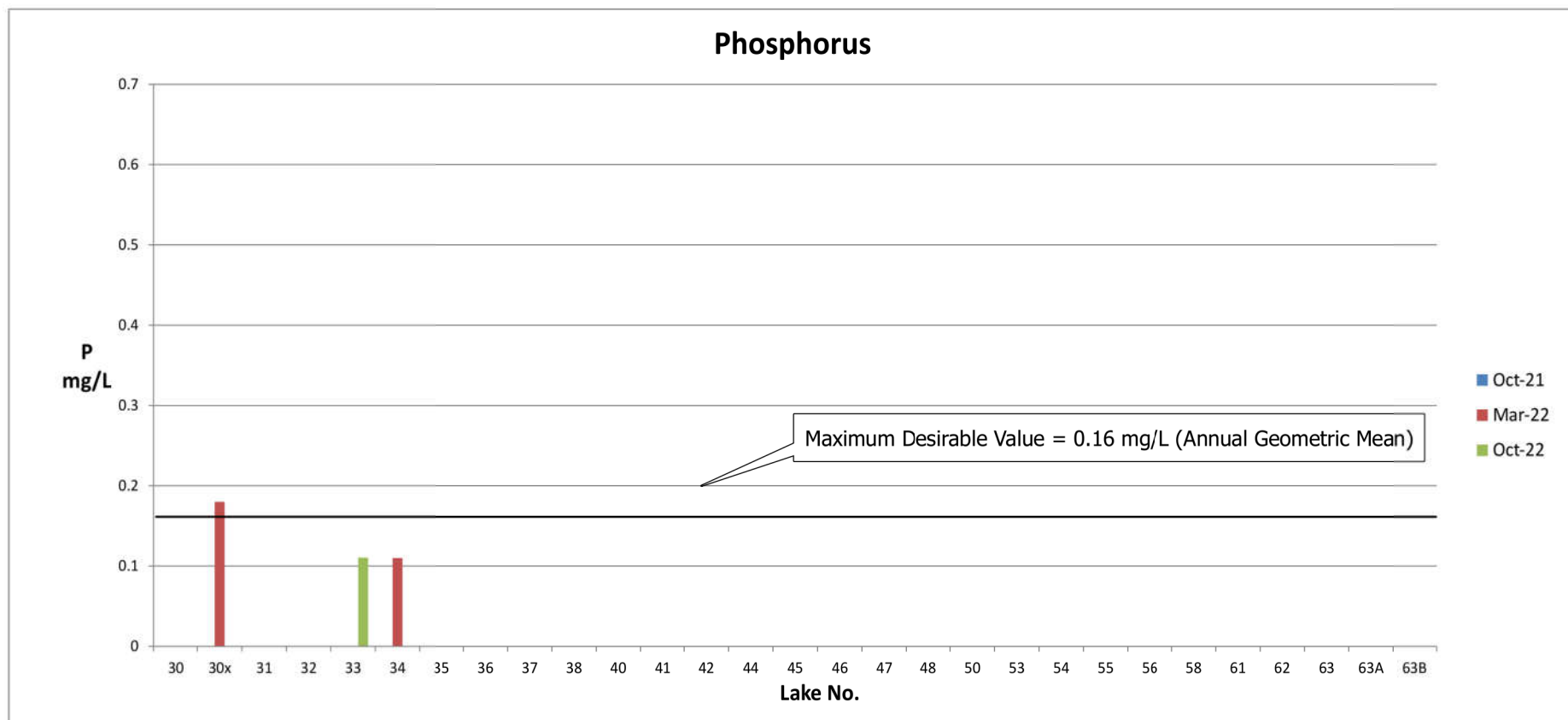


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 Date: 11/2/2022  
 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL GIS: ACV

#### DISSOLVED OXYGEN MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
5**



Note: Phosphorus was not detected or was below the quantification limit in all lakes in October 2021



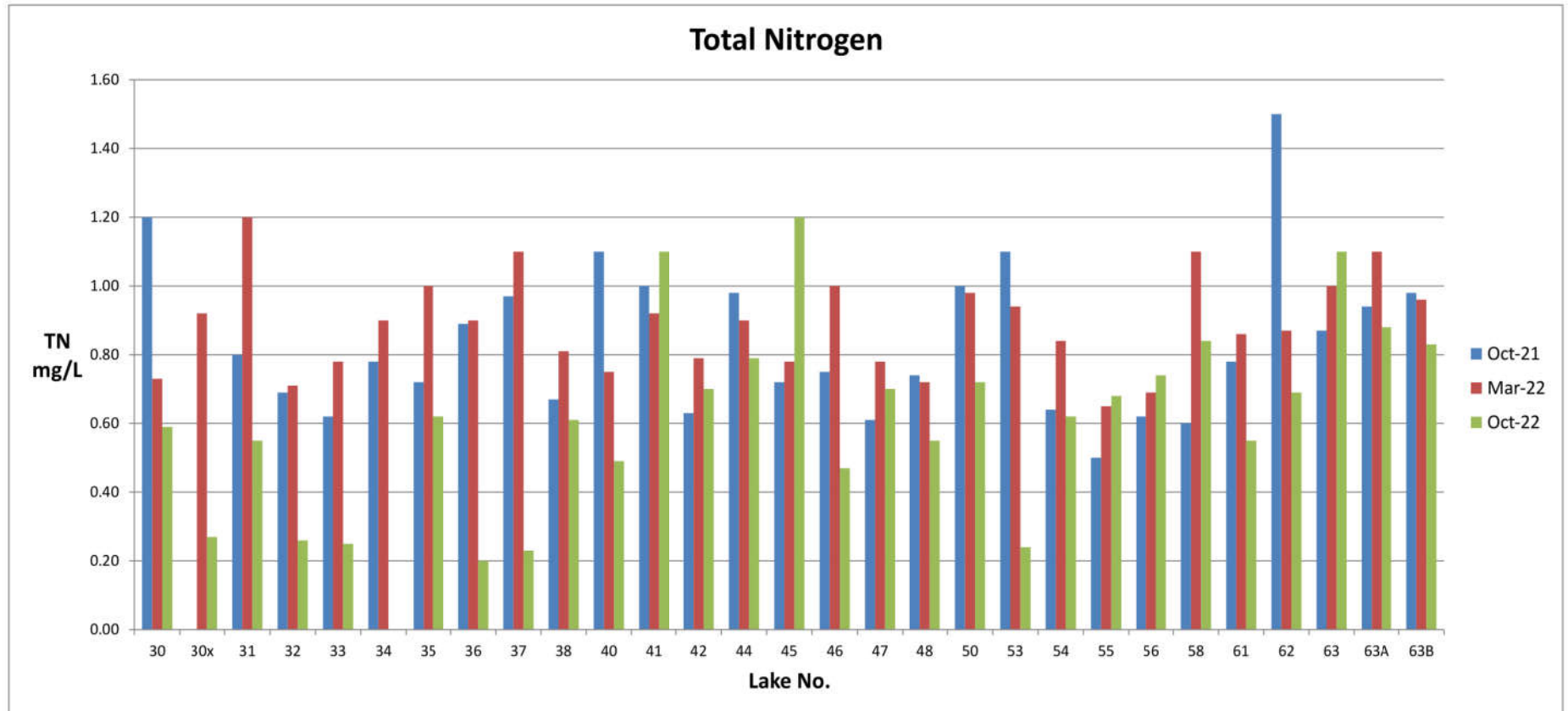
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 Date: 11/2/2022  
 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL GIS: ACV

#### PHOSPHORUS MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
6**

Maximum Desirable Value = 2.23mg/L  
(Annual Geometric Mean)



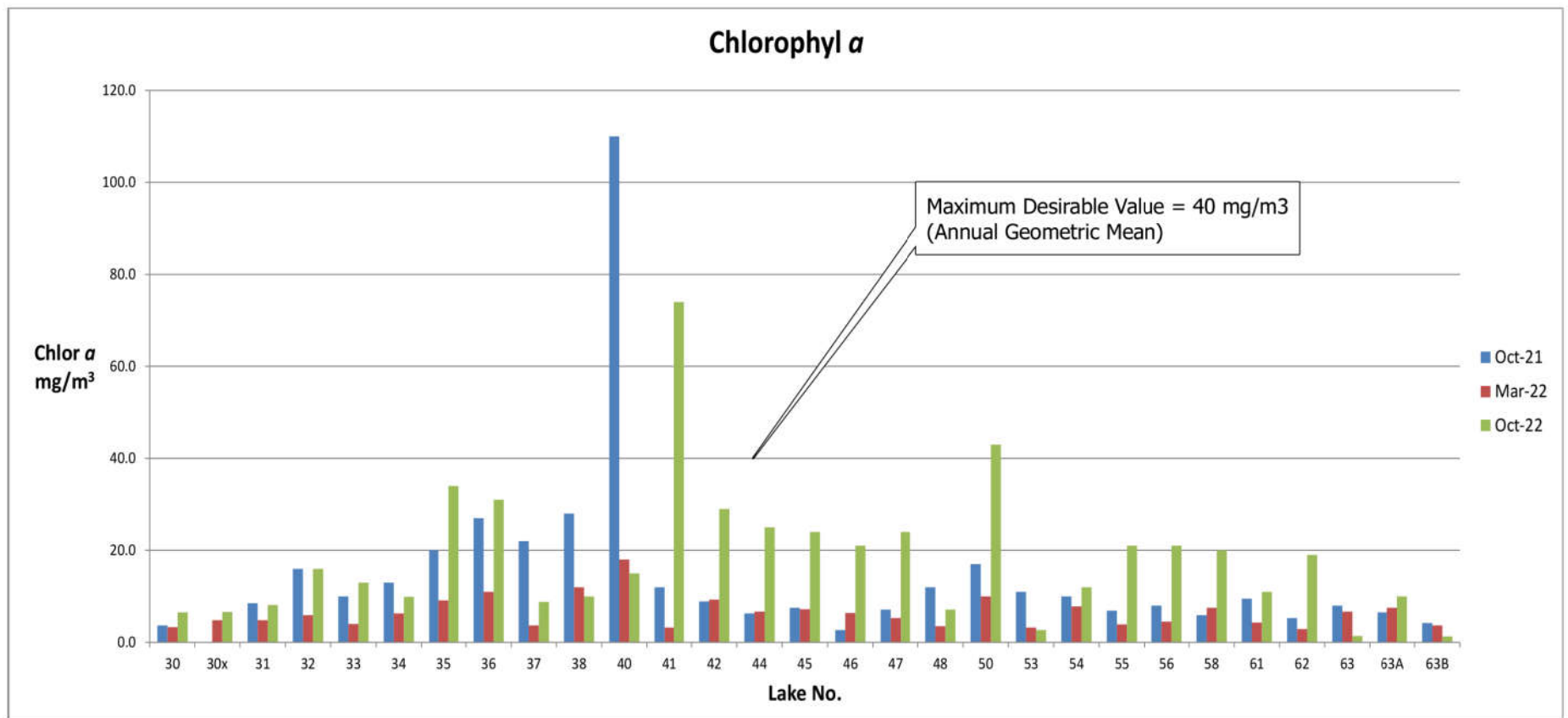
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Date: 11/2/2022  
Photo Date: N/A  
Project No. Q0505.2  
Biologist: DL GIS: ACV

#### TOTAL NITROGEN MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
COLLIER COUNTY, FLORIDA

**FIGURE  
7**





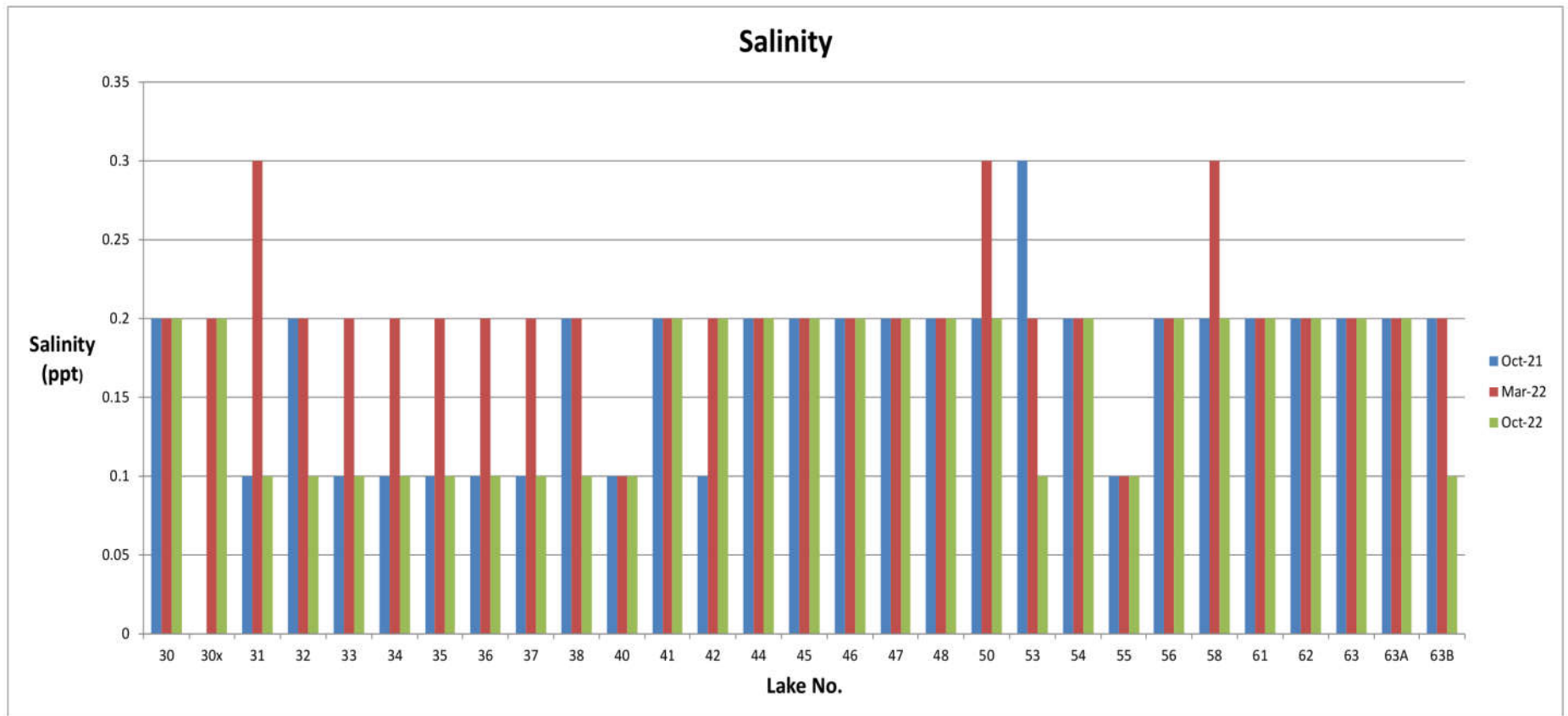
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 Date: 11/2/2022  
 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL GIS: ACV

#### CHLOROPHYLL A MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
8**

Normal Range = 0 - 0.5 ppt



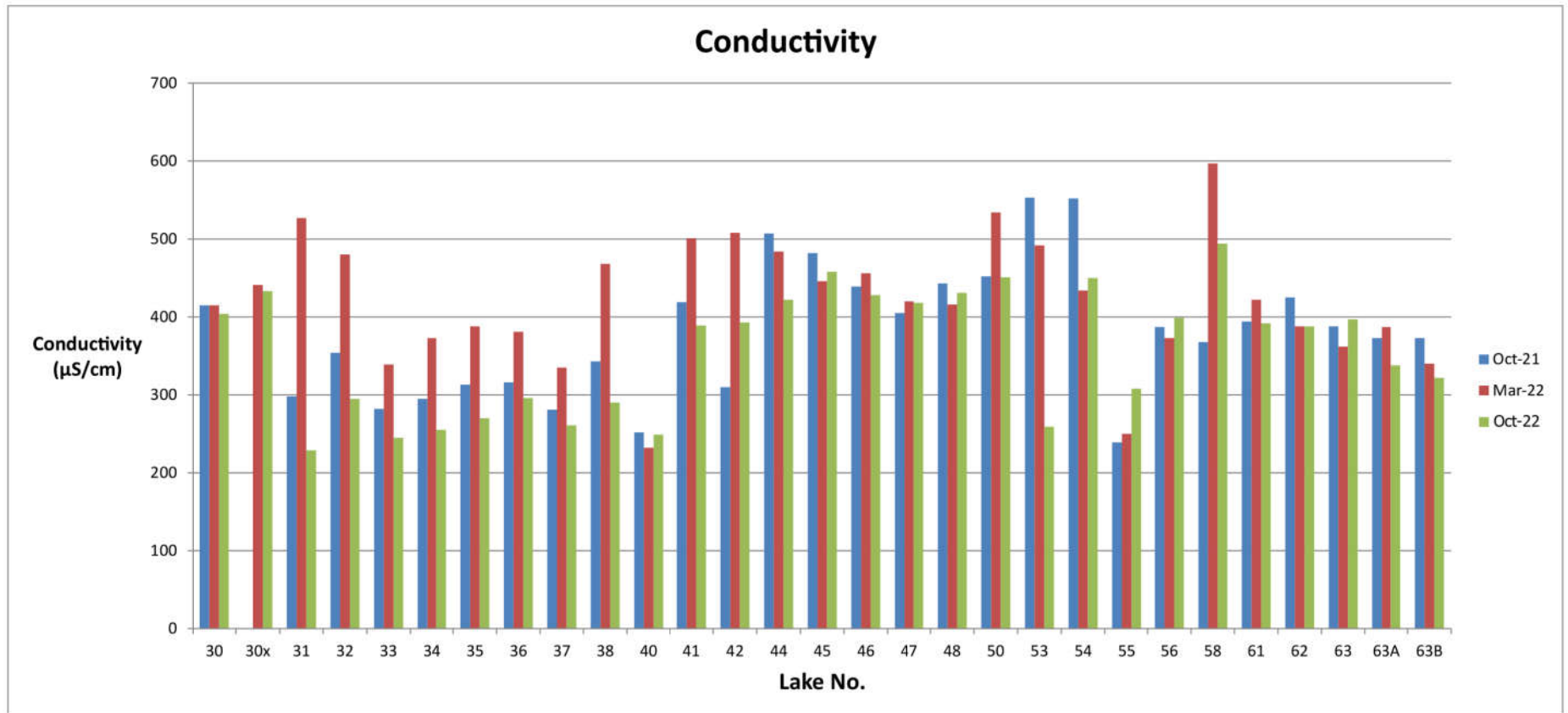
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 Date: 11/2/2022  
 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL GIS: ACV

#### SALINITY MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
9**

Maximum Desirable Value = 1,275 uS/cm



Scale: N/A  
 Date: 11/2/2022  
 Photo Date: N/A  
 Project No. Q0505.2  
 Biologist: DL      GIS: ACV

#### CONDUCTIVITY MEASUREMENTS OCT 2021 - OCT 2022

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**FIGURE  
10**



## **APPENDIX B**

### **Photographs of Sampling Locations**

**The Quarry CDD  
October 2022  
Water Quality Monitoring Report  
Collier County, Florida**





Lake 30



Lake 31



Lake 32



Lake 33



Lake 34



Lake 35



Lake 36



Lake 37



Date: 11/2/2022  
 Photo Date: Oct 2022  
 Project No. Q0505.2  
 Biologist: DL  
 GIS: ACV

# PHOTOGRAPHS

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

**APPENDIX  
 B-1**





Lake 38



Lake 40



Lake 41



Lake 42



Lake 44



Lake 45



Lake 46



Lake 47



Date: 11/2/2022  
Photo Date: Oct 2022  
Project No. Q0505.2  
Biologist: DL  
GIS: ACV

## PHOTOGRAPHS

THE QUARRY CDD  
SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
COLLIER COUNTY, FLORIDA

APPENDIX  
B-2





Lake 48



Lake 50



Lake 53



Lake 54



Lake 55



Lake 56



Lake 58



Lake 61



Date: 11/2/2022  
 Photo Date: Oct 2022  
 Project No. Q0505.2  
 Biologist: DL  
 GIS: ACV

# PHOTOGRAPHS

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

APPENDIX  
 B-3





Lake 62



Lake 63



Lake 63A



Lake 63B



Date: 11/2/2022  
 Photo Date: Oct 2022  
 Project No. Q0505.2  
 Biologist: DL  
 GIS: ACV

## PHOTOGRAPHS

THE QUARRY CDD  
 SECTIONS 13, 14, 23, AND 24, TOWNSHIP 48 SOUTH, RANGE 26 EAST  
 COLLIER COUNTY, FLORIDA

APPENDIX  
 B-4



## **Ninth Order of Business**

**9A**

**MINUTES OF MEETING  
QUARRY  
COMMUNITY DEVELOPMENT DISTRICT**

The meeting of the Board of Supervisors of Quarry Community Development District was held Monday December 12, 2022 at 1:00 p.m. at the Quarry Golf Club, 8950 Weathered Stone Drive, Naples, FL 34120.

Present and constituting a quorum were:

Timothy Cantwell	Chairman
Dean Britt	Vice Chairman
William Patrick	Assistant Secretary
Mel Stuckey	Assistant Secretary
Rick Fingeret	Assistant Secretary

Also present were:

Justin Faircloth	District Manager
Albert Lopez	District Engineer
Wes Haber	District Counsel ( <i>via phone</i> )
Will Elliot	Collier Environmental Services
Residents	

*The following is a summary of the discussions and actions taken.*

**FIRST ORDER OF BUSINESS**

**Call to Order**

- Mr. Cantwell called the roll, and a quorum was established.

**SECOND ORDER OF BUSINESS**

**Pledge Allegiance**

- The Pledge of Allegiance was recited.

**THIRD ORDER OF BUSINESS**

**Approval of Agenda**

- Item 6 was changed to District Manager's Report and item 9 was changed to Engineer's Report.
- Mr. Faircloth noted that the revised Phase II B Schedule from Glase Golf was emailed to the Board as well as Glase Golf Phase I Change Order #2.

On MOTION by Mr. Britt seconded by Mr. Cantwell with all in favor, the agenda was approved as amended. 5-0
--

**FOURTH ORDER OF BUSINESS**

**Public Comments on Agenda Items**

- None.

**FIFTH ORDER OF BUSINESS**

**Organizational Matters**

**A. Declaration of Vacant Seats 2 and 4**

On MOTION by Mr. Stuckey, seconded by Mr. Britt with all in favor  
Seats 2 and 4 were declared vacant. 5-0

**B. Appointment of Supervisors to Vacant Seats 2 and 4**

On MOTION by Mr. Cantwell, seconded by Mr. Britt with all in favor Mr.  
Patrick was appointed to Seat 2 and Mr. Britt was appointed to Seat 4. 5-0

**C. Oaths of Office for Appointed Supervisors**

- Mr. Faircloth administered the Oath of Office to Mr. Patrick and Mr. Britt

**D. Resolution 2023-01, Appointment of Officers**

- This item was not covered but postponed until the January meeting.

**SIXTH ORDER OF BUSINESS**

**District Manager's Report**

**A. Approval of the November 14, 2022 Minutes**

On MOTION by Mr. Britt, seconded by Mr. Fingeret with all in  
favor the November 14, 2022 Minutes were approved. 5-0

**B. Acceptance of the Financial Report, and Approval of the Check Register and  
Invoices as of November 2022**

On MOTION by Mr. Cantwell seconded by Mr. Stuckey with all in favor  
the Financial Report as of November 2022 was accepted, and Check  
Register and Invoices as of November 2022 were approved. 5-0

**C. November 2022 Field Management Report**

- Mr. Faircloth noted the next inspection by Inframark would be completed in December.

**D. Follow-up Items**

**i. 8851 Nautical Landing Circle Discussion**

- Mr. Faircloth discussed the observations from 8851 Nautical Landing Circle. The Board  
agreed to continue monitoring the area, but no action was taken.

**ii. FY2023 Quarry CDD Calendar of Events**

- Mr. Faircloth reviewed the updated FY2023 Calendar of Events with the Board. The Board requested the calendar be added to the website.

**iii. CES Preserve Report****a. Preserve Three Carolina Willow Discussion**

- Mr. Elliott presented his report to the Board.
- The Board requested Mr. Faircloth respond to the homeowner requesting Willow removal in Preserve #3 noting that the preserves are professionally managed, and the area will be monitored.

**SEVENTH ORDER OF BUSINESS****New Business**

- None.

**EIGHTH ORDER OF BUSINESS****Old Business**

- None.

**NINTH ORDER OF BUSINESS****Engineer's Report****A. Fieldstone Lane Update**

- Mr. Lopez updated the Board on Fieldstone Lane and noted the survey should take place later in the month.

**B. Glase Golf Phase II B Construction Schedule**

- The updated construction schedule from Glase Golf for Phase II B was presented to the Board.
- Mr. Lopez and Mr. Faircloth discussed the Phase I Pay app and Change Order #2. The Board requested Mr. Faircloth update the pay application and process it without the Change Order. The Board requested Mr. Lopez inform Glase Golf of the need for greater detail on the requested Change Order.
- Mr. Britt requested detail and oversight be ensured from staff on the project regarding item quantities.
- Mr. Faircloth noted that an invite was sent for a meeting to review erosion concerns prior to the January 9, 2023 meeting.

**TENTH ORDER OF BUSINESS****Attorney's Report****A. Draft Agreement with QCA****B. Draft License Agreement****C. Draft Drainage Rules****D. Title Search Update**

- Mr. Haber discussed the draft agreement with the QCA for the stormwater rules and guidelines. The Board requested staff work together to proceed and develop the necessary documents for review by the QCA and target the February 13, 2023 meeting for the Board to approve a Resolution to set a Public Hearing for the March 20, 2023 meeting.
- Mr. Haber will develop the necessary ads for Inframark to reserve space in the paper prior to the February 13, 2023 meeting so that once the Resolution has been adopted, the notice can be advertised for the March 20, 2023 meeting.
- Mr. Haber and Mr. Lopez discussed the efforts to correct any mistakes regarding District easements. A paralegal will review with CPH help as needed.

**ELEVENTH ORDER OF BUSINESS****Supervisor Requests**

- None.

**TWELFTH ORDER OF BUSINESS****Audience Comments**

- None.

**THIRTEENTH ORDER OF BUSINESS****Adjournment**

On MOTION by Mr. Britt seconded by Mr. Fingeret with all in favor the meeting was adjourned at 3:15 p.m. 5-0
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Chairperson/Vice-Chairperson

**9B**

**TO BE SENT UNDER SEPARATE COVER**



**9C**

# Quarry CDD

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1st Quarter 2023 – Field Management Report  
Inspection date 12-27-22



[www.inframarkims.com](http://www.inframarkims.com)

Inspected by: Jacob Whitlock

## 1. Lake Management

The lakes look healthy, water levels are receding. It was reported that Hydrilla was topping out in some lakes. This was confirmed by inspection. Alligator activity was high. Some photos were taken from a distance because of this. Additional lake maintenance information is found below; all lake issues are low density unless otherwise noted.

### a. Algae on Lakes: Lake 41 & 50



### b. Littorals:

- i. The littorals in lake 40 and 50 appear to be doing very well.



- ii. Alligator Flag in Lakes: Lakes 30 & 63. Both have appeared to have been sprayed.



c. Rocks: No issues observed.

d. Weeds:

- i. Alligator Weed in Lakes: No issues observed.



- ii. **Bitter Melon/Balsam Apple:** No issues observed.
- iii. **Brazilian Pepper:** No issues observed.
- iv. **Cattails in Lakes:** No issues observed.
- v. **Climbing Hemp Vine in Lakes:** No issues observed.
- vi. **Dollar Weed in Lakes:** No issues observed.
- vii. **Hydrilla in Lakes:** Lakes 40, 42, 54, 55, 56, 58, 59, 63A 63B



- viii. **Illinois Pondweed in Lakes:** No issues observed.
- ix. **Palms on Lake Banks:** No issues observed.
- x. **Red Ludwigia in Lakes:** No issues observed.
- xi. **Sedges in Lakes:** No issues observed.
- xii. **Spatterdock/Lily Pads in Lakes:** No issues observed.

xiii. Torpedo Grass in Lakes: Lake 30 and near hole 2, lake 44

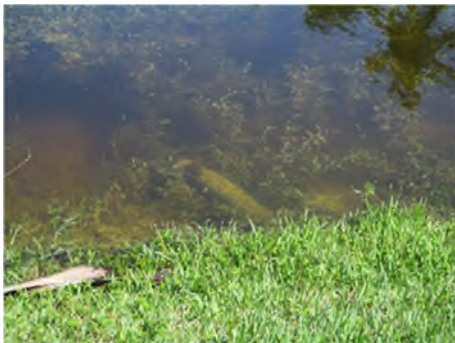


xiv. Various Lake Bank Weeds:

No issues observed.

xv. Various Submerged weeds in Lakes:

Lake 41



Lake 50



Lake 54 (L54L30-1)



Lake 55





xvi. Trash in Lakes:

Lake 63A



e. Bulkheads: No issues observed.

f. Clippings in Lakes: No issues observed.

2. Lake Bank Erosion

a. The erosion on lake 34 next to cart path. run off from the cart path is contributing.



b. Step erosion observed on south bank of Lake 33.



3. Lake Bank Vegetation No issues observed.

4. Storm Drainage System

a. Boundary Berm: No issues observed.

b. Control Structures:



- i. **W1W2:** Control Structure near hole 5 was not flowing. Recommend evaluation of this structure while water levels are down.



- ii. **W1W4:** The control structure was not flowing. Filter fabric is exposed in several areas. Palms and still present on the structure and removal is recommended.



- iii. **W1L30:** Control Structure was not flowing. Weeds and palms are present. The filter fabric is exposed between rocks around the edge.



- iv. **L30COCO2:** Control Structure was flowing. Water levels are receding.



- v. Other numbered structures



L63L30-1



L63L30-2



L59L30 & L59L30-2



L50L30



W4W3



L58L30



L54L30-2



- c. **Drains:** No issues observed.
- d. **Roadway Catch Basins:** No issues observed.
- e. **Catch Basins:** No issues observed.
- f. **Inter-Connect/Drainpipes:** No issues observed.
- g. **Illicit Discharges:** No issues observed.
- h. **Lake Drainage Pipes:** No issues observed.

## 5. Preserve/Wetlands Management

- a. The wetland fence between holes 9 and 10. It is recommended that the preserve company check the fence line for vegetation to avoid fence damage.



## 6. Parcels

No issues observed.

## 7. Fish/Wildlife Observations:

<input type="checkbox"/> Bass	<input type="checkbox"/> Bream	<input type="checkbox"/> Catfish	<input type="checkbox"/> Gambusia
<input checked="" type="checkbox"/> Egrets	<input checked="" type="checkbox"/> Herons	<input type="checkbox"/> Coots	<input type="checkbox"/> Gallinules
<input checked="" type="checkbox"/> Anhinga	<input type="checkbox"/> Cormorant	<input type="checkbox"/> Osprey	<input checked="" type="checkbox"/> Ibis
<input type="checkbox"/> Wood stork	<input type="checkbox"/> Otter	<input checked="" type="checkbox"/> Alligators	<input type="checkbox"/> Snakes
<input type="checkbox"/> Turtles	<input type="checkbox"/> Other: Deer		





8. **Residential Complaints/Concerns:** Wetland 4 behind 9351 Marble Stone Drive. It was reported that a Willow in this location may need to be managed as to not overtake the preserve area. During inspection it appears that the root system of this tree has been cut in a few places. The board may wish to take further action on this matter. This tree is right on the preserve border.





## 9. Non-CDD Issues:

- a. Northwest corner near 11th hole. The fence is overgrown and appears to have been sprayed. It is still advised to cut and remove dead vegetation to avoid damage to fencing. Board to advise if this is the responsibility of the golf course.

09-30-22

12-27-22

