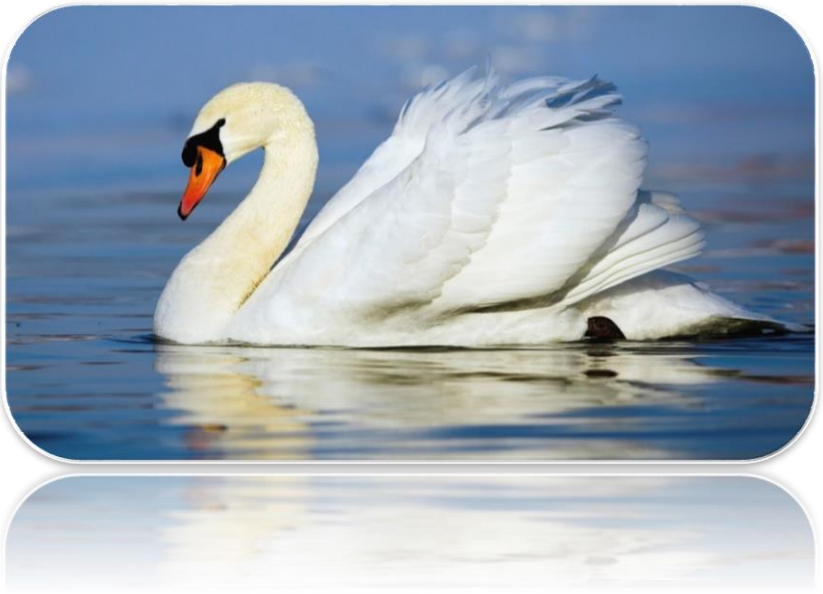
MIROMAR LAKES COMMUNITY DEVELOPMENT DISTRICT



AGENDA

NOVEMBER 28, 2023

PREPARED BY:

JPWARD & ASSOCIATES, LLC, 2301 NORTHEAST 37TH STREET, FORT LAUDERDALE, FL 33308

T: 954-658-4900 **E:** JimWard@JPWardAssociates.com

Miromar Lakes Community Development District

November 21, 2023

Board of Supervisors

Miromar Lakes Community Development District

Dear Board Members:

The regular meeting of the Board of Supervisors of the Miromar Lakes Community Development District will be held on **Tuesday, November 28, 2023,** at **2:00 P.M.** in the Library at the **Beach Clubhouse, 18061 Miromar Lakes Parkway, Miromar Lakes, Florida 33913.**

The following WebEx link and telephone number are provided to join/watch the meeting remotely:
https://districts.webex.com/districts/j.php?MTID=m5dfcf3536cc1e59a90c9eaef91233337
Access Code: **2345 727 7269**, Event Password: **Jpward**
Phone: **408-418-9388** and enter the access code **2345 727 7269,** password: **Jpward** (**579274** from phones) to join the meeting.

Agenda

1. Call to Order & Roll Call.

2. Consideration of Minutes of October 12, 2023 – Regular Meeting.

3. Staff Reports.
   - I. District Attorney.
   - II. District Engineer
   - III. District Asset Manager.
     - a) Operations Report November 1, 2023.
     - b) Waterway Inspection Report October 2023.
     - c) Water Quality Report August 2023.
   - IV. District Manager
     - a) No meeting December 14, 2023.
     - b) Financial Statement for period ending October 31, 2023 (unaudited).

4. Supervisor's Requests and Audience Comments.
   - I. Supervisor Mike Weber: Ravenna Water Management System turnover.

5. Announcement of Next Meeting – **January 11, 2024**.

6. Adjournment.

The first order of business is the call to order & roll call.

The second order of business is the consideration of the Minutes from the Miromar Lakes Community Development District Board of Supervisors Regular Meeting held on October 12, 2023.

The third order of business are the staff reports by the District Attorney, District Engineer, and District Asset Manager.

The fourth order of business is a request from Supervisor Mike Weber to discuss the Ravenna Water Management System turnover.

The balance of the agenda is standard in nature, and I look forward to seeing you at the meeting. If you have any questions and/or comments before the meeting, please do not hesitate to contact me directly at (954) 658-4900.

Sincerely yours,

Miromar Lakes Community Development District

James P Ward

James P. Ward
District Manager

The Fiscal Year 2024 meeting schedule is as follows:

~~**October 12, 2023**~~	~~**November 9, 2023**~~
December 14, 2023 - Canceled	January 11, 2024
February 8, 2024	March 14, 2024
April 11, 2024	May 9, 2024
June 13, 2024	July 11, 2024
August 8, 2024	September 12, 2024

MINUTES OF MEETING
MIROMAR LAKES
COMMUNITY DEVELOPMENT DISTRICT

The Regular Meeting of the Board of Supervisors of the Miromar Lakes Community Development District was held on Thursday, October 12, 2023, at 2:00 P.M. in the Library at the Beach Clubhouse, 18061 Miromar Lakes Parkway, Miromar Lakes, Florida 33913.

Present and constituting a quorum:

Alan Refkin	Chair
Michael Weber	Vice Chair
Patrick Reidy	Assistant Secretary
Mary LeFevre	Assistant Secretary
Doug Ballinger	Assistant Secretary

Also present were:

James P. Ward	District Manager
Charlie Krebs	District Engineer
Greg Urbancic	District Attorney
Bruce Bernard	Asset Manager
Richard Freeman	Asset Manager

Audience:

Heather Chapman	HOA Manager

All residents' names were not included with the minutes. If a resident did not identify themselves or the audio file did not pick up the name, the name was not recorded in these minutes.

FIRST ORDER OF BUSINESS **Call to Order/Roll Call**

District Manager James P. Ward called the meeting to order at approximately 2:00 p.m. He conducted roll call; all Members of the Board were present, constituting a quorum.

SECOND ORDER OF BUSINESS **Consideration of Minutes**

September 14, 2023 – Regular Meeting Minutes

Mr. Ward noted there was one name spelling correction. He asked if there were any other additions, deletions, or corrections for the Minutes; there were none.

On MOTION made by Mary LeFevre, seconded by Mike Weber, and with all in favor, the September 14, 2023, Regular Meeting Minutes were approved as amended.

DRAFT

THIRD ORDER OF BUSINESS Staff Reports

I. District Attorney

No report.

II. District Engineer

No report.

III. Asset Manager

a) Operations Report October 1, 2023

Mr. Richard Freeman indicated the fountain at Port Romano was repaired and reinstalled. He stated lake maintenance in San Marino has begun. He indicated he would bring information regarding further lake bank maintenance to the Board at an upcoming meeting.

Mr. Bruce Bernard stated that they were reviewing proposals for lake bank repair.

IV. District Manager

a) Financial Statement for period ending September 30, 2023 (unaudited)

Mr. Ward indicated CDD financials were good with $533,000 dollars in excess falling into this year. He stated this was a preliminary number subject to audit changes. He noted there would most likely be some audit adjustments necessary, but this number was above the anticipated $340,000 dollars. He stated he anticipated hitting the $1.5 million dollar mark going into September 30, 2024.

Ms. Mary LeFevre stated if this were true it might then be possible to lower assessments.

Mr. Pat Reidy indicated at least a discussion could be had at that point regarding assessment rates. He noted from a cash position the CDD was in a much better position than it was a few years ago.

Mr. Ward agreed.

FOURTH ORDER OF BUSINESS Supervisor's Requests and Audience Comments

Mr. Ward asked if there were any Supervisor's requests.

Ms. LeFevre asked for an update regarding the transfer of drainage permits to the HOA as opposed to the CDD.

DRAFT

Mr. Charlie Krebs explained Miromar granted permission to assemble a package regarding the drainage permits, and the next which would come through would be Phase 2 for Costa Maggiore, following which would be Avellino, but Avellino was under construction with many vacant lots. He stated before the District accepted anything from Avellino, he wanted to be sure the construction was almost completed. He noted Costa Maggiore Phase 2 was almost completed and after Avellino, next was Messina across from FGCU, and the others were still under construction and permitting.

Mr. Refkin asked if there were any update regarding Ravenna.

Mr. Weber noted last month he provided an update. He stated following the meeting he made some phone calls and received an email from an HOA Board Member laying out what the HOA would accept from the CDD, which he found odd. He indicated he then reached out to Boris, the President of the HOA, who was unaware of the email, but made it clear the HOA wished to get Ravenna transferred to the CDD and wished to know what the CDD's expectations were. He stated he then spoke with Jim Ward who spoke with Staff and outlined what was needed to bring Ravenna to a state in which the CDD would accept the transfer: 1) New filter fabric was needed to overlap the old fabric ensuring there was no uncovered rip rap; the existing fabric did not need to be recovered, only the gaps between the fabric needed to be covered with new fabric; 2) the CDD needed a signed and sealed letter from an Engineer indicating the installation was completed in accordance with plans and specifications; 3) all outstanding permits must be closed; 4) the CDD and Engineers would do period inspections and a final inspection for the CDD Board before acceptance; and 5) the CDD would accept a 2 to 1 slope. He stated the 2 to 1 slope was a point of contention, especially in the email he received, in which the email author was demanding a 3 to 1 slope. He stated the CDD would accept a 2 to 1 slope for transfer, but of course preferred a 3 to 1 slope. He stated the 2 to 1 slope meant the CDD would have more maintenance going forward. He noted the review and interpretation of the Ravenna legal documents regarding the transfer was something Ravenna needed to determine; the CDD needed a letter from Ravenna's attorney stating Ravenna's approval of the transfer was done in accordance with Ravenna's declarations and bylaws. He indicated he would continue conversations to obtain a signoff on the CDD's requests and then hopefully move forward. He stated it sounded positive and Ravenna wished to move forward especially given Ravenna was facing a huge assessment it would not have faced if this had been done sooner.

Mr. Refkin complemented Mr. Weber for his efforts in this regard.

Ms. LeFevre asked if the email was sent to Mr. Weber without Boris's knowledge.

Mr. Weber responded in the affirmative; apparently Boris had been unaware of the email. He stated he would provide another update next month.

Mr. Refkin asked about the cane toads.

Mr. Freeman responded installation of new traps was being considered.

Mr. Ballinger asked if the 350 grass carp had been placed in the lake.

Mr. Freeman responded in the affirmative.

Discussion ensued regarding the 350 grass carp.

DRAFT

Mr. Ward asked if there were more Board questions or comments; there were none. He asked if there were any audience comments or questions; there were none.

FIFTH ORDER OF BUSINESS Announcement of Next Meeting

Announcement of Next Meeting – November 9, 2023

SIXTH ORDER OF BUSINESS Adjournment

Mr. Ward adjourned the meeting at approximately 2:15 p.m.

On MOTION made by Alan Refkin, seconded by Mary LeFevre, and with all in favor, the meeting was adjourned.

Miromar Lakes Community Development District

_____ _____

James P. Ward, Secretary Alan Refkin, Chairman

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MIROMAR LAKES
COMMUNITY DEVELOPMENT DISTRICT

Monthly Asset Manager's Report
October 2023

Prepared For:
James Ward
District Manager

Prepared By:

Calvin, Giordano & Associates, Inc.

A SAFEbuilt® COMPANY

CGA Project No. 13-5692
November 1, 2023

MIROMAR LAKES
COMMUNITY DEVELOPMENT DISTRICT

TABLE OF CONTENTS

MIROMAR LAKES
COMMUNITY DEVELOPMENT DISTRICT

I. PURPOSE

The purpose of this report is to provide the District Manager with an update on recent inspection-related activities. We will continue to provide updated monthly inspection reports on the status of ongoing field activities.

II. CURRENT ASSET UPDATES

The following items are currently outstanding:

1. Lake Maintenance

- Aquatic vendor treated grasses, brush, and invasive weeds along the shoreline of lakes #6H, 6I, 6M, 6N, 6O, 6P, 6J, 6K, 6M, 6N, 6O, and the beach club marina rip rap. Selectively treated torpedo grass and vines in the littoral areas of lakes #3D, 3E, 6K, 6R, 6P and 6J. They treated the dead floating eel grass that was getting pushed into the coves of the peninsula marina. Treated submerged aquatic vegetation (Hydrilla) in lake #6J. Treated surface algae in lakes #6H, 6K, 6L and 6R. Treated planktonic algae in lake 3D, 6C, 6P, and 6R. Selectively treated grasses, vines, and invasive alligator weed in the littoral areas of lakes #6P and 6J. Also, hand pulled all the weeds around the shoreline of lake #3D.

- The cane toad vendor has quoted the CDD for 35 bait stations. The vendor has suggested that if he trapped only 2 toads/station per week, that's 70 adult toads per cycle. Considering each female can lay 20,000 eggs in each lake. The vendor is currently averaging 5 toads per test box "2" within Bellini. This is a suggestion to help migrate the tadpole population and keep them at a manageable control level. The CDD is suggesting a total of 35 boxes be installed around select lakes throughout the community. Boxes will be owned by the cane toad vendor on a rental basis by the CDD.

2. Capital

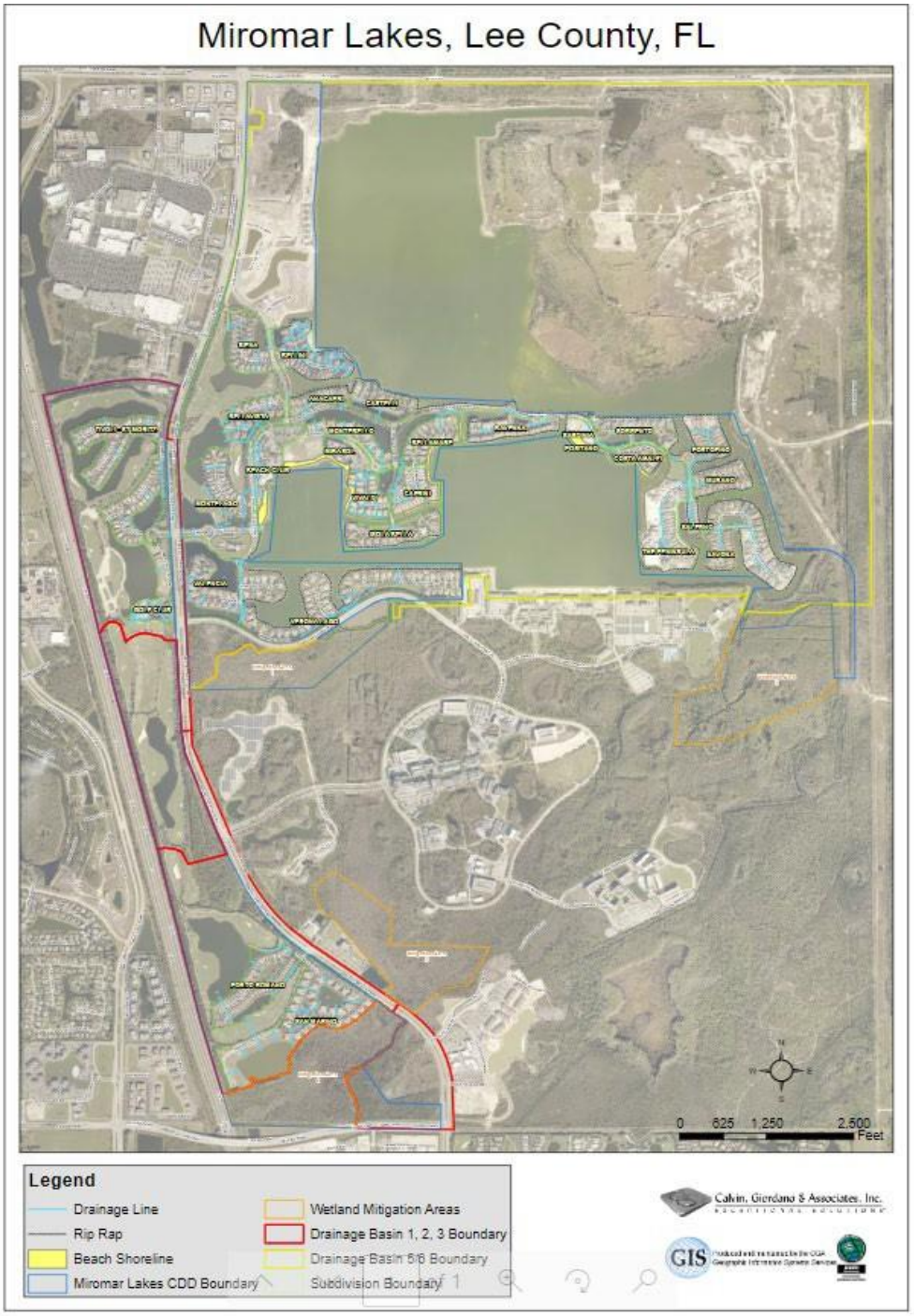
- The submersed vegetation coverage is in good range at the moment. The lake has approximately 15% coverage in vegetation. The next step in the process is to focus on limiting growth in undesired areas. The peninsula area is problematic at the moment. The aquatic vendor will continue treating dock/boat slips and shorelines where growth interferes with water uses/access. CDD staff is working with the vendor on vegetation guidelines to determine where we will allow submerged weeds to be present. Once the vegetation management guidelines are finalized. The aquatic vendor can incorporate this strategy into their regular visits and knock back the vegetation using herbicides to prevent damaging the habit that will be needed in the next few processes.

- The fishery vendor wrapped up their vegetation mapping project and calculated 9-10 acres of emergent vegetation along the shoreline throughout the lake. They will assess and confirm if any additional emergent vegetation can be established. Over the next few weeks, Then the fishery vendor will update the Fisheries Management Plan and propose next steps based on the progress made over the past 12 months.

3. Future Items

- Follow up with lake bank restoration vendor on proposal for repairs to FY 24 capital.
- Periodic inspection of Ravenna riprap shoreline installation will take place.

III. LOCATION MAP



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Certificate of Authorization #514

IV. DISTRICT ASSET MANAGERS PHOTOS

San Marino lake grasses along the shoreline before treatment.

Retention area before yearly cleanup.

Sun Murillo lake.

SOLITUDE
LAKE MANAGEMENT

Miromar Lakes CDD
Waterway Inspection Report

Reason for Inspection: Routine Scheduled

Inspection Date: 2023-10-20

Prepared for:

Miromar Lakes CDD
10160 Miromar Lakes Blvd.
Fort Myers, Florida 33913

Prepared by:

Bailey Hill, Aquatic Specialist

FORT MYERS FIELD OFFICE
SOLITUDELAKEMANAGEMENT.COM
888.480. LAKE (5253)

TABLE OF CONTENTS

Site: 1A

Comments:

Normal growth observed

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels. Some minor growth of chara observed, monitor and treat as needed.

Action Required:

Re-inspect next visit

Target:

Species non-specific

Site: 1B

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 1C

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels. Minor surface algae observed.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 2A

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 3A

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 3B

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 3C

Comments:

Normal growth observed

Shoreline is well maintained. Algae has shown improvement, continue to monitor and treat as needed.

Action Required:

Routine maintenance next visit

Target:

Surface algae

Site: 6A

Comments:

Normal growth observed

Shoreline has shown improvement since last inspection, continue to treat torpedograss and vine growth. Algae and submersed are controlled

Action Required:

Routine maintenance next visit

Target:

Shoreline weeds

Site: 6B

Comments:

Site looks good

Shoreline is well maintained. Algae has improved since last visit, only minor accumulation observed.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6C

Comments:

Site looks good

Shoreline is well maintained. New growth of hydrilla observed, monitor and treat as needed. Lake is lightly planktonic.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6D

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6E

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6F

Comments:

Requires attention

Spot treat dog fennel and torpedograss in littorals. Algae and submersed vegetation are at controlled levels. Some plankton observed.

Action Required:

Routine maintenance next visit

Target:

Shoreline weeds

Site: 6G

Comments:

Normal growth observed

Treatment was evident, continue to spot treat in littorals. Algae and submersed vegetation are at controlled levels. Surface algae has improved since last visit.

Action Required:

Routine maintenance next visit

Target:

Shoreline weeds

Site: 6H

Comments:

Site looks good

Site looks good. Shoreline has shown significant improvement. Algae and submersed vegetation are at controlled levels. Minimal surface algae observed.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6I

Comments:

Normal growth observed

Shoreline has shown significant improvement. Spot treat patch of cattails in thallia and grasses along hedge. Algae and submersed vegetation are

Action Required:

Routine maintenance next visit

Target:

Shoreline weeds

Site: 6J

Comments:

Requires attention

Spot treat sedge and torpedograss. Algae and submersed vegetation are at controlled levels.

Action Required:

Re-inspect next visit

Target:

Shoreline weeds

Site: 6K

Comments:

Normal growth observed

Previous treatment was evident. Spot treat patches of water sprite at the edge of the littorals. Algae and submersed vegetation are at controlled levels.

Action Required:

Re-inspect next visit

Target:

Shoreline weeds

Site: 6L

Comments:

Treatment in progress

Treatment for torpedograss was evident, growth along hedge needs treatment. Algae and submersed vegetation are at controlled levels.

Action Required:

Re-inspect next visit

Target:

Torpedograss

Site: 6M

Comments:

Normal growth observed

Shoreline is well maintained, treat minimal torpedograss. Algae and submersed vegetation are at controlled levels. Lake is slightly planktonic.

Action Required:

Routine maintenance next visit

Target:

Torpedograss

Site: 6N

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels. Lake is slightly planktonic.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6O

Comments:

Treatment in progress

Treatment for shoreline weeds was in progress. Observed significant improvement since last inspection. Algae and submersed vegetation are at controlled levels.

Action Required:

Re-inspect next visit

Target:

Shoreline weeds

Site: 6P

Comments:

Site looks good

Shoreline is well maintained. Minimal growth notes. Algae and submersed vegetation are at controlled levels. Dye was added to prevent plankton growth.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 6R

Comments:

Normal growth observed

Shoreline shows improvement, continue to treat torpedograss and pennywort. Planktonic algae bloom was recently treated, continue to treat as needed.

Action Required:

Re-inspect next visit

Target:

Shoreline weeds

Site: 5/6-1

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 5/6-2

Comments:

Normal growth observed

Shoreline is well maintained. Spot treat minimal torpedograss growth. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Torpedograss

Site: 5/6-3

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next visit

Target:

Species non-specific

Site: 5/6-4

Comments:

Site looks good

Shoreline is well maintained. Algae and submersed vegetation are at controlled levels.

Action Required:

Routine maintenance next vis

Target:

Species non-specific

Management Summary

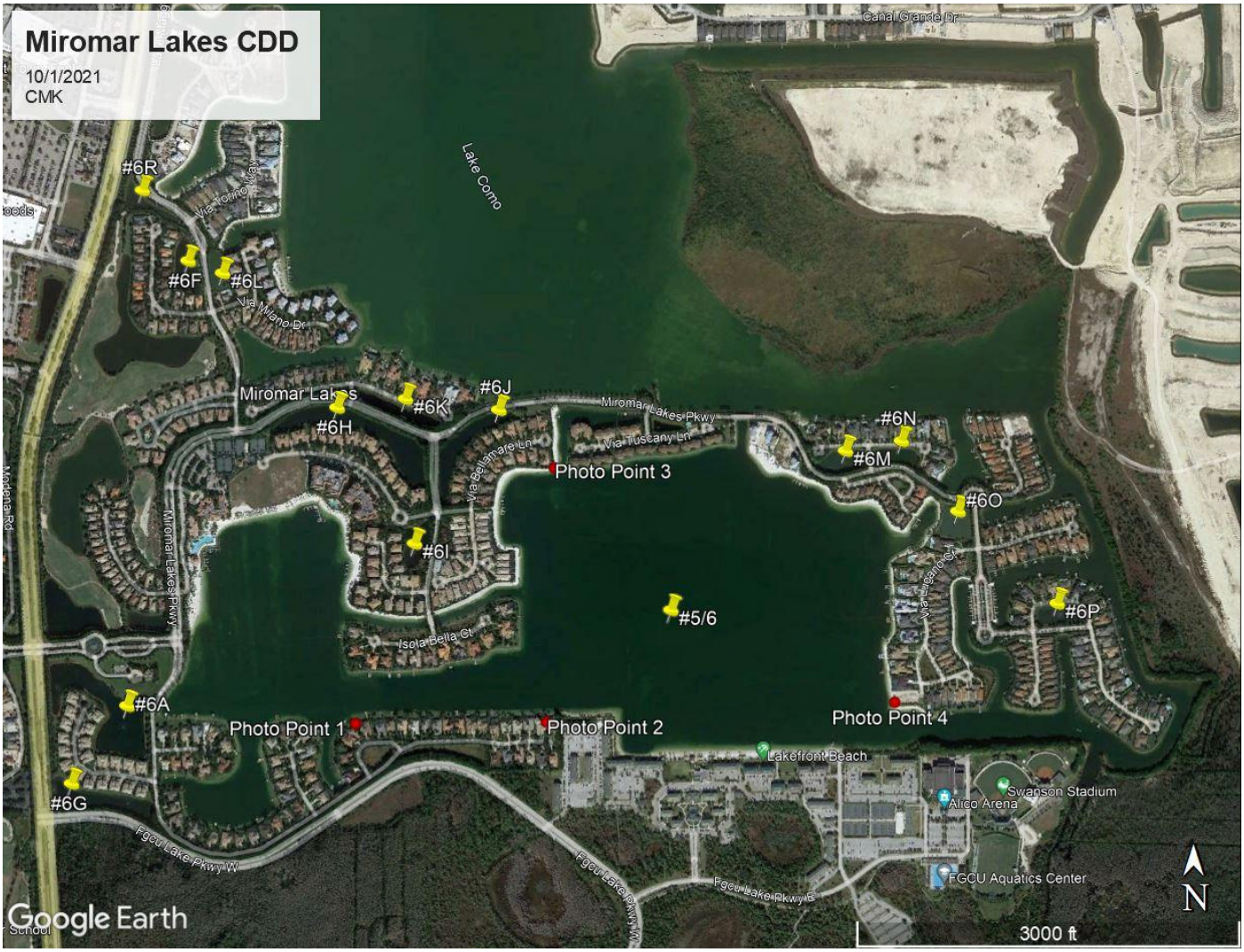
Observations and Action Items:

- Overall the lakes are in good condition. The golf course is well maintained and the only issues found were shoreline weed growth within the communities. Targets include: torpedograss, vines, dog fennel, water sprite, and pennywort. All sites that previously required attention were addressed and showed significant improvement during this inspection. The technician will continue to target weed growth in sites 6F and 6J.

- Lakes 6G, 6F, 6M, and 6N were slightly planktonic. However, no major blooms were observed during this inspection. The technician will continue to monitor these lakes and treat them as needed.

- The next quality control report will be due January 2024.

Site	Comments	Target	Action Required
1A	Normal growth observed	Species non-specific	Re-inspect next visit
1B	Site looks good	Species non-specific	Routine maintenance next visit
1C	Site looks good	Species non-specific	Routine maintenance next visit
2A	Site looks good	Species non-specific	Routine maintenance next visit
3A	Site looks good	Species non-specific	Routine maintenance next visit
3B	Site looks good	Species non-specific	Routine maintenance next visit
3C	Normal growth observed	Surface algae	Routine maintenance next visit
6A	Normal growth observed	Shoreline weeds	Routine maintenance next visit
6B	Site looks good	Species non-specific	Routine maintenance next visit
6C	Site looks good	Species non-specific	Routine maintenance next visit
6D	Site looks good	Species non-specific	Routine maintenance next visit
6E	Site looks good	Species non-specific	Routine maintenance next visit
6F	Requires attention	Shoreline weeds	Routine maintenance next visit
6G	Normal growth observed	Shoreline weeds	Routine maintenance next visit
6H	Site looks good	Species non-specific	Routine maintenance next visit
6I	Normal growth observed	Shoreline weeds	Routine maintenance next visit
6J	Requires attention	Shoreline weeds	Re-inspect next visit
6K	Normal growth observed	Shoreline weeds	Re-inspect next visit
6L	Treatment in progress	Torpedograss	Re-inspect next visit
6M	Normal growth observed	Torpedograss	Routine maintenance next visit
6N	Site looks good	Species non-specific	Routine maintenance next visit
6O	Treatment in progress	Shoreline weeds	Re-inspect next visit
6P	Site looks good	Species non-specific	Routine maintenance next visit
6R	Normal growth observed	Shoreline weeds	Re-inspect next visit
5/6-1	Site looks good	Species non-specific	Routine maintenance next visit
5/6-2	Normal growth observed	Torpedograss	Routine maintenance next visit
5/6-3	Site looks good	Species non-specific	Routine maintenance next visit
5/6-4	Site looks good	Species non-specific	Routine maintenance next visit


Miromar Lakes CDD
10/1/2021
CMK
Canal Grande Dr
Lake Como
#6R
Via Roma Way
#6F
#6L
Via Milano Dr
Miromar Lakes
#6H
#6K
#6J
Miromar Lakes Pkwy
Via Tuscany Ln
Via Bellamare Ln
Photo Point 3
#6N
#6M
#6O
Modena Rd
Miromar Lakes Pkwy
#6I
#5/6
Isola Bella Ct
Via Positano Ct
#6P
#6A
Photo Point 1
Photo Point 2
Photo Point 4
Lakefront Beach
#6G
Swanson Stadium
Alico Arena
FGCU Aquatics Center
Fgcu Lake Pkwy W
Fgcu Lake Pkwy E
Google Earth
3000 ft
N


Miromar Lakes CDD
10/1/2021
CMK
#6E
Miromar Lakes
#1B
#6D
#6C
#1C
#6B
#1A
Three Oaks
Three Oaks Pkwy
San Carlos Park
#2A
Pine Chase Rd
#3A
#3B
Ben Hill Griffin Pkwy
#3C
Google Earth
5000 ft
N

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Fort Myers, Florida 33901
USA
www.ghd.com

Our ref: 11225022-11

November 15, 2023

Mr. Bruce Bernard
Calvin, Giordano & Associates, Inc.
1800 Eller Drive, Suite 600
Fort Lauderdale, FL, 33316

Miromar Lakes Water Quality Sampling Report – August 2023

Dear Mr. Bernard,

GHD Services Inc. (GHD) is pleased to present the results of our water quality sampling services for Lakes 3 and 6 – Miromar Lakes.

1. Water Quality Sampling – August 2023

The August 2023 sampling event consisted of the collection of surface water samples from a total of five (5) test locations (WQL #1 through #4 and #6) from Lake 6. One (1) surface water sample has historically been taken near the outfall of Lake 3 within the Miromar Lakes Golf Club (WQL #5). However, during the time of the August 2023 sampling event, the golf course was under construction and access was not granted to the sampling location by golf course personnel. The sampling locations are depicted on **Figure 1.**

The sampling plan includes sample collection at the following locations and depths:

Sample Identification	Sampling Location	Sample Depth
WQ Location #1	Rip Rap in front of the Miromar Lakes Pkwy Bridge	18 inches
WQ Location #2	Mouth of Canal (west of Via Portofino Way)	18 inches
WQ Location #3A	Back of Weir (southeast of Via Navona Way)	18 inches
WQ Location #4	Beachfront (east of the Miromar Lakes Pkwy & Montlelago Ct.)	18 inches
WQ Location #5	Lake 3 Outfall within the Miromar Lakes Golf Club	18 inches
WQ Location #6	Front of Weir (southeast of Via Navona Way)	36 inches

Conductivity, dissolved oxygen, pH, and temperature were measured in the field with a calibrated YSI Model 556 multi-parameter water quality meter. Turbidity and total water depth were measured at the time of sample collection. Surface Water Field Sheets are attached. Field data is summarized in **Table 1**.

Samples from WQL #1 through #4 and #6 are collected using direct grab sampling methods. The sample from WQL #5 is collected using the direct-dip sampling method with an extendable dipper. The samples are capped, labeled, packed on ice, and transported to Benchmark EnviroAnalytical, Inc., in North Port, Florida. Benchmark EnviroAnalytical, Inc. is certified by the State of Florida and NELAP (National Environmental Laboratory Accreditation Conference). Laboratory analyses are conducted for 5-day biochemical oxygen demand (BOD5),

total suspended solids (TSS), total nitrogen, nitrogen speciation (ammonia, total Kjeldahl nitrogen [TKN], and nitrate + nitrite), total phosphorus, ortho phosphorus (lab filtered), and chlorophyll-*a*.

All samples collected during the August 2023 sampling event were prepared and analyzed within the method required holding times. The laboratory data have been reviewed with respect to authenticity, precision, limits of detection, and accuracy of the data. The laboratory analytical results are summarized in the attached **Laboratory Analytical Reports.**

Trend graphs have been prepared for each monitor location for laboratory analytical results and select field measurements. The trend graphs include water quality action levels for select parameters as developed and presented in the Lake Management Plan for Miromar Lakes. GHD recommends that if a single measurement exceeds an action level that the District notify their lake maintenance contractor to inspect the lake(s) for evidence of potential algal blooms and treat as needed. If a subsequent measurement exceeds an action level, it is recommended that the District investigates potential reasons behind the change and take appropriate action(s) as applicable based on the findings.

2. Analytical Summary

Please note that all averages below are based off of the results from WQL #1 through #4 and WQL #6, as WQL #5 was unable to be accessed during the August 2023 sampling event. It appears that between the prior sampling event in March 2023 and the recent sampling event conducted on August 7, 2023:

- BOD5 levels remained consistent and low. The BOD5 concentration at all sampling locations was below the method detection limit ([MDL], noted by an “U” following the result).
- The chlorophyll-*a* concentration slightly increased at all sampling locations. The average concentration of chlorophyll-*a* increased from 5.42 mg/m^3 in March 2023 to 7.29 mg/m^3 in August 2023. No location revealed chlorophyll-*a* results in exceedance of the action limit defined as 20 mg/m^3.
- Dissolved oxygen (milligrams per liter [mg/L] and %) trends have historically varied but remain relatively consistent when compared with historical trends for August in previous years. Across all sampling locations, the average dissolved oxygen percent for the August 2023 sampling event has increased by 4.9% when compared to the previous sampling event (from 88.8 % in March to 93.7% in August).
- The average concentration of total nitrogen remained relatively consistent across all sample locations when compared to the previous sampling event (from 0.674 mg/L in March to 0.662 mg/L in August).
- The average concentration of total phosphorus remained consistent across all sample locations when compared to the previous sampling event (from 0.028 mg/L in March to 0.029 mg/L in August).
- The concentration of ortho phosphorus remained relatively consistent across all sampling locations.
- The turbidity increased at all locations (from an average of 3.0 NTU in March to 9.68 NTU in August).
- The average concentration of total suspended solids slightly increased since the previous sampling event (from 2.57 mg/L in March to 2.84 mg/L in August).
- The average conductivity decreased at all locations (from 349.8 umhos/cm in April to 319.8 umhos/cm in August).
- The average pH slightly increased from the previous sampling event (from 8.23 SU in March to 8.40 in August).
- The average temperature increased by about 7.46°C (from 25.06°C in March to 32.52°C in August).

Based on historical data, it appears the concentration of BOD tends to be elevated during April/May, especially at WQL #5. While the BOD has historically fluctuated, including detections above the action level (2 mg/L), the BOD generally does not remain above its action level for more than one monitoring event. The last action level

exceedance for BOD was observed in May 2020 at WQL #5. This month, the concentration of BOD at all sample locations was undetected and far below the action level. During the months of April/May, the lake maintenance contractor may need to inspect the lakes, and specifically WQL #5, more often for evidence of potential algal blooms and treat as needed.

The concentrations of chlorophyll-*a* were far below the action level of 20 milligrams per meter cubed (mg/m^3) at all sampling locations. During the previous sampling event, the concentration at WQL #5 neared the action level but remained below at 19.5 mg/m^3. As previously mentioned, WQL #5 was unable to be accessed for the current sampling event due to golf course construction. Chlorophyll-*a* concentrations appear to be low and stable at the locations that were able to be sampled. Previously, a cyclic trend for chlorophyll-*a* concentration was observed at WQL #5. Generally, it appears that there are relatively high chlorophyll-*a* concentrations within WQL #5 during the warmer months (March through August), and low concentrations in the colder months (September through February). Chlorophyll-*a* concentrations at WQL #5 will be closely monitored during the next sampling event to delineate and confirm the observed cyclic trend.

The dissolved oxygen remains significantly above the action level for dissolved oxygen percent (%) (a minimum of 38%). Overall, the concentration of DO has increased across sampling locations since the previous March 2023 sampling event. The only exception to this is WQL #1, where the DO content decreased. The dissolved oxygen content in WQL #3 was closely monitored due to a significant decrease during the previous sampling event. Since March, the dissolved oxygen content in WQL #3 has increased and is now consistent with the other sampling locations. GHD will continue to monitor the dissolved oxygen content in WQL #3 as it has historically fluctuated. This is most likely due to the physical location of the water quality sample, as it is taken directly behind a weir and in a location that contains moderate vegetation growth.

The dissolved oxygen readings at the monitoring locations fluctuate throughout the year as anticipated given the temperature of the water and biological activity. The dissolved oxygen concentration typically fluctuates throughout the year with apparent lows during the latter part of the year (September through December). The results from the August 2023 sampling event are consistent with historical results for August. Based on historical trends, GHD recommends the District notify their lake maintenance contractor to continue to watch for evidence of algal blooms during the September to December months.

For the August 2023 sampling event, overall, total nitrogen remained relatively consistent when compared to the previous sampling event, slightly decreasing at WQL #1 and #6, remaining relatively consistent at WQL #2 and #6, and slightly increasing at WQL #3. All locations remain well below the action level defined for total nitrogen (1.25 mg/L) and are consistent with historical results.

During the August 2023 monitoring event, the concentrations of total phosphorus slightly decreased at WQL #1, remained relatively consistent at WQL #3, #4, and #6, and slightly increased at WQL #2. The total phosphorus concentration was detected between the MDL and the practical quantitation limit ([PQL], noted by an “I” following the result) at WQL #1, #3, and #6. Total phosphorus as detected at WQL #2 with a concentration of 0.032 mg/L and at WQL #4 with a concentration of 0.036 mg/L. Results for total phosphorus are consistent with historical levels and below the action limits, defined as 0.05 mg/L.

Turbidity has fluctuated in the past. The turbidity observed across all sampling locations during the August sampling is higher than historical levels and has increased since the previous sampling event (from an average of 3.0 NTU in March to 9.68 NTU in August), but remains well under the action level, defined as 32 NTU for the parameter.

While the concentration of total suspended solids (TSS) has fluctuated, it generally remains below the action level of 8 mg/L. The results from the August 2023 sampling event revealed that the TSS concentration has

decreased at WQL #3 and #6, remained consistent at WQL #2, and increased at WQL #1 and #4. All locations remain far below the action level.

The conductivity at all monitoring locations during the August 2023 sampling event has decreased when compared to the previous sampling event. Results remain steady and consistent with historical levels for conductivity. Conductivity levels between locations remain consistent with one another. Historically, WQL #5 has a higher level of conductivity, due to its proximity to the golf course, whereas the other sampling locations are from Lake 6 in the residential development area. Therefore, the variation from WQL #5 to the other locations is expected.

The average pH across all water quality locations was calculated to be 8.40 SU, slightly higher than the previous sampling event (8.23 SU), ranging between 8.14 SU at WQL #3 to 8.55 SU at WQL #4. All sampling locations displayed an increasing trend in pH when compared to the previous sampling event except WQL #3, which displayed a decreasing trend. The pH at sampling location WQL #4 slightly exceeds the upper action limit defined as 8.5 SU. The pH across all locations has historically fluctuated and is dependent on many factors. A cyclic increasing and decreasing trend in pH is observed since the beginning of sampling records in April 2016. The lowest pHs across all locations appear to occur towards the end of the year (October to December), whereas the highest appear to occur between April and June.

A Trophic State Index calculation (defined by FAC 62-303.200 and the Water Quality Assessment for the State of Florida 305(b) Report) was used to help classify the quality of water based on each water body's chlorophyll-*a*, total phosphorous, and total nitrogen concentration. A ratio of total nitrogen to total phosphorus was calculated for each water body to determine general conditions. For this sample event, the breakdown of the sample locations is below:

- Nutrient Balanced (10<TN/TP<30) – WQL #1, #2, #3, #4, and #6
- Phosphorus Limited (TN/TP<10) – None
- Nitrogen Limited (TN/TP>30) – None

As can be seen above, all sampling locations were found to be nutrient balanced during the August 2023 sampling event.

A TSI value was calculated based on the TN/TP ratio for each location. A TSI of 0-59 is "good", a value of 60-69 is "fair", and a value of 70+ is "poor". Based on the results of this sampling event, each sampling location's calculated TSI value is:

WQL #1	WQL #2	WQL #3	WQL #4	WQL #5	WQL #6
43.24	45.40	44.87	47.64	NS	45.48

3. Conclusions and Recommendations

Water quality conditions from the August 2023 appear to remain relatively consistent since the previous March 2023 sampling event. Overall, increasing trends were observed in dissolved oxygen, consistent trends were observed in BOD5, total nitrogen, and total phosphorus, and increasing trends were observed in pH and chlorophyll-*a.*

The pH levels at all sampling locations continue to increase. The pH at WQL #4 slightly exceeds the defined upper action limit of 8.5 SU (8.55 SU). GHD expects the pH to decrease before the next sampling event but recommends lake maintenance to closely monitor the pH to ensure WQL #4 does not remain above the upper

action limit. Continued close monitoring of the pH at all sampling locations is recommended due to the fact that pH is a vital parameter for algal growth within freshwater bodies. Cyanobacteria (blue-green algae) prefers basic water (between a pH of 7.5 and 10 SU).

The chlorophyll-*a* concentration slightly increased at all sampling locations, however all locations sampled display concentrations far under the defined action level. During the previous sampling event, the chlorophyll-*a* concentration at WQL #5 neared the action level of 20 mg/m^3 (19.5 mg/m^3). GHD was unable to sample WQL #5 due to construction occurring on the golf course at the time of sampling. GHD recommends that lake maintenance completes frequent visual inspections of WQL #5 to ensure no algal growth is occurring. GHD will continue to monitor the sampling locations closely, especially at WQL #5, in order to ensure levels remain under the action level and to define and confirm the cyclic pattern observed of the concentration rising during the warmer months before dropping in the colder months.

Based on these conclusions, GHD recommends continued water quality monitoring at this time. Due to the previous chlorophyll-*a* spike observed in WQL #5, GHD recommends the District notify their lake maintenance contractor to increase visual monitoring and inspect the Miromar Lakes Golf Club lakes for evidence of potential algal blooms and treat as needed.

The next tri-annual sampling event is planned for December 2023.

Please call if you have questions or need additional information.

Regards,

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Encl: Attachments: Laboratory Data Compliance Memo
Table
Figure
Trend Graphs
Laboratory Analytical Reports
Surface Water Field Sheets

Attachment 1

Table 1

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
August 2023

Sample Location/Sample ID:		WQ Location #1 / WQL1																						
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**	**10/24/19**	**02/17/20**	**06/03/20**	**10/21/20**	**03/03/21**	**08/05/21**	**10/26/21**	**02/17/22**	**08/22/22**	**11/28/22**	**03/27/23**	**08/07/23**
Field Parameters	**Units**																							
Total Water Depth	Feet	7.66	NS	6.1	5.83	3.5	6.2	4.89	2.90	5.7	4.95	6.83	7.2	4.2	3.9	6.5	5.4	6.0	6.0	6.0	5.0	8	8	NM
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	408	353	387	369.3	405	413.1	348.2	407.3	354.6	312.7	387.3	348.4	369	689	300	292	358	304	304	295	337	356.9	322.3
Dissolved oxygen (DO), field	mg/L	8.03	5.91	7.53	8.13	7.95	5.91	6.95	6.89	7.39	8.54	6.49	6.1	8.02	6.05	7.07	7.51	7.0	5.74	5.74	6.12	7.43	7.70	6.25
Dissolved oxygen (DO), field	%	100.9*	79.3	89.4	88.5	101.6	79.6	83.0	87.6	98.9	96.0	80.9	78.1	94.5	77.0	87.1	90.6	93.1	72.3	72.3	83.1	90.1	93.4	87.4
pH, field	s.u.	8.44	8.19	7.92	8.13	7.97	8.23	8.08	8.37	8.24	8.31	8.13	8.36	8.26	8.29	8.57	8.82	8.10	8.32	8.50	8.64	7.77	7.95	8.36
Temperature, field	Deg C	27.08	30.8	24	19.5	28.0	31	24.3	27.7	30.6	21.1	26.6	28.1	23.44	29.1	26.6	25.0	29.91	27.4	27.4	31.5	25.3	25.2	32.6
Turbidity, field	NTU	2.41	3.44	3.55	4.64	8.16	5.05	3.02	2.90	5.53	4.39	3.32	3.71	1.66	3.63	2.42	1.58	1.87	1.82	1.82	2.93	1.48	2.94	8.4
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.80	4.20	3.90	6.0	5.4	6.0	NS	5.0	NS	NS	NS	NS
Wet Parameters	**Units**																							
Ammonia-N	mg/L	U	0.026 I	U	0.035	0.008 U	0.008 U	0.026 I	0.008 U	0.022 I	0.008 U	0.008 U	0.017 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 I	0.008 U	0.008 U	0.008 I	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.24	0.29	0.67	0.66	0.48	0.27	0.52	0.26	0.27	0.45	0.42	0.26	0.42	0.28	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.626	0.878	0.911	0.968	0.611	0.580	0.629	0.551	0.565	0.632	0.619	0.588	0.632	0.591	0.05 U	0.480	0.474	0.531	0.430	0.630	0.689	0.712	0.600
Total nitrogen	mg/L	0.626	0.878	0.911	0.974	0.616	0.592	0.629	0.565	0.574	0.639	0.619	0.588	0.639	0.591	0.05 U	0.480	0.474	0.531	0.430	0.818	0.876	0.736	0.613
Nitrite/Nitrate	mg/L	U	U	U	0.006 I	0.005 I	0.012 I	0.004 U	0.014 I	0.009 I	0.007 I	0.006 U	0.006 U	0.007 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.188	0.187	0.024	0.013 I
Ortho phosphorus (Field Filtered)	mg/L	0.074	0.071	0.030	0.012	0.027	0.038	0.026	0.014	0.017	0.014	0.024	0.026	0.028	0.051	0.0126	0.024	0.011	0.014	0.003 I	0.018	0.007 I	0.023	0.012
Total phosphorus	mg/L	0.087	0.091	0.068	0.038	0.027 I	0.041	0.121	0.017 I	0.018 I	0.026 I	0.034	0.063	0.035	0.053	0.011 I	0.059	0.022 I	0.030 I	0.017 I	0.017 I	0.018 I	0.031 I	0.024 I
Chlorophyll	mg/m3	5.91	7.32	7.86	11.1	8.42	9.27	5.25	10.1	10.1	6.92	3.72	7.81	3.71	3.96	5.76	3.55	7.44	7.06	3.36	8.28	17.3	4.68	6.40
Total suspended solids (TSS)	mg/L	2.35	3.49	4.80	7.00	7.80	6.15	3.67	3.67	4.00	4.20	1.20 I	2.20 I	3.50	3.20	2.40	2.00 I	2.80	0.667 I	2.50	2.20 I	3.90	2.35	3.44
Biochemical oxygen demand (total BOD5)	mg/L	0.706 I	U	U	1.06 I	1.40 I	1.05 I	1.0 U	1.16 I	2.72 I	1.85 I	1.24 I	1.03 I	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Sample Location/Sample ID:		WQ Location #2 / WQL2																						
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**	**10/24/19**	**02/17/20**	**06/03/20**	**10/21/20**	**03/03/21**	**08/05/21**	**10/26/21**	**02/17/22**	**08/22/22**	**11/28/22**	**03/27/23**	**08/07/23**
Field Parameters	**Units**																							
Total Water Depth	Feet	7.43	NS	9.2	8.56	6	6.2	8.01	6.00	10.2	8.65	8.31	10.4	7.8	6.35	9.0	8.8	10.25	7.5	8.5	6.0	15	11	NM
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	422	359	384	385.7	414	435.0	638.9	417.0	363.7	321.2	411.8	346.4	373	701	300	303	346	305	322	293	339	359.5	314.8
Dissolved oxygen (DO), field	mg/L	7.67	5.55	7.12	8.05	7.87	6.21	6.58	6.95	7.52	9.90	6.88	6.27	8.12	5.86	4.64	7.04	7.09	8.64	8.18	7.63	7.36	6.88	7.0
Dissolved oxygen (DO), field	%	97.4	74.0	84.7	87.6	101.8	82.9	77.7	88.0	100.2	110.0	85.9	81.0	96.2	77.2	51.1	86.9	93.7	99.9	90.4	99.2	89.6	89.4	100
pH, field	s.u.	8.37	8.07	7.68	7.97	8.21	8.11	7.89	8.31	8.03	8.06	8.25	8.27	8.49	8.31	8.26	8.72	8.0	8.22	8.44	8.56	7.97	8.26	8.41
Temperature, field	Deg C	27.62	30.4	24.1	19.5	28.7	30.5	23.7	27.5	30.4	20.5	26.7	28.5	23.9	30.1	27.1	25.5	29.87	27.4	20.2	31.6	25.6	25.3	32.7
Turbidity, field	NTU	3.97	31.71	4.38	4.66	7.15	3.12	3.20	8.22	3.75	5.76	3.37	3.55	2.18	3.49	2.40	3.41	2.44	2.13	2.07	2.90	1.13	3.14	8.2
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.30	NS	5.5	6.5	7.0	7.0	NS	7.0	NS	NS	NS	NS
Wet Parameters	**Units**																							
Ammonia-N	mg/L	U	0.019 I	U	0.071	0.008 U	0.008 U	0.036	0.008 U	0.008 U	0.008 U	0.027	0.008 U	0.008 U	0.008 U	0.009 I	0.008 U	0.017 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.26	0.36	0.90	0.84	0.32	0.34	0.71	0.30	0.38	0.69	0.34	0.30	0.28	0.25	NS	NS	NS	NS	NS	NS	NA	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.745	1.15	0.888	1.04	0.507	0.641	0.710	0.675	0.613	0.693	0.606	0.605	0.403	0.556	0.500	0.450	0.469	0.542	0.538	0.635	0.704	0.610	0.632
Total nitrogen	mg/L	0.745	1.15	0.900	1.04	0.514	0.645	0.710	0.690	0.618	0.698	0.606	0.605	0.403	0.556	0.500	0.450	0.469	0.542	0.538	0.806	0.717	0.632	0.643
Nitrite/Nitrate	mg/L	U	U	0.012 I	U	0.007 I	0.004 I	0.004 U	0.015 I	0.005 I	0.006 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.171	0.013 I	0.022 I	0.011 I
Ortho phosphorus (Field Filtered)	mg/L	0.077	0.070	0.064	0.015	0.028	0.050	0.025	0.015	0.020	0.008	0.002 U	0.055	0.035	0.053	0.0288	0.026	0.016	0.015	0.010	0.010	0.005 I	0.016	0.026
Total phosphorus	mg/L	0.079	0.087	0.066	0.031 I	0.054	0.065	0.042	0.023 I	0.008 U	0.009 I	0.008 U	0.073	0.069	0.062	0.012 I	0.032	0.017 I	0.036	0.020 I	0.021 I	0.031 I	0.028 I	0.032
Chlorophyll	mg/m3	6.59	7.28	8.08	11.7	7.76	7.13	5.42	8.35	9.06	8.80	5.28	9.11	4.34	5.11	6.13	2.04	5.95	7.37	3.72	11.6	17.7	5.26	6.95
Total suspended solids (TSS)	mg/L	4.21	3.90	4.60	7.20	6.60	2.60	3.60	8.00	1.00 I	4.67	3.80	2.40	3.00	2.40	2.40	2.80	2.80	2.00 I	1.75 I	2.00 I	4.50	2.04 I	2.55
Biochemical oxygen demand (total BOD5)	mg/L	0.778 I	U	U	1.33 I	1.13 I	1.0 U	1.0 U	1.36 I	1.89 I	1.10 I	1.40 I	1.50 I	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.03	1.0 U	1.0 U	1.0 U

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
August 2023

Sample Location/Sample ID:		WQ Location #3A / WQL3A																						
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**	**10/24/19**	**02/17/20**	**06/03/20**	**10/21/20**	**03/03/21**	**08/05/21**	**10/26/21**	**02/17/22**	**08/22/22**	**11/28/22**	**03/27/23**	**08/07/23**
Field Parameters	**Units**																							
Total Water Depth	Feet	3.78	3.64	3.52	2.81	1.5	4.6	3.35	3.2	3.6	5.87	2.95	4.5	3	1.5	4.0	3.0	3.33	3.75	2.0	3.33	4	2	NM
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	406	329	255	375.7	430	200.4	339	418.9	365.1	323	391.9	373.2	381	690	293	297	363	313	321	296	330	344.4	331.5
Dissolved oxygen (DO), field	mg/L	7.31	4.78	2.93	7.40	14.02	1.38	6.49	6.16	7.33	8.44	5.82	2.05	5.77	6.49	6.41	5.62	3.15	8.43	6.70	6.88	8.25	5.53	6.25
Dissolved oxygen (DO), field	%	91.8	62.9	34.3	81.5	198	17.42	76.4	78.2	97.9	94.3	72.7	25.7	68.5	85.4	80.5	70.2	39.0	98.9	73.5	93.2	96.4	68.2	87.2
pH, field	s.u.	8.44	8.0	6.99	7.96	9.32	6.91	7.97	8.15	8.13	7.53	8.21	7.34	7.93	8.44	8.38	8.49	7.16	7.97	8.49	8.57	8.07	8.24	8.14
Temperature, field	Deg C	27.0	29.7	23.2	20.1	33.7	27.3	23.5	27.6	30.5	20.8	26.7	26.8	23.77	29.3	27.0	25.4	26.24	27.6	19.7	31.3	25.8	25.5	32.7
Turbidity, field	NTU	7.64	78.77	3.48	5.42	86.9	2.99	3.05	3.94	3.63	4.20	2.20	2.79	1.31	3.49	2.76	4.13	1.77	2.70	2.17	2.11	1.32	2.45	9.6
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Lake Bottom	Lake Bottom	Lake Bottom	4.0	3.0	3.33	NS	2.0	NS	NS	NS	NS
Wet Parameters	**Units**																							
Ammonia-N	mg/L	U	0.029 I	0.044	0.027 I	0.008 U	0.008 U	0.009 I	U	0.023 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.009 I	0.008 U	0.035	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.25	0.42	1.54	0.82	0.04	1.22	0.65	0.38	0.32	1.29	0.37	1.02	0.67	0.21	NS	NS	NS	NS	NS	NS	NA	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.581	0.949	1.11	1.06	3.73	0.642	0.634	0.645	0.621	0.949	0.598	0.635	0.451	0.510	0.216	0.526	0.546	0.565	0.607	0.809	0.694	0.558	0.644
Total nitrogen	mg/L	0.581	0.949	1.13	1.06	3.73	0.650	0.634	0.658	0.626	0.954	0.598	0.635	0.451	0.510	0.216	0.526	0.546	0.565	0.607	0.982	0.710	0.570	0.659
Nitrite/Nitrate	mg/L	U	U	0.021	U	0.008 I	0.008 I	0.004 U	0.013 I	0.005 I	0.006 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.173	0.016 I	0.012 I	0.015 I
Ortho phosphorus (Field Filtered)	mg/L	0.073	0.012	0.051	0.012	0.018	0.029	0.031	0.016	0.020	0.025	0.014	0.060	0.043	0.048	0.0199	0.030	0.017	0.012	0.009	0.017	0.013	0.024	0.017
Total phosphorus	mg/L	0.088	0.026 I	0.052	0.033	0.090	0.039	0.048	0.024 I	0.008 U	0.019 I	0.018 I	0.066	0.069	0.064	0.012 I	0.046	0.021 I	0.017 I	0.022 I	0.020 I	0.013 I	0.025 I	0.024 I
Chlorophyll	mg/m3	5.76	8.71	10.1	10.4	249	10.1	4.83	7.85	10.6	8.15	4.60	7.88	3.79	5.10	5.52	4.00	7.06	7.99	4.09	9.16	15.4	6.22	7.66
Total suspended solids (TSS)	mg/L	7.06	6.42	5.11	7.20	95.0	3.80	4.00	3.60	6.00	4.33	2.60	2.40	1.50 I	4.80	2.40	4.20	2.00 I	3	1.75 I	1.67 I	5.00	3.27	2.08 I
Biochemical oxygen demand (total BOD5)	mg/L	U	U	U	1.11 I	10.6	1.39 I	1.0 U	1.12 I	1.66 I	1.19 I	2.32 I	1.27 I	1.0 U	1.0 U	1.0 U	1.30 I	1.32 I	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Sample Location/Sample ID:		WQ Location #3B / WQL3B											WQ Location #6 / WQL6											
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**	**10/24/19**	**02/17/20**	**06/03/20**	**10/21/20**	**03/03/21**	**08/05/21**	**10/26/21**	**02/17/22**	**08/22/22**	**11/28/22**	**03/27/23**	**08/07/23**
Field Parameters	**Units**																							
Total Water Depth	Feet	3.78	4	3.52	2.98	2	4.6	6.94	3.2	3.6	5.87	3.50	12.5	17.6	15.5	10.5	14.4	12.3	10.5	14.0	5.5	19	13	NM
Sample Depth	Feet	3	3	3	2.5	1.5	3	3.0	NS	3	3	3	3	3	3	1.5	3	3	3.0	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	405	341	369	313.1	406	384.1	338.6	NS	354.5	322.4	391.3	340.8	362	688	290	295	365	305	319	294	324	346.1	318.4
Dissolved oxygen (DO), field	mg/L	7.32	6.22	6.82	6.58	8.46	5.59	5.87	NS	7.39	6.32	5.7	5.63	8.44	6.49	6.66	7.43	6.82	8.25	8.40	7.52	7.88	7.79	7.05
Dissolved oxygen (DO), field	%	91.1	82.8	81.2	67.9	109.3	74.0	68.8	NS	98.8	70.6	71.2	72.4	99.2	85.7	83.4	90.4	90.3	85.4	90.8	99.8	96.1	94.4	99.3
pH, field	s.u.	8.46	8.14	7.68	7.77	8.12	8.10	8.00	NS	8.18	8.08	8.22	8.16	8.5	8.51	8.63	8.74	7.59	8.25	8.48	8.76	8.12	8.26	8.52
Temperature, field	Deg C	26.55	30.3	24.1	16.9	28.6	30.0	23.3	NS	30.6	20.8	26.7	28.3	23.28	29.4	29.3	25.2	30.07	27.6	19.6	31.4	25.5	25.1	32.4
Turbidity, field	NTU	7.98	10.03	3.15	21.38	3.93	4.15	2.84	NS	26.26	7.10	2.17	4.85	1.48	2.83	2.13	1.75	2.19	1.79	2.79	2.89	1.38	2.50	10.1
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.80	8.00	7.20	7.0	7.5	6.4	NS	7.0	NS	NS	NS	NS
Wet Parameters	**Units**																							
Ammonia-N	mg/L	U	0.15 I	U	0.097	0.008 U	0.008 U	0.028 I	NS	0.015 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.009 I	0.008 U	0.012 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.24	0.32	0.90	1.29	0.37	0.35	0.63	NS	0.30	0.66	0.36	0.36	0.28	0.19	NS	NS	NS	NS	NS	NS	NA	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.736	0.880	1.04	2.90	0.462	0.715	0.731	NS	0.757	0.722	0.683	0.612	0.414	0.490	0.05 U	0.559	0.448	0.496	0.782	0.539	0.656	0.658	0.618
Total nitrogen	mg/L	0.744	0.880	1.05	2.90	0.472	0.715	0.731	NS	0.763	0.727	0.683	0.612	0.414	0.490	0.05 U	0.559	0.448	0.496	0.782	0.539	0.678	0.670	0.629
Nitrite/Nitrate	mg/L	0.008 I	U	0.012 I	U	0.010 I	0.004 U	0.004 U	NS	0.006 I	0.006 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.022 I	0.012 I	0.011 I
Ortho phosphorus (Field Filtered)	mg/L	0.088	0.064	0.029	0.012	0.029	0.226	0.272	NS	0.020	0.022	0.027	0.063	0.032	0.059	0.0155	0.026	0.002 I	0.014	0.010	0.014	0.002 U	0.015	0.023
Total phosphorus	mg/L	0.092	0.098	0.031 I	0.168	0.054	1.08	0.501	NS	0.013 I	0.033	0.029 I	0.067	0.035	0.064	0.016 I	0.055	0.023 I	0.038	0.020 I	0.015 I	0.008 U	0.023 I	0.029 I
Chlorophyll	mg/m3	5.99	7.05	7.57	64.5	5.44	9.14	3.94	NS	10.8	7.61	5.38	8.86	3.18	4.95	4.80	2.48	7.62	6.69	4.19	8.55	8.09	5.68	7.62
Total suspended solids (TSS)	mg/L	7.11	5.78	3.80	44.7	4.20	4.80	3.20	NS	26.0	3.33	6.20	2.60	1.25 I	3.20	2.60	1.80 I	1.20 I	3	1.25 I	2.40	4.60	2.63	2.31
Biochemical oxygen demand (total BOD5)	mg/L	0.556 I	U	U	6.47	1.0 U	1.45 I	1.0 U	NS	2.01 I	1.0 U	1.16 I	1.04 I	1.0 U	1.0 U	1.39 I	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
August 2023

Sample Location/Sample ID:		WQ Location #4 / WQL4																					
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**	**10/24/19**	**02/17/20**	**06/03/20**	**10/21/20**	**03/03/21**	**08/05/21**	**10/26/21**	**02/17/22**	**08/22/22**	**11/28/22**	**03/27/23**	**08/07/23**
Field Parameters	**Units**																							
Total Water Depth	Feet	12	7.77	14.88	7.91	5.0	10.7	7.9	6.90	11.8	10.7	14.20	15.4	13.55	12.55	13.0	8.01	7.2	7.0	5.5	6.0	NS	12	NM
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	NM	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	403	340	373	361.8	405	404.8	342.0	399.7	342	310.3	382.1	337.0	363	682	286	291	349	302	318	293	317	342.1	312.1
Dissolved oxygen (DO), field	mg/L	7.72	6.55	7.14	8.06	8.33	5.02	5.73	7.13	6.96	7.84	7.28	6.42	8.45	6.42	1.41	7.75	7.31	6.69	8.22	7.06	7.96	8.19	6.91
Dissolved oxygen (DO), field	%	96.4	88.3	85.6	88.3	106.6	66.8	68.2	89.2	92.9	87.8	90.2	82.8	99.4	83.4	17.0	93.5	94.2	89.1	90.6	97.8	94.8	98.6	94.5
pH, field	s.u.	8.58	8.31	7.59	8.10	7.65	8.16	8.08	8.39	8.34	7.99	7.97	8.38	8.58	8.57	8.66	8.80	6.62	8.21	8.26	8.76	7.94	8.42	8.55
Temperature, field	Deg C	26.71	31.1	24.5	19.8	28.1	30.3	24.1	26.8	30.5	20.9	26.3	28.5	23.49	29.9	27.5	24.8	29.95	27.6	19.7	31.9	24	24.2	32.2
Turbidity, field	NTU	1.87	2.04	4.44	3.02	3.11	1.81	2.48	3.38	3.56	4.10	2.72	2.58	1.04	2.48	1.85	2.28	1.76	3.19	3.14	2.07	0.98	3.95	12.1
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.50	8.50	7.00	6.5	8.01	7.2	NS	5.5	NS	NS	NS	NS
Wet Parameters	**Units**																							
Ammonia-N	mg/L	U	0.023 I	U	0.012 I	0.008 U	0.008 U	0.026 I	0.008 U	0.014 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.025 I	0.008 U	0.008 U	0.071	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.20	0.23	0.96	0.68	0.72	0.31	0.53	0.27	0.23	0.74	0.54	0.25	0.24	0.16	NS	NS	NS	NS	NS	NS	NA	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.868	0.887	0.780	0.976	0.518	0.570	0.612	0.610	0.640	0.885	0.615	0.126 I	0.371	0.633	0.05 U	0.538	0.469	0.555	0.430	0.784	0.579	0.743	0.752
Total nitrogen	mg/L	0.868	0.887	0.808	0.976	0.524	0.570	0.612	0.623	0.645	0.885	0.615	0.126	0.371	0.633	0.05 U	0.538	0.469	0.555	0.446	0.969	0.596	0.764	0.768
Nitrite/Nitrate	mg/L	U	U	0.028	U	0.006 I	0.004 U	0.004 U	0.013 I	0.005 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.016 I	0.185	0.017 I	0.021 I	0.016 I
Ortho phosphorus (Field Filtered)	mg/L	0.094	0.017	0.024	0.017	0.030	0.044	0.027	0.019	0.017	0.022	0.026	0.065	0.037	0.042	0.0180	0.021	0.012	0.016	0.010	0.016	0.002 I	0.020	0.023
Total phosphorus	mg/L	0.101	0.021 I	0.027 I	0.038	0.048	0.067	0.038	0.030 I	0.044	0.043	0.038	0.070	0.064	0.064	0.014 I	0.043	0.032	0.043	0.020 I	0.017 I	0.018 I	0.035	0.036
Chlorophyll	mg/m3	4.92	7.11	7.78	9.09	3.94	9.31	4.62	8.66	10.5	8.43	3.43	7.38	2.75	3.78	5.05	1.74	5.39	7.27	3.82	14.2	6.85	5.24	7.80
Total suspended solids (TSS)	mg/L	2.33	2.84	3.60	5.20	3.26	2.60	1.60 I	2.00 I	5.50	2.33	3.40	3.20	1.25 I	3.40	1.80 I	0.570 U	3.60	2.00 I	1.25 I	0.570 U	5.40	2.55	3.80
Biochemical oxygen demand (total BOD5)	mg/L	U	U	U	1.09 I	1.0 U	1.0 U	1.0 U	1.16 I	1.47 I	1.0 U	1.0 U	1.07 I	1.0 U	1.0 U	1.51 I	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

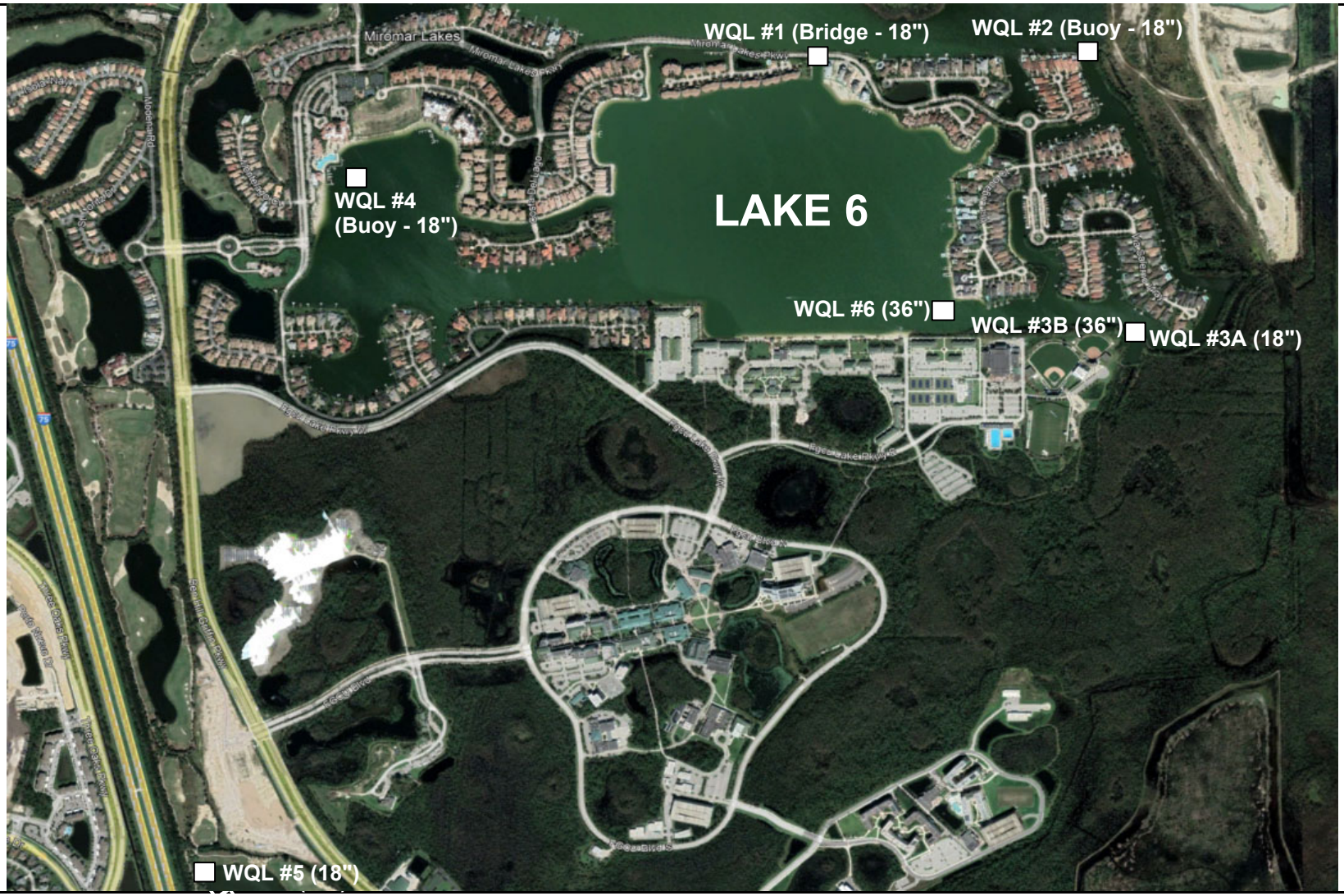
Sample Location/Sample ID:		WQ Location #5 / WQL5																						
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**	**10/24/19**	**02/17/20**	**06/03/20**	**10/21/20**	**03/03/21**	**08/05/21**	**10/26/21**	**02/17/22**	**08/22/22**	**11/28/22**	**03/27/23**	**08/07/23**
Field Parameters	**Units**																							
Total Water Depth	Feet	NS	2	2.03	1.42	2.5	4.32	2.84	S	2.7	1.10	1.50	1.98	1.72	<1	2.0	2.5	NM	4.0	2.0	2.5	NS	NM	NS
Sample Depth	Feet	NS	1.5	1.5	0.5	1.5	1.5	1.5	S	1.5	0.5	0.75	1.0	1	<1	1.5	1.5	1.5	1.5	0.5	1.5	1.5	1.5	NS
Conductivity, field	umhos/cm	NS	411	515	462.0	464	478.4	447.9	464.1	405.1	427.2	475.8	465.0	480	802	373	409	82.9	423	438	397.6	429	475.8	NS
Dissolved oxygen (DO), field	mg/L	NS	4.84	6.22	6.88	8.50	8.03	4.21	5.47	6.09	4.21	5.00	3.20	7.6	5.18	7.65	3.05	6.07	4.69	8.40	6.31	7.13	6.56	NS
Dissolved oxygen (DO), field	%	NS	64.7	77.2	72.2	111.1	109.1	49.6	68.2	81.2	46.1	61.0	41.3	89.3	69.0	96.5	37.5	80.6	60.1	53.4	85.1	87.4	81.8	NS
pH, field	s.u.	NS	7.83	7.77	7.65	7.77	8.10	7.58	7.61	7.80	6.38	6.44	7.99	8.35	8.28	8.18	8.04	8.12	8.01	8.15	8.41	8.40	8.17	NS
Temperature, field	Deg C	NS	30.6	26.4	17.7	29.3	31.5	23.6	26.6	30.4	19.8	25.4	28.4	23.42	30.3	27.4	25.3	30.19	27.9	20.6	32.2	25.7	26.3	NS
Turbidity, field	NTU	NS	2.08	3.62	3.60	5.77	4.65	1.99	4.93	3.40	4.18	4.98	4.71	2.45	5.74	2.96	2.27	4.05	17.12	2.10	2.30	1.22	2.88	NS
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Lake Bottom	Lake Bottom	Lake Bottom	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**																							
Ammonia-N	mg/L	NS	0.033	U	0.008 I	0.008 U	0.008 U	0.034	0.008 U	0.010 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.023 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	NS
TAN criteria calculation	mg/L	NS	0.49	0.70	1.40	0.58	0.32	1.03	0.82	0.52	2.19	1.51	0.46	0.36	0.26	NS	NS	NS	NS	NS	NS	NA	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	NS	0.845	0.786	0.962	0.754	0.756	0.838	1.11	0.857	0.944	0.902	0.807	0.688	1.08	0.137 I	0.755	0.720	0.668	0.925	0.883	0.717	0.982	NS
Total nitrogen	mg/L	NS	0.845	0.794	0.962	0.762	0.760	0.854	1.13	0.863	0.957	0.902	0.807	0.688	1.08	0.137	0.755	0.720	0.668	0.925	1.06	0.737	1.01	NS
Nitrite/Nitrate	mg/L	NS	U	0.008 I	U	0.008 I	0.004 I	0.016	0.016	0.006 I	0.013 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.177	0.020 I	0.029	NS
Ortho phosphorus (Field Filtered)	mg/L	NS	0.022	0.042	0.017	0.027	0.019	0.022	0.016	0.015	0.019	0.023	0.050	0.038	0.055	0.075	0.029	0.014	0.008	0.010	0.016	0.011	0.026	NS
Total phosphorus	mg/L	NS	0.065	0.042	0.036	0.035	0.067	0.046	0.027 I	0.025 I	0.024 I	0.028 I	0.081	0.049	0.102	0.084	0.067	0.035	0.027 I	0.034	0.024 I	0.017 I	0.030 I	NS
Chlorophyll	mg/m3	NS	15.1	12.5	13.9	16.0	25.0	17.3	27.6	19.8	15.4	23.4	15.7	12.6	30.4	22.7	4.93	22.9	16.5	5.08	21.7	10.0	19.5	NS
Total suspended solids (TSS)	mg/L	NS	4.10	4.80	5.00	8.11	11.0	0.570 U	6.20	4.00	3.00	7.60	2.40	3.25	9.00	4.20	3.00	5.40	2.33	1.50 I	2.00 I	5.40	3.00	NS
Biochemical oxygen demand (total BOD5)	mg/L	NS	1.31 I	1.56 I	1.36 I	2.41 I	2.14 I	1.64 I	3.38 I	1.15 I	1.38 I	3.39 I	1.54 I	1.32 I	3.01 I	1.73 I	1.0 U	1.55 I	1.0 U	1.32 I	1.22	1.02 I	1.56 I	NS

Notes:

S - Sample collected from edge of lake
U - Not detected at the associated reporting limit
* DO values at or above 100% are possible super-saturation conditions due to high water temperatures and/or high volume of algae.
NM - Not Measured
NS - Not sampled during noted event
I - Reported value is between method detection limit and the practical quantitation limit

Attachment 2

Figure 1



Tri-Annual Water Quality Sampling Report
Lakes 3 and 6 - Miromar Lakes
Fort Myers, Lee County, Florida

11225022-08

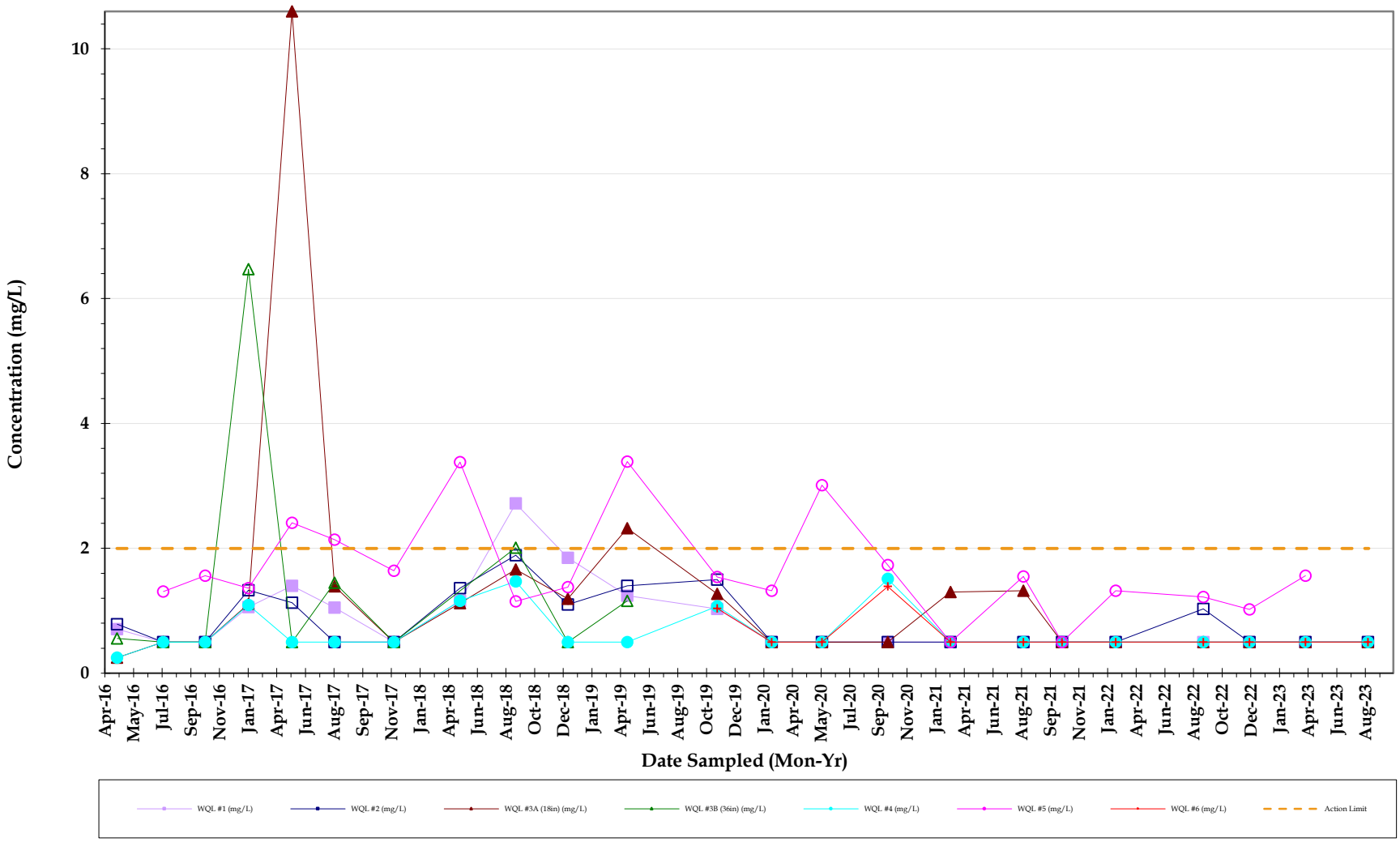
March 2023

Sampling Location Map

Figure 1

Attachment 3

Trend Graphs

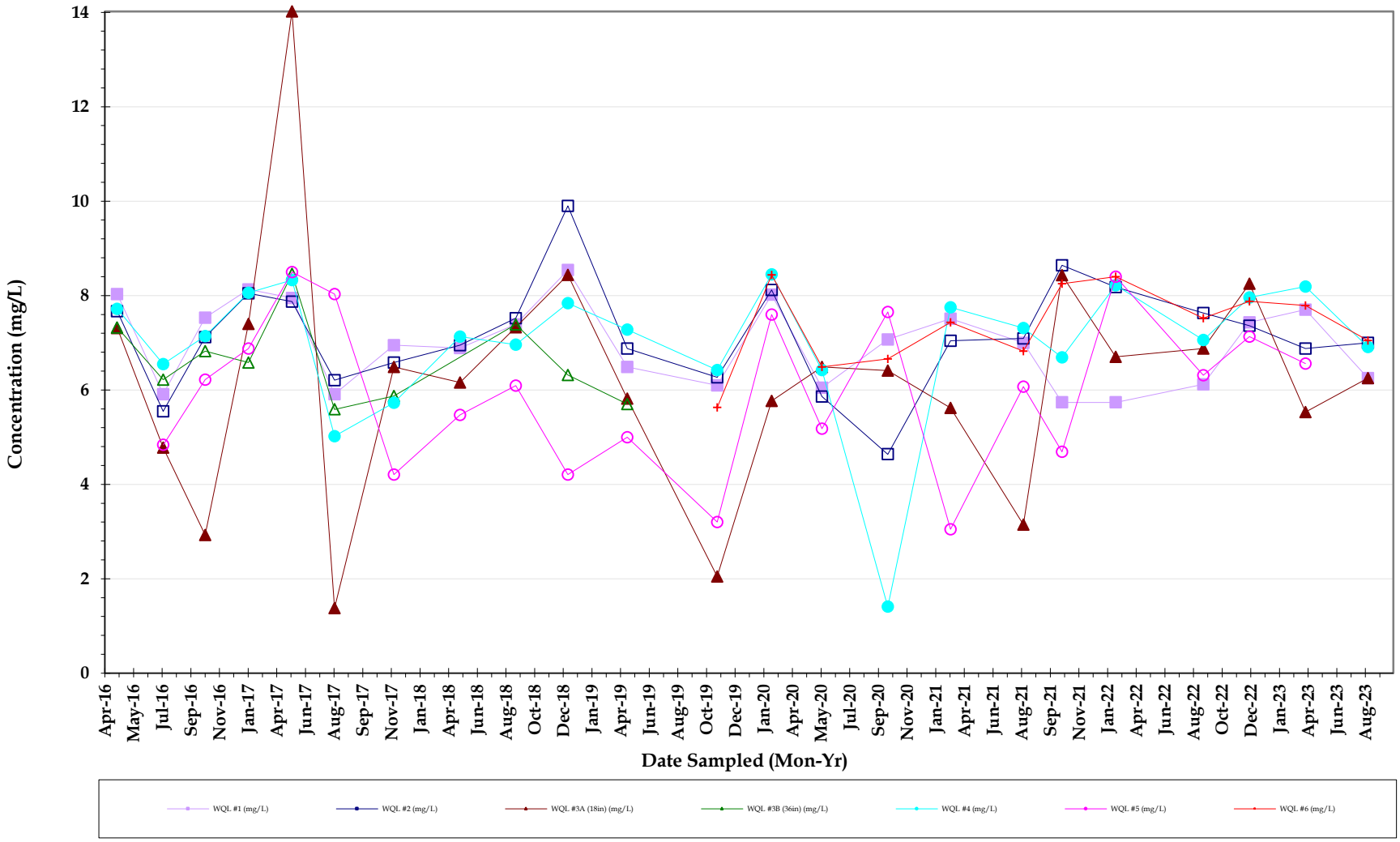


Biochemical Oxygen Demand

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

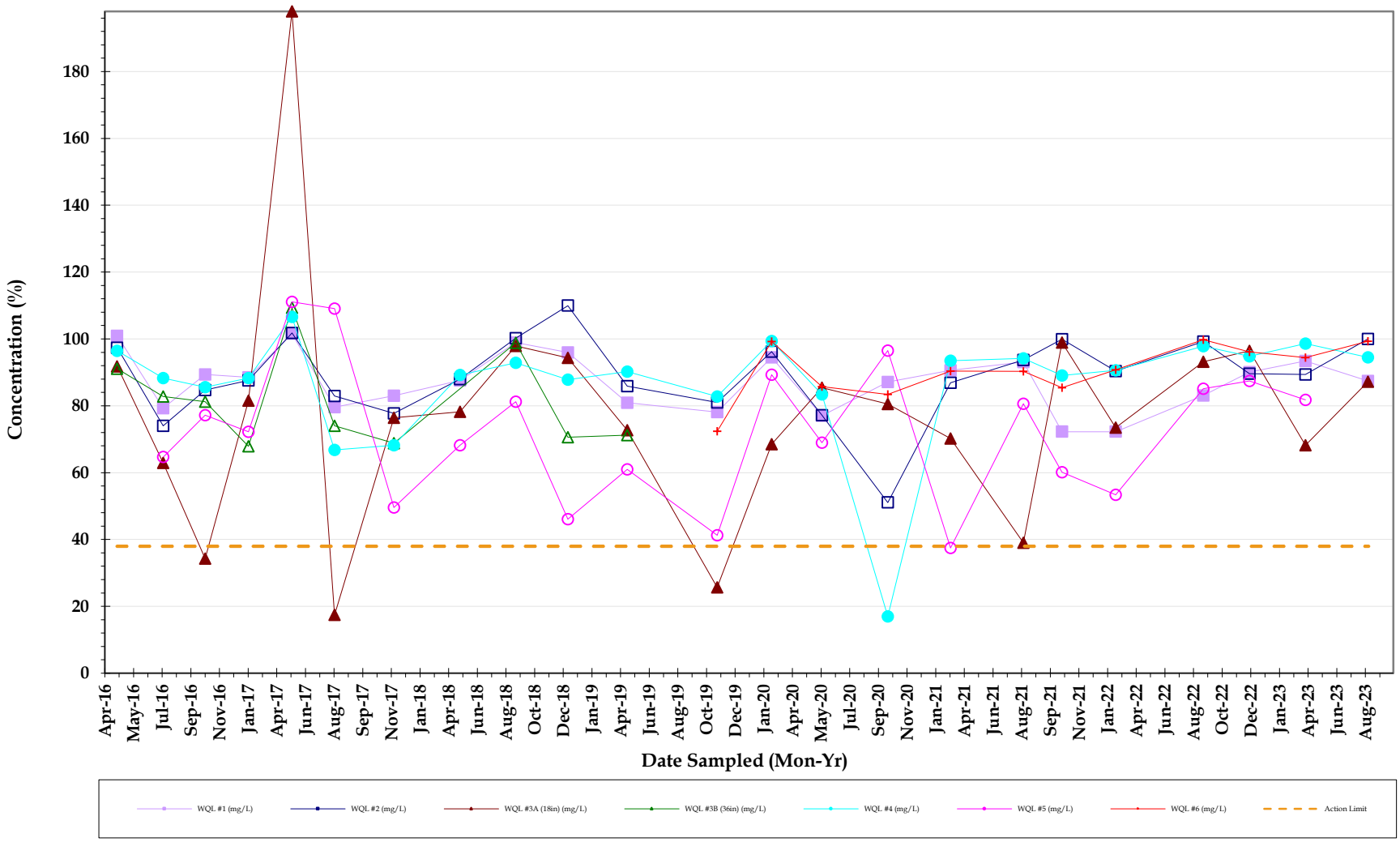


Dissolved Oxygen (mg/L)

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

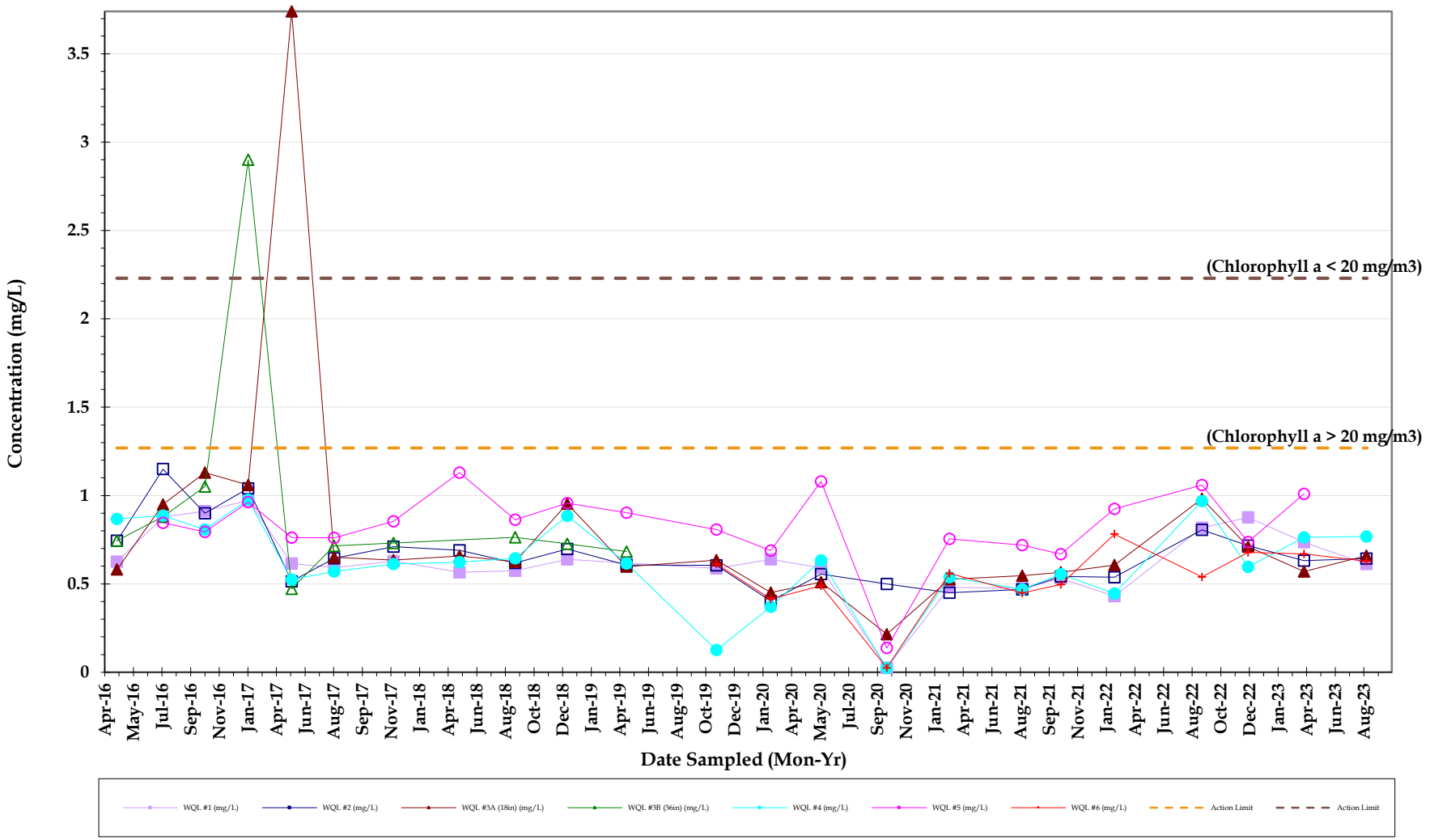


Dissolved Oxygen (%)

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

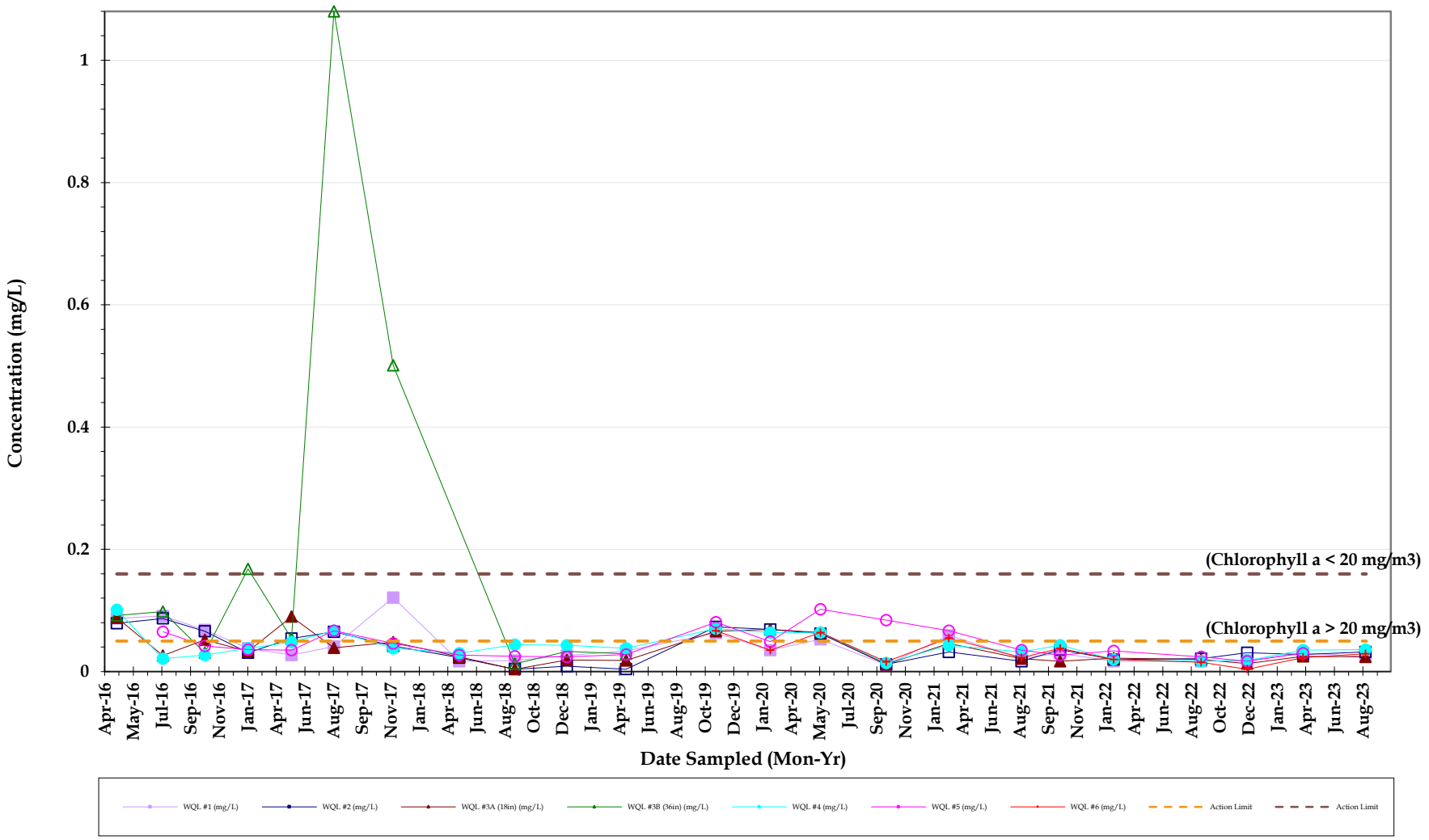


Total Nitrogen

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

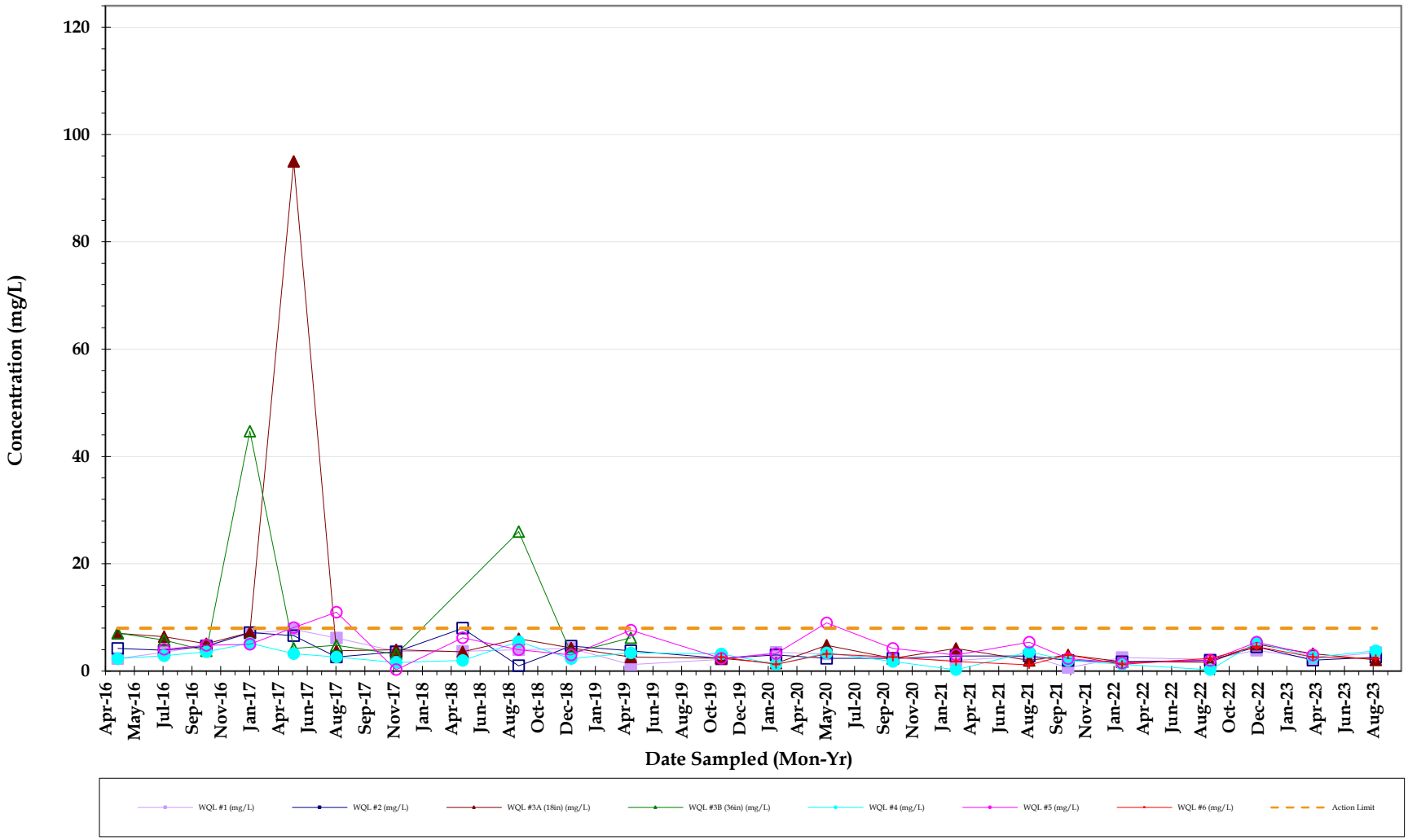


Total Phosphorus

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

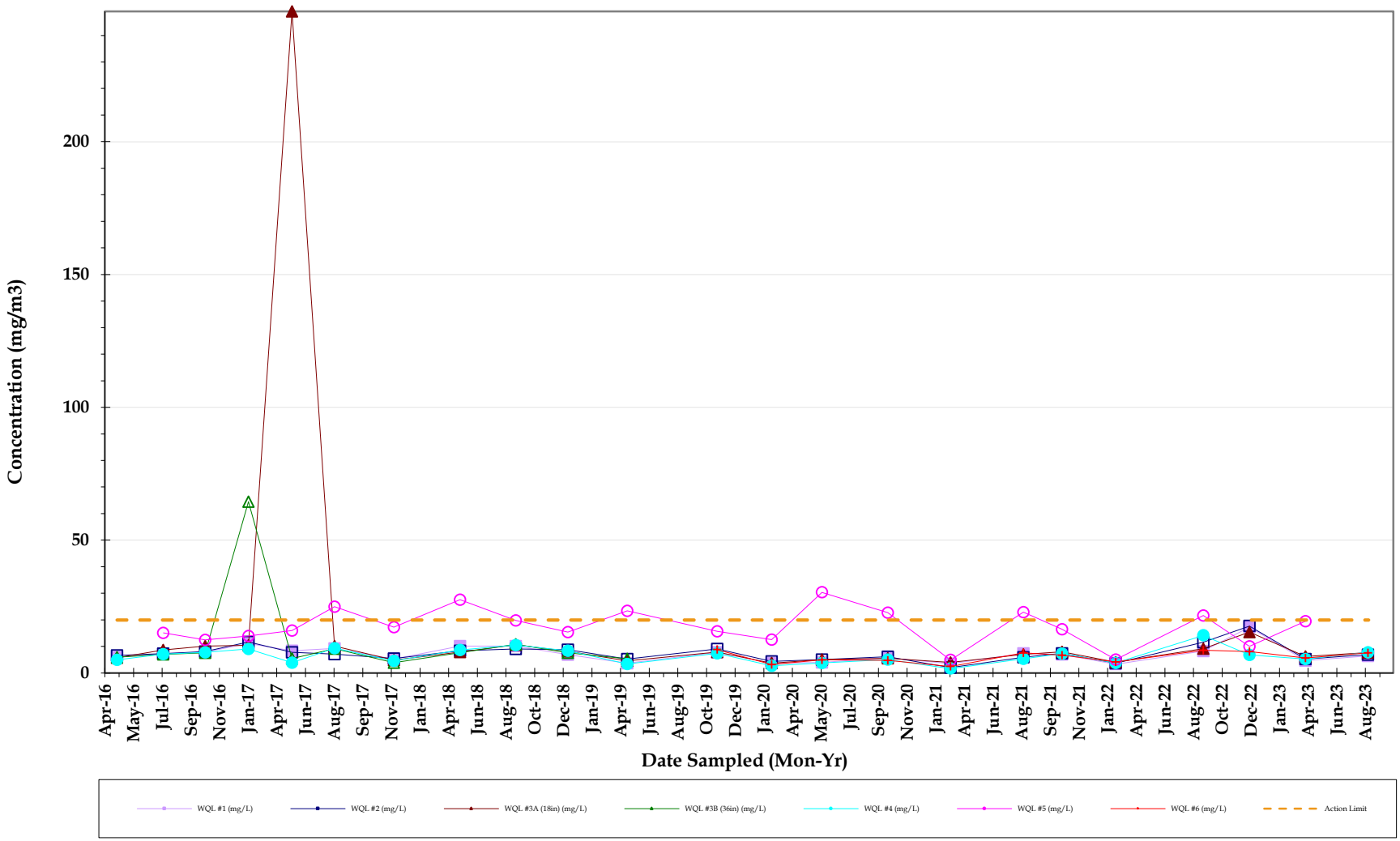


Total Suspended Solids

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

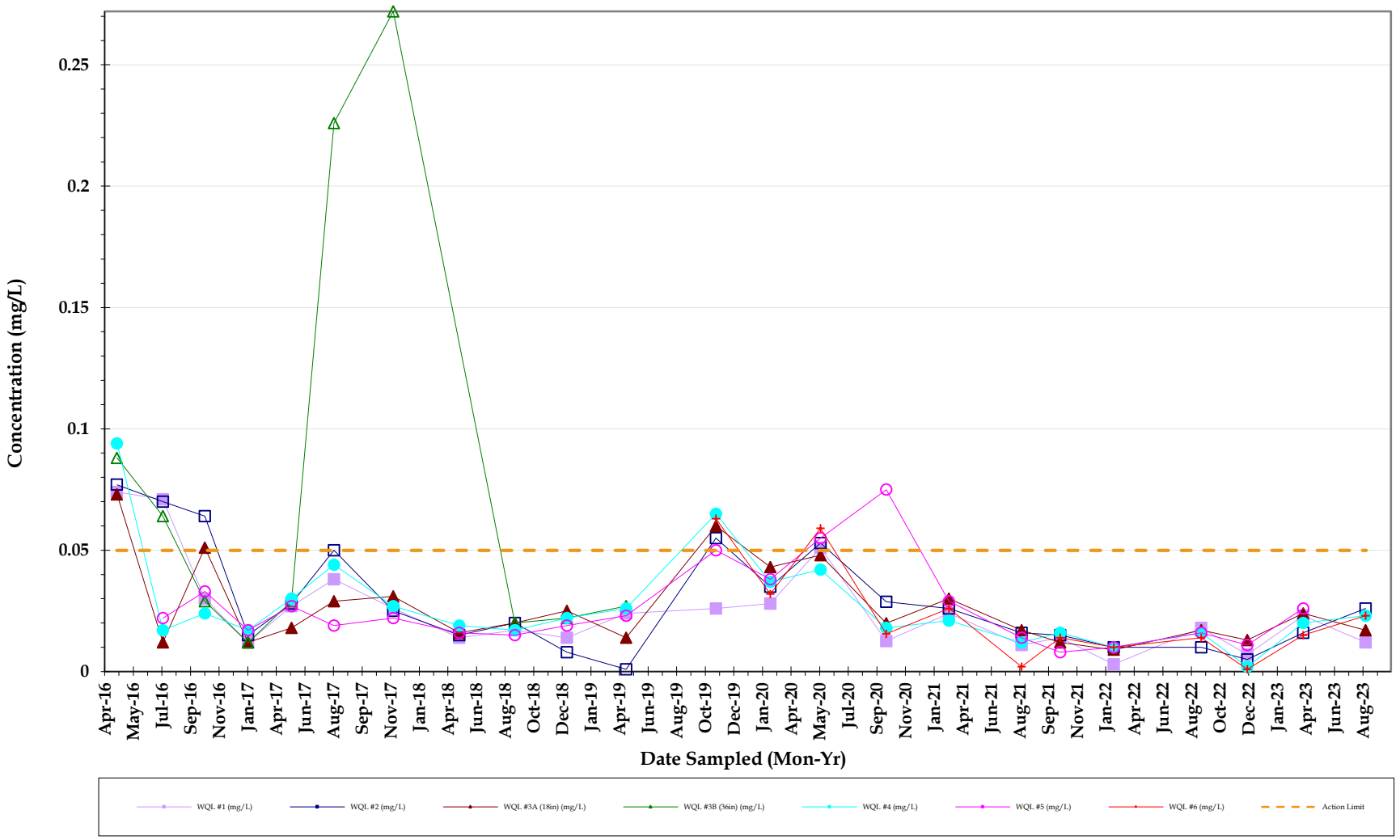


Chlorophyll *a*

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

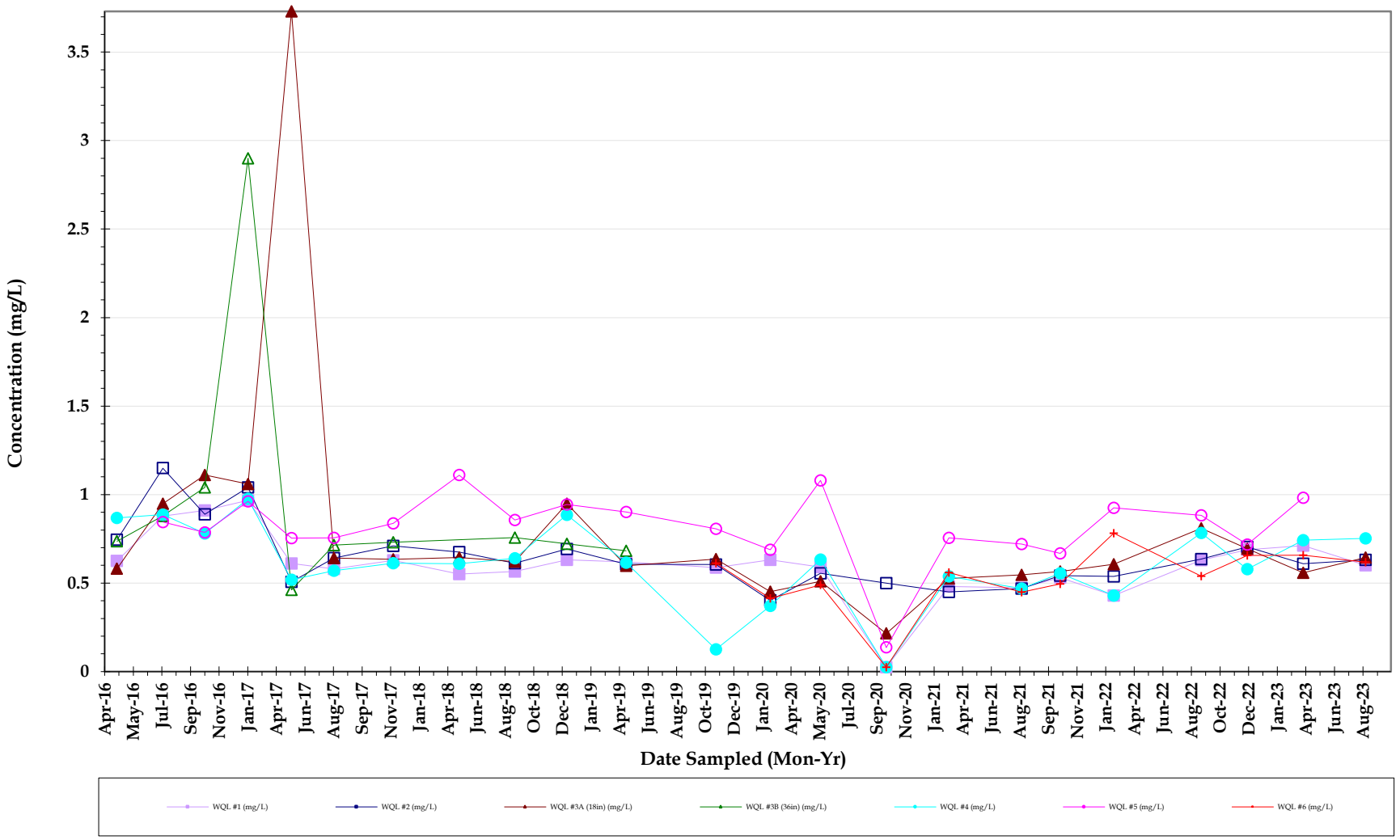


Orthophosphate

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

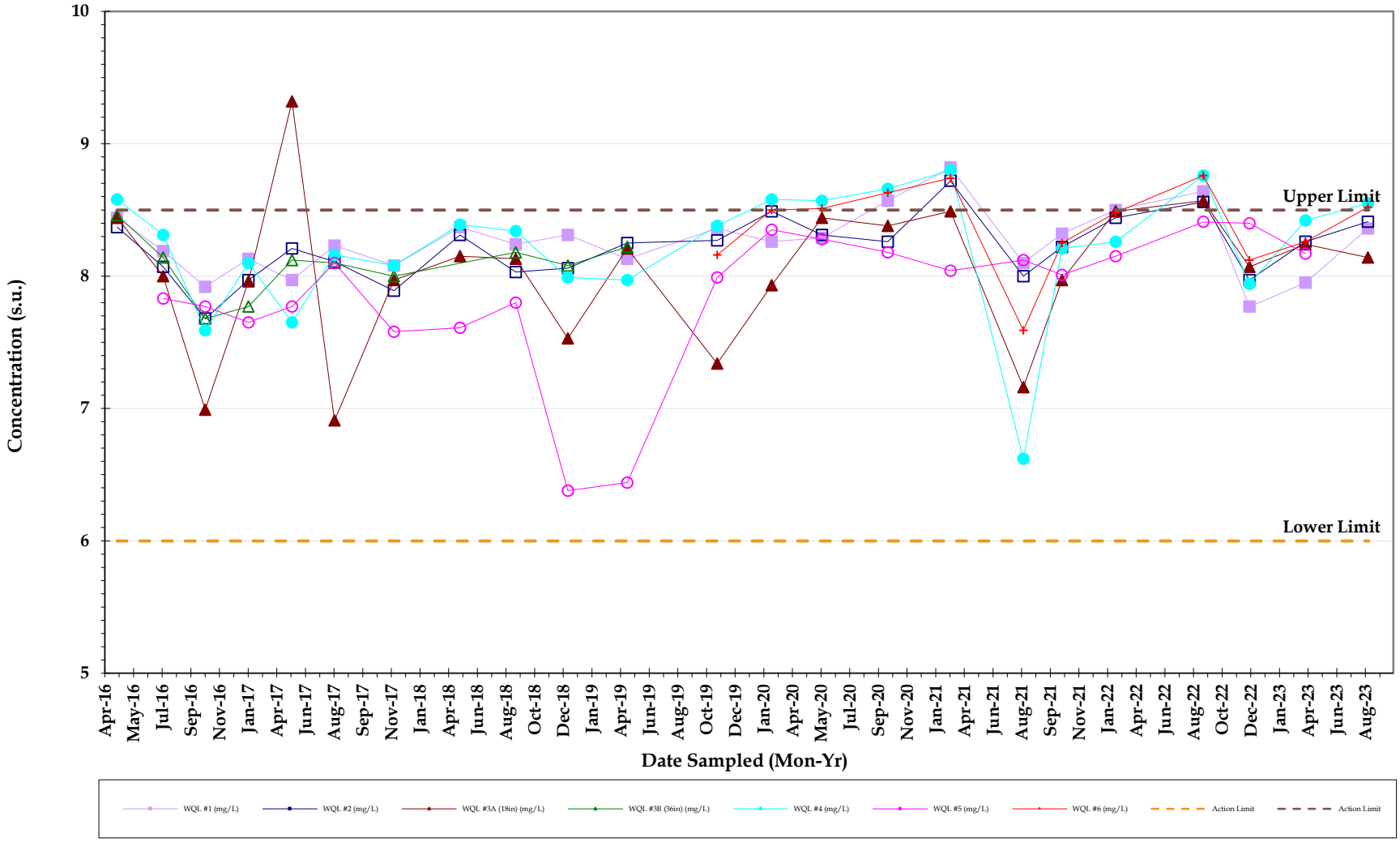


Total kjeldahl nitrogen (TKN)

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

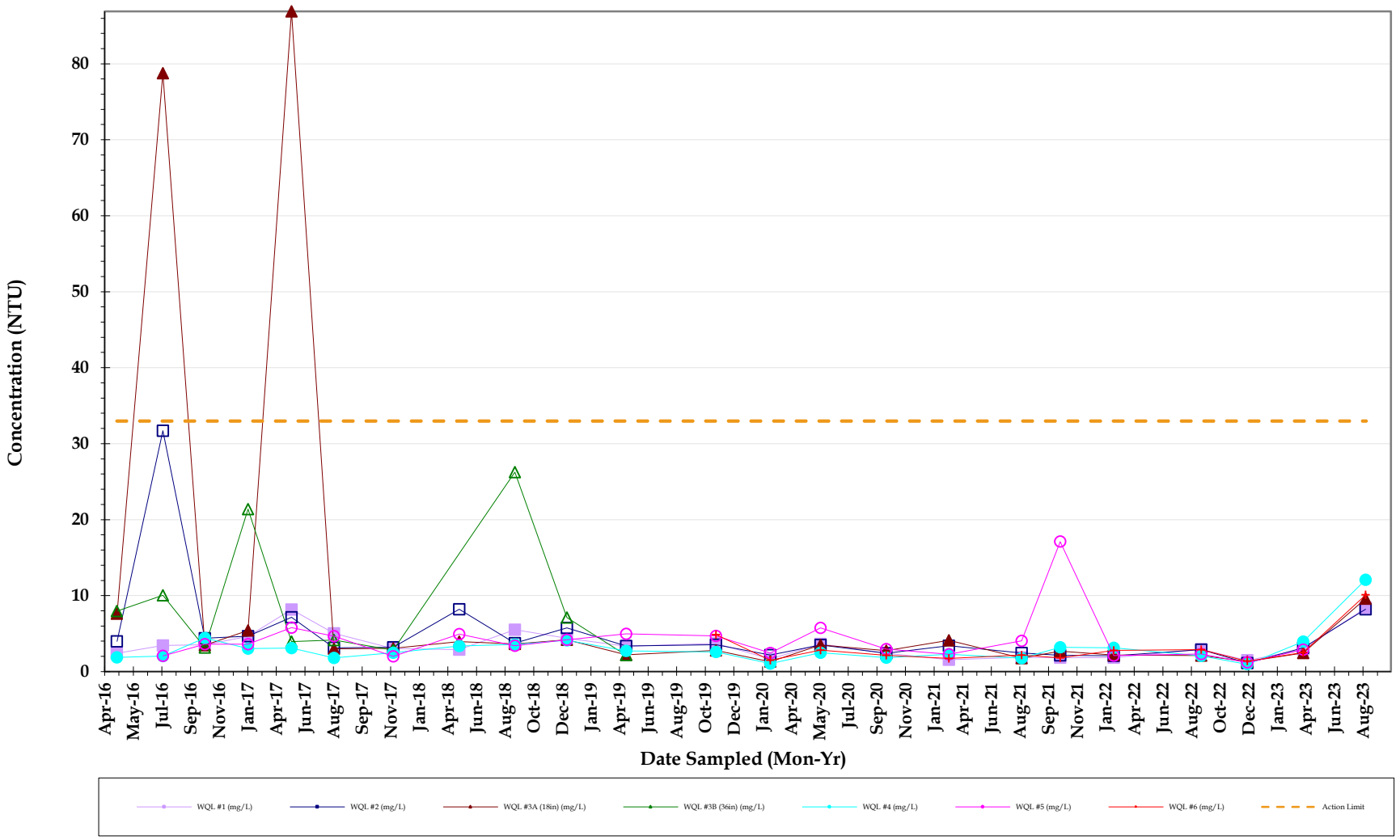


pH, Field

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

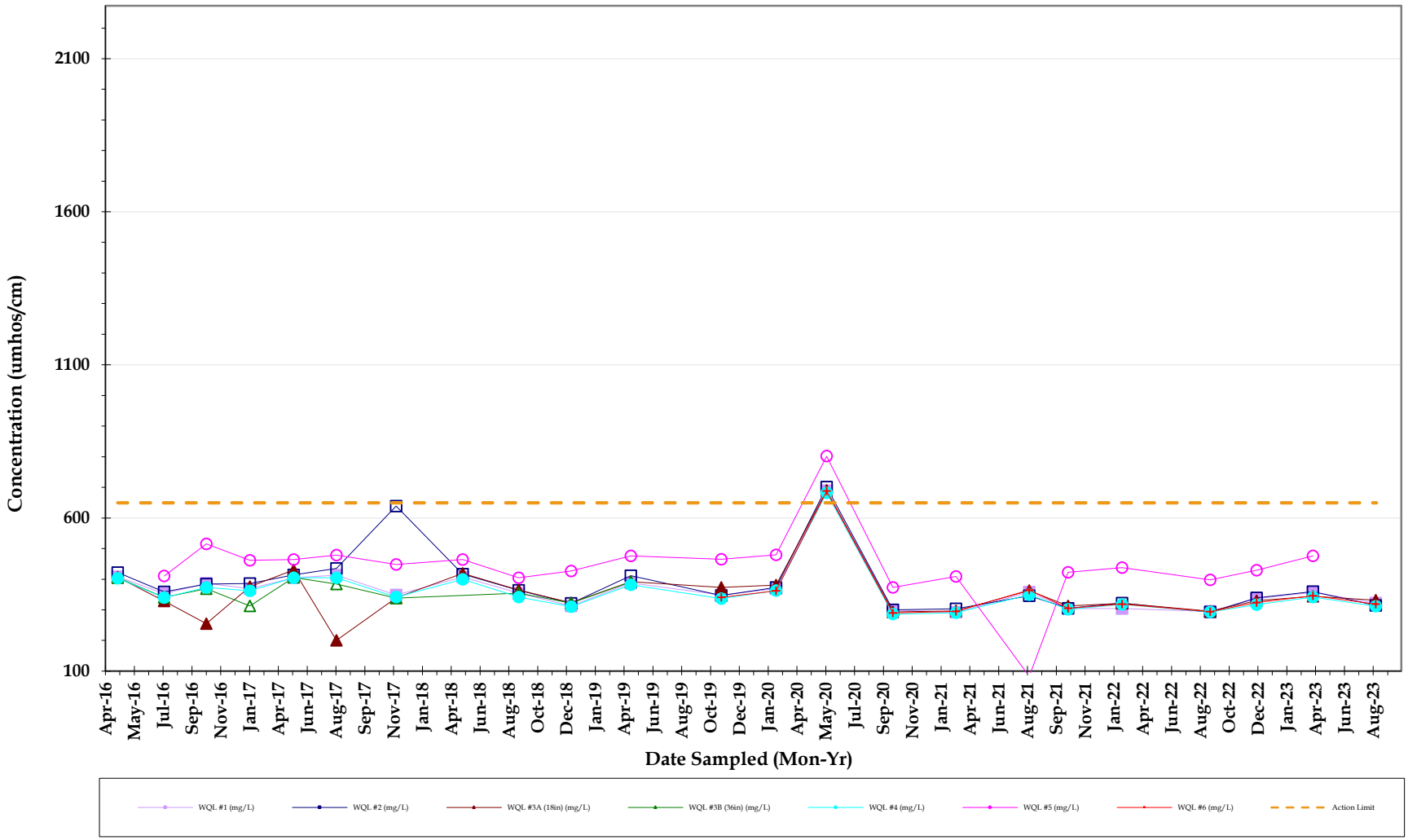


Turbidity

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

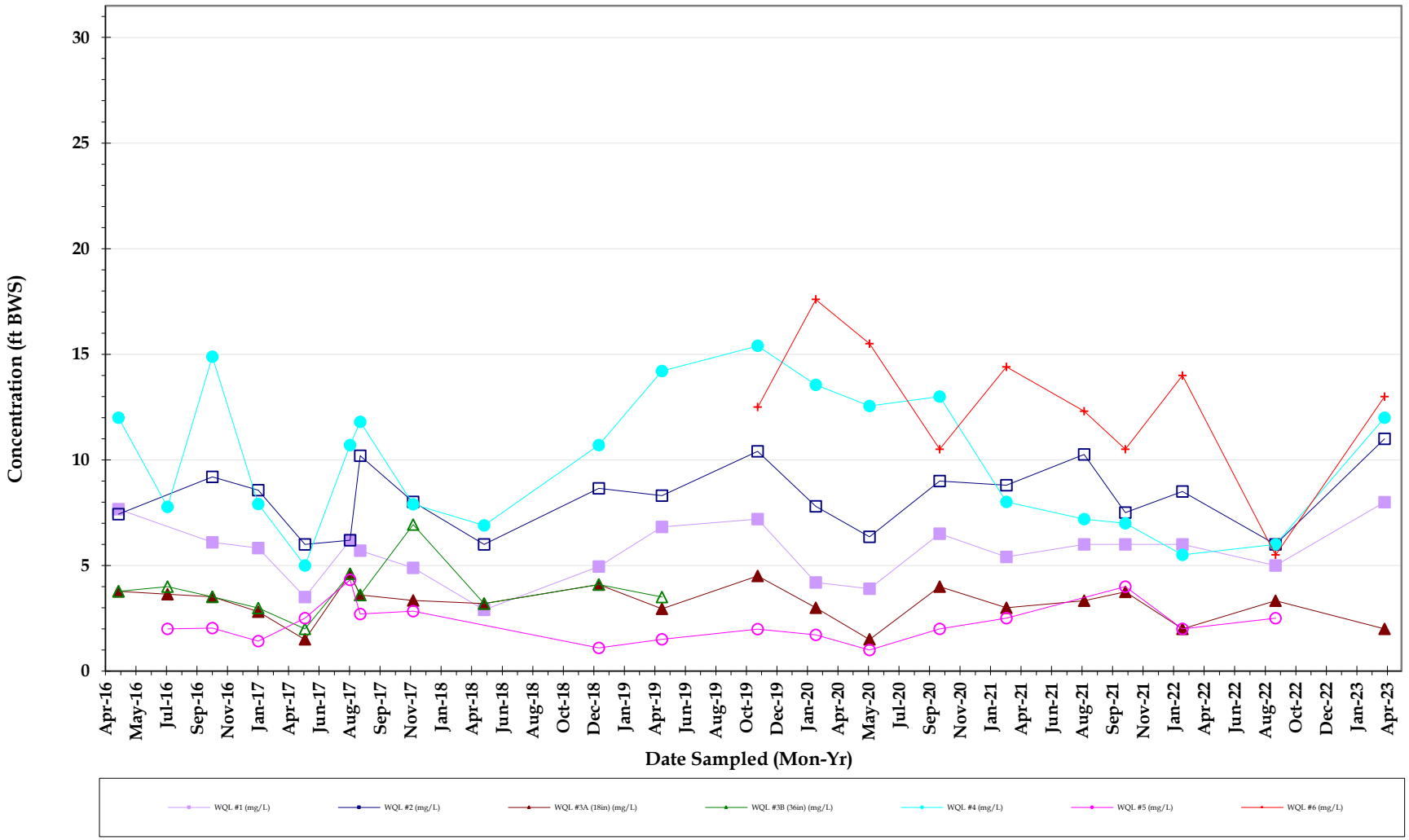


Conductivity

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

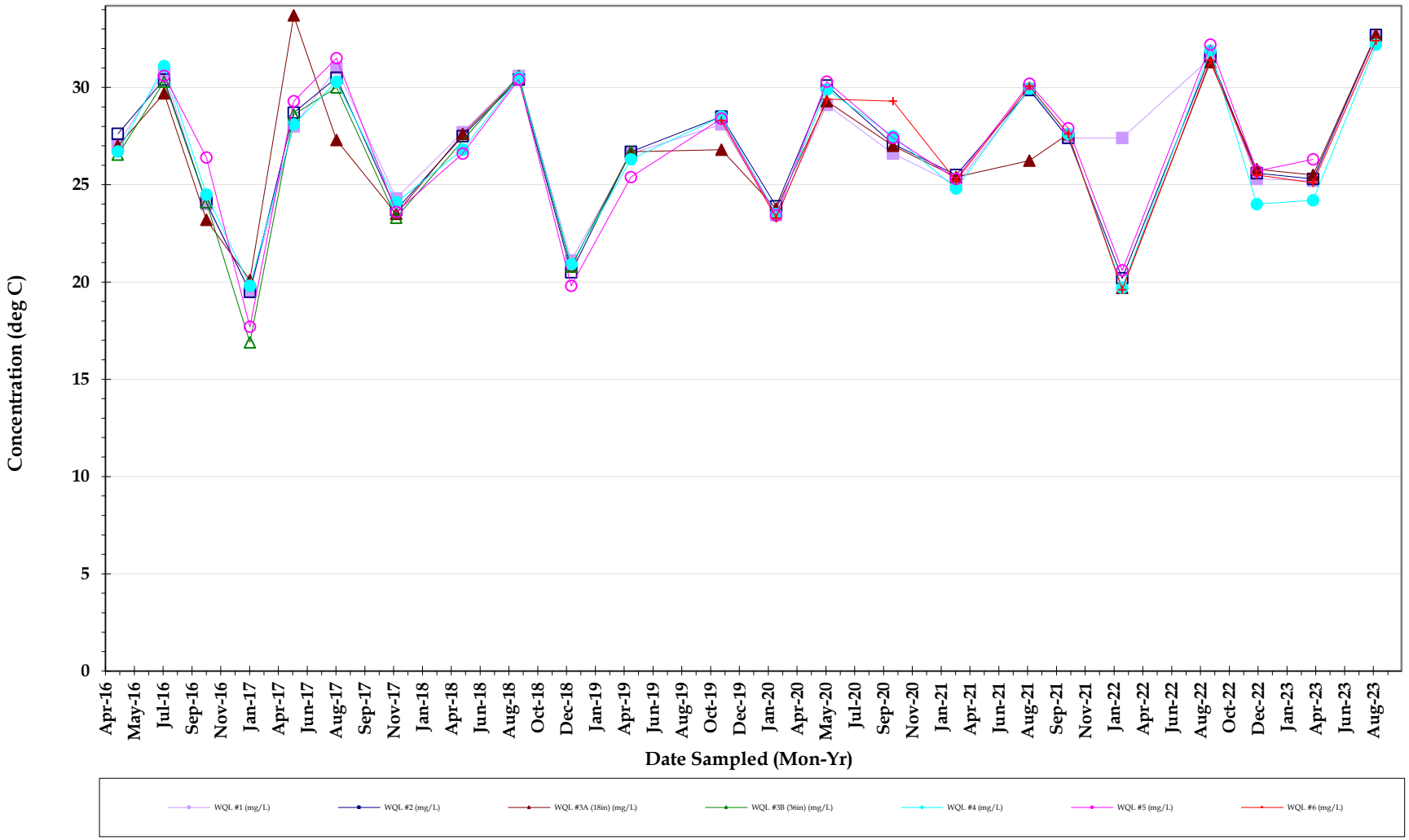


Water Depth

Miromar Lakes

Water Quality Surface Water Sample results

MARCH 2023



Temperature, sample

Miromar Lakes

Water Quality Surface Water Sample results

AUGUST 2023

Attachment 4

Laboratory Analytical Reports

FDOH Certification #E84167

BENCHMARK EnviroAnalytical, Inc.

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 23080476

G H D Services, Inc.
2675 Winkler Ave., Ste.180
Fort Myers, FL 33901

Project Name : MIROMAR LAKES WQM QTLY
Date Received : 08/08/2023
Time Received : 15:14
Project #: 11225022-00

Submission Number: 23080476
Sample Number: 001
Sample Description: WQL #1
Sample Date: 08/07/2023
Sample Time: 12:40
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	08/09/2023 18:05	LK
TOTAL KJELDAHL NITROGEN	0.600	MG/L	0.05	0.20	351.2	08/09/2023 17:27	MS
ORTHO PHOSPHORUS AS P	0.012	MG/L	0.002	0.008	365.3	08/09/2023 10:15	JS
TOTAL PHOSPHORUS AS P	0.024 I	MG/L	0.008	0.032	365.3	09/01/2023 13:54	JS/TH
CHLOROPHYLL A	6.40	MG/M3	0.25	1.00	445.0	08/15/2023 12:13	CH
TOTAL SUSPENDED SOLIDS	3.44	MG/L	0.570	2.280	SM2540D	08/10/2023 12:00	MA
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	08/09/2023 13:12	LD/MA LD
NITRATE+NITRITE AS N	0.013 I	MG/L	0.006	0.024	SYSTEA EASY	08/09/2023 12:48	MS
TOTAL NITROGEN	0.613	MG/L	0.05	0.20	SYSTEA+351	08/09/2023 12:48	MS/MS

Submission Number: 23080476
Sample Number: 002
Sample Description: WQL #2
Sample Date: 08/07/2023
Sample Time: 12:30
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	08/10/2023 16:32	LK
TOTAL KJELDAHL NITROGEN	0.632	MG/L	0.05	0.20	351.2	08/09/2023 17:22	MS
ORTHO PHOSPHORUS AS P	0.028	MG/L	0.002	0.008	365.3	08/09/2023 10:15	JS
TOTAL PHOSPHORUS AS P	0.032	MG/L	0.008	0.032	365.3	09/01/2023 13:55	JS/TH
CHLOROPHYLL A	6.95	MG/M3	0.25	1.00	445.0	08/15/2023 12:13	CH
TOTAL SUSPENDED SOLIDS	2.55	MG/L	0.570	2.280	SM2540D	08/10/2023 12:00	MA
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	08/09/2023 13:12	LD/MA LD
NITRATE+NITRITE AS N	0.011 I	MG/L	0.006	0.024	SYSTEA EASY	08/09/2023 12:49	MS
TOTAL NITROGEN	0.643	MG/L	0.05	0.20	SYSTEA+351	08/09/2023 12:49	MS/MS

Submission Number: 23080476
Sample Number: 003
Sample Description: WQL #3
Sample Date: 08/07/2023
Sample Time: 12:20
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	08/10/2023 16:33	LK
TOTAL KJELDAHL NITROGEN	0.644	MG/L	0.05	0.20	351.2	08/09/2023 17:23	MS
ORTHO PHOSPHORUS AS P	0.017	MG/L	0.002	0.008	365.3	08/09/2023 10:16	JS
TOTAL PHOSPHORUS AS P	0.024 I	MG/L	0.008	0.032	365.3	09/01/2023 10:47	JS/TH
CHLOROPHYLL A	7.66	MG/M3	0.25	1.00	445.0	08/15/2023 12:13	CH
TOTAL SUSPENDED SOLIDS	2.08 I	MG/L	0.570	2.280	SM2540D	08/10/2023 12:00	MA
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	08/09/2023 13:12	LD/MA LD
NITRATE+NITRITE AS N	0.015 I	MG/L	0.006	0.024	SYSTEA EASY	08/09/2023 12:49	MS
TOTAL NITROGEN	0.659	MG/L	0.05	0.20	SYSTEA+351	08/09/2023 12:49	MS/MS

Submission Number: 23080476
Sample Number: 004
Sample Description: WQL #4
Sample Date: 08/07/2023
Sample Time: 11:55
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	08/10/2023 16:35	LK
TOTAL KJELDAHL NITROGEN	0.752	MG/L	0.05	0.20	351.2	08/09/2023 17:32	MS
ORTHO PHOSPHORUS AS P	0.023	MG/L	0.002	0.008	365.3	08/09/2023 10:18	JS
TOTAL PHOSPHORUS AS P	0.036	MG/L	0.008	0.032	365.3	09/01/2023 13:56	JS/TH
CHLOROPHYLL A	7.80	MG/M3	0.25	1.00	445.0	08/15/2023 12:13	CH
TOTAL SUSPENDED SOLIDS	3.80	MG/L	0.570	2.280	SM2540D	08/10/2023 12:00	MA
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	08/09/2023 13:12	LD/MA LD
NITRATE+NITRITE AS N	0.016 I	MG/L	0.006	0.024	SYSTEA EASY	08/09/2023 12:50	MS
TOTAL NITROGEN	0.768	MG/L	0.05	0.20	SYSTEA+351	08/09/2023 12:50	MS/MS

Submission Number: 23080476
Sample Number: 005
Sample Description: WQL #6
Sample Date: 08/07/2023
Sample Time: 12:10
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	08/10/2023 16:37	LK
TOTAL KJELDAHL NITROGEN	0.618	MG/L	0.05	0.20	351.2	08/09/2023 17:34	MS
ORTHO PHOSPHORUS AS P	0.023	MG/L	0.002	0.008	365.3	08/09/2023 10:19	JS
TOTAL PHOSPHORUS AS P	0.029 I	MG/L	0.008	0.032	365.3	09/01/2023 13:57	JS/TH
CHLOROPHYLL A	7.62	MG/M3	0.25	1.00	445.0	08/15/2023 12:13	CH
TOTAL SUSPENDED SOLIDS	2.31	MG/L	0.570	2.280	SM2540D	08/10/2023 12:00	MA
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	08/09/2023 13:12	LD/MA LD

NITRATE+NITRITE AS N	0.011 I	MG/L	0.006	0.024	SYSTEA EASY	08/09/2023 12:50	MS
TOTAL NITROGEN	0.629	MG/L	0.05	0.20	SYSTEA+351	08/09/2023 12:50	MS/MS

Haley Rin

Dale D. Dixon / Laboratory Director — 10/02/2023 Date

Kathleen Gauthier - Technical Director/QC Officer

Haley Richardson - QA Officer

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.
B = Results based upon colony counts outside the ideal range.
H = Value based on field kit determination. Results may not be accurate.
I = Reported value is between the laboratory MDL and the PQL.
J1 = Estimated value. Surrogate recovery limits exceeded.
J2 = Estimated value. No quality control criteria exists for component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
J5 = Estimated value. Data questionable due to improper lab or field protocols.
K = Off-scale low. Value is known to be < the value reported.
L = Off-scale high. Value is known to be > the value reported.
N = Presumptive evidence of presence of material.
O = Sampled, but analysis lost or not performed.
Q = Sample held beyond accepted hold time.
T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.
I = Data deviate from historically established concentration ranges.
? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
* = Not reported due to interference.
Oil & Grease - If client does not send sufficient sample quantity for spike evaluation surface water samples are supplied by the laboratory.

NOTES:

MBAS calculated as LAS; molecular weight = 340.
PQL = 4xMDL.
ND = Not detected at or above the adjusted reporting limit.
G1 = Accuracy standard does not meet method control limits, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.
G2 = Accuracy standard exceeds acceptable control limits. Duplicate and spike values are within control limits. Reported data are usable.

COMMENTS:

Chlorophyll A lab filtered at E85086 on 08/08/2023 at 0923.

For questions or comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

Benchmark EA South
1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7

Benchmark EA, Inc.
1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with Temperature Gun ID #258

Client: **GHD Services, Inc.** (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers Fl 33901
Erik Isern (239) 215-3914 Shannon Tucker 239-210-8653
Email EDD Reports to: Andrew Wyatt (Andrew.Wyatt@ghd.com)
2022 PO# 34043123

Kit Shipped to client via UPS Standard in 1 large cooler

Chain of Custody Form: Miromar Lakes WQM

Project Number: 11225022- 00

Profile: 840, QC Report

Laboratory Submission #: 23560476

Station ID	Sample Type[1]	Sample Matrix[2]	Parameters, Preservative[4], Container Type[3] / Total # of Containers = 4					Laboratory Submission #
			Unique bottle ID 1A	Unique bottle ID 1B	Unique bottle ID 1C	Unique bottle ID 1D	Unique bottle ID 1E	
			NO_3-NO_2 (353.2) TKN (351.2) NH_3 (350.1) TP (365.3) T-N (Calc.)	BOD5 (SM5210B)	Ortho-Phos (Lab Filtered) (365.3)	TSS (SM2540D)	Chlorophyll a (445.0) Filtered @ BEAS 8/8/23 0923	
			1.1mL 1:4 H_2SO_4 pH<2 ✓ Lot # 23-04	Plain	Plain	Plain	Plain	
			1 x ½ Pint Plastic	1 x 1 Quart Plastic	1 x ½ Pint Plastic	1 x 1 Quart Plastic	1 x 500mL Opaque Plastic	
WQL#1	Grab	SW	Date/Time: 8/7/23 12:40					1
WQL#2	Grab	SW	Date/Time: 8/7/23, 12:30					2
WQL#3	Grab	SW	Date/Time: 8/7/23 12:20					3
WQL#4	Grab	SW	Date/Time: 8/7/23 11:55					4
WQL#6	Grab	SW	Date/Time: 8/7/23 12:10					5
	Grab	SW	Date/Time:					

Notes:
1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4. **Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).**
5. Under "Preservative," list any preservatives that were added to the sample container. Lot Number of preservative used is specific to the bottles included in the kit. NaThio, H_2SO_4 and HNO_3 do not have expiration dates per the manufacturer. Micro bottles are pre-preserved at manufacturing stage. 40mL vials are pre-preserved at manufacturing stage.
6. 2 Quart plastic bottles are not certified.

Instructions:
1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.
5. Sample kit has been created by BEA using new, certified bottles unless otherwise noted.

Laboratory Sample Acceptability:
pH <2 : ✓ BEA Temperature: 0.8°C
~~BEAS Temp: 2.9°C~~

1	Collector & Affiliation: (Print & Sign) Madison Hulka Madison Hulka	Date: 8/7/23	Time: 3:20pm	Received By & Affiliation: (Print & Sign) Brooke Kratenick BEAS	Date: 8/8/23	Time: 1520
2	Relinquished By & Affiliation: (Print & Sign) Brooke Kratenick BEAS	Date: 8/8/23	Time: 1144	Received By & Affiliation: (Print & Sign) Steven Neider for BEA	Date: 8/8/23	Time: 1144
	Steven Neider for BEA	8/8/23	1514	Kara McGowan BEA	8/8/23	1514

BENCHMARK
EnviroAnalytical, Inc.

NELAP Certification #E84167

Submission Number: 23080476
Project Name: MIROMAR LAKES WQM QTLY

QC REPORT

SUBMISSION NUMBER	SAMPLE NUMBER	METHOD	ANALYTE	ANALYSIS DATE/TIME	QC FLAG	QC VALUE	SAMPLE RESULT	LR RESULT	LR %RSD	SPK RESULT	STD-SPK %REC
23080485 - 001	691297	350.1	AMMONIA NITROGEN	08/10/2023 17:13	LR		0.034	0.035	1.84		
		350.1	AMMONIA NITROGEN	08/10/2023 17:50	MB	0.00	0.000				
23080418 - 001	691178	350.1	AMMONIA NITROGEN	08/10/2023 16:24	SPK	1.00	0.020			0.934	91.0
		350.1	AMMONIA NITROGEN	08/10/2023 17:07	STD	1.00	0.998				99.8
23080422 - 001	691182	351.2	TOTAL KJELDAHL NITROGEN	08/09/2023 16:21	LR		24.600	23.900	2.05		
		351.2	TOTAL KJELDAHL NITROGEN	08/09/2023 16:33	MB	0.00	0.000				
23080424 - 002	691187	351.2	TOTAL KJELDAHL NITROGEN	08/09/2023 17:09	SPK	2.00	0.790			2.710	95.8
		351.2	TOTAL KJELDAHL NITROGEN	08/09/2023 17:26	STD	2.00	2.090				104.0
23080484 - 001	691288	365.3	ORTHO PHOSPHORUS AS P	08/09/2023 11:00	LR		0.133	0.133	0.00		
		365.3	ORTHO PHOSPHORUS AS P	08/09/2023 12:20	MB	0.00	0.000				
23080424 - 001	691186	365.3	ORTHO PHOSPHORUS AS P	08/09/2023 14:21	SPK	0.20	0.197			0.407	105.0
		365.3	ORTHO PHOSPHORUS AS P	08/09/2023 13:28	STD	0.20	0.201				101.0
23080624 - 011	691508	365.3	TOTAL PHOSPHORUS AS P	09/01/2023 17:13	LR		0.210	0.212	0.84		
		365.3	TOTAL PHOSPHORUS AS P	09/01/2023 17:13	MB	0.00	0.000				
23080663 - 001	691585	365.3	TOTAL PHOSPHORUS AS P	09/01/2023 17:13	SPK	0.20	0.148			0.340	96.0
		365.3	TOTAL PHOSPHORUS AS P	09/01/2023 17:13	STD	0.20	0.185				92.3
23080476 - 001	691273	445.0	CHLOROPHYLL A	08/15/2023 12:13	LR		6.404	6.490	0.96		
23080360 - 001	691098	SM2540D	TOTAL SUSPENDED SOLIDS	08/10/2023 12:00	LR		104.000	112.000	5.24		
		SM2540D	TOTAL SUSPENDED SOLIDS	08/10/2023 12:00	MB	0.00	0.000				
		SM2540D	TOTAL SUSPENDED SOLIDS	08/10/2023 12:00	STD	951.00	1012.000				106.4
23080526 - 001	691368	SM5210B	BIOCHEMICAL OXYGEN DEMAND	08/09/2023 13:12	LR		1930.000	1310.000	27.06		
		SM5210B	BIOCHEMICAL OXYGEN DEMAND	08/09/2023 13:12	MB	0.00	0.000				
23080424 - 001	691186	SYSTEA EASY	NITRATE+NITRITE AS N	08/09/2023 12:32	LR		2.320	2.320	0.00		
		SYSTEA EASY	NITRATE+NITRITE AS N	08/09/2023 12:23	MB	0.00	0.000				
23080424 - 002	691187	SYSTEA EASY	NITRATE+NITRITE AS N	08/09/2023 12:39	SPK	2.00	0.490			2.430	97.2

QC FLAGS: MB or BLK = METHOD BLANK LR = LAB REPLICATE MSD = MATRIX SPIKE DUPLICATE STD or LCS = STANDARD SPK or MS = MATRIX SPIKE

SUBMISSION NUMBER	SAMPLE NUMBER	METHOD	ANALYTE	ANALYSIS DATE/TIME	QC FLAG	QC VALUE	SAMPLE RESULT	LR RESULT	LR %RSD	SPK RESULT	STD-SPK %REC
		SYSTEA EASY	NITRATE+NITRITE AS N	08/09/2023 12:24	STD	0.25	0.247				98.7

Comments:

Attachment 5

Surface Water Field Sheets

SURFACE WATER FIELD SHEET
Station Information

STATION ID: WQL #1

LOCATION: upstream of bridge

DATE/TIME: 8/7/23 1240

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
Small Lake (>4 and <10HA) (collect samples in middle of open water)
(Large Lake (>10HA) (collect samples at selected location point))
Small Stream (collect samples in representative area)
Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet) (Average of 2 measurements)
Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) (No Flow) Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low (Normal) High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn (Direct Grab with Sample Bottle) Dipper Other

Field Measurements		**Meter ID#**			**Field Measurements Read By:** (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1240	1.5	8.36	6.25	87.4	32.6	322.3	8.4
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, (clear,) partly cloudy, windy

PERSONNEL ON SITE: Madison Mullen, Connor Haydon

REMARKS:

SURFACE WATER FIELD SHEET
Station Information

STATION ID: WQL #2

LOCATION: corner at turn

DATE/TIME: 8/7/23 1230

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
Small Lake (>4 and <10HA) (collect samples in middle of open water)
~~Large Lake (>10HA)~~ (collect samples at selected location point)
Small Stream (collect samples in representative area)
Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet) Sample Depth: 1.5 (feet)
(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) (No Flow) Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low ~~Normal~~ High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn ~~Direct Grab with~~ Sample Bottle Dipper Other _____

Field Measurements **Meter ID#** **Field Measurements Read By:** (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1230	1.5	8.41	7.0	100	32.7	314.8	8.2
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: _____

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, (clear), partly cloudy, windy

PERSONNEL ON SITE: MM, CH

REMARKS: _____

SURFACE WATER FIELD SHEET
Station Information

STATION ID: WQ2 #3

LOCATION: adjacent tower

DATE/TIME: 8/7/23 1220

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
Small Lake (>4 and <10HA) (collect samples in middle of open water)
~~Large Lake (>10HA)~~ (collect samples at selected location point)
Small Stream (collect samples in representative area)
Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements) nm (feet) Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) (No Flow) Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low (Normal) High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn ~~Direct Grab with~~ (Sample Bottle) Dipper Other

Field Measurements **Meter ID#** **Field Measurements Read By:** (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1220	1.5	8.14	6.25	87.2	32.7	331.5	9.6
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: —

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, (clear), partly cloudy, windy

PERSONNEL ON SITE: MM CH

REMARKS:

SURFACE WATER FIELD SHEET
Station Information

STATION ID: WQ2 #4

LOCATION: adjacent to boop

DATE/TIME: 8/7/23 1155

ALL TIMES ARE: ETZ or CTZ (circle one)

WATERBODY TYPE: (Circle One)
Small Lake (>4 and <10HA) (collect samples in middle of open water)
Large ~~Lake~~ (>10HA) (collect samples at selected location point)
Small Stream (collect samples in representative area)
Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet) (Average of 2 measurements)
Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow / Flow within Banks / Flood Conditions

WATER LEVEL: (Circle One) Low / Normal / High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn / Direct Grab with Sample Bottle / Dipper / Other

Field Measurements **Meter ID#** **Field Measurements Read By:** (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1155	1.5	8.55	6.91	94.5	32.02	312.1	12.1
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: —

Samples immediately placed on ice? Yes / No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: MM, CM

REMARKS:

SURFACE WATER FIELD SHEET
Station Information

STATION ID: WQL # 5

LOCATION: adjacent to brook

DATE/TIME: 8/7/23

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
- Small Lake (>4 and <10HA) (collect samples in middle of open water)
- Large Lake (>10HA) (collect samples at selected location point)
- Small Stream (collect samples in representative area)
- Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: _____ (feet) (Average of 2 measurements)

Sample Depth: _____ (feet)

STREAM FLOW: (Circle One if applicable) No Flow / Flow within Banks / Flood Conditions

WATER LEVEL: (Circle One) Low / Normal / High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn / Direct Grab with Sample Bottle / Dipper / Other _____

Field Measurements **Meter ID#** **Field Measurements Read By:** (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: _____

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, (clear), partly cloudy, windy

PERSONNEL ON SITE: CH, MM

REMARKS: Location under construction, golf course personnel did not allow access, Sample wasn't collected

SURFACE WATER FIELD SHEET
Station Information

STATION ID: WQL #6

LOCATION: upstream of Furr

DATE/TIME: 8/7/23 1210

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
Small Lake (>4 and <10HA) (collect samples in middle of open water)
(Large Lake (>10HA) (collect samples at selected location point))
Small Stream (collect samples in representative area)
Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet) (Average of 2 measurements)
Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) (No Flow) Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low (Normal) High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn (Direct Grab with Sample Bottle) Dipper Other _____

Field Measurements **Meter ID#** **Field Measurements Read By:** (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1210	1.5	8.52	7.05	99.3	32.4	318.4	10.1
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: _____

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, (clear), partly cloudy, windy

PERSONNEL ON SITE: MM, CAP

REMARKS:

Attachment 6

Laboratory Data Compliance Memo

Data Compliance Report

November 07, 2023

To	Mr. Bruce Bernard Manager of Field Operations Calvin, Giordano & Associates, Inc. 1800 Eller Drive, Suite 600 Fort Lauderdale, FL 33316	**Contact No.**	716-205-1977
Copy to	File	**Email**	Sheri.Finn@ghd.com
From	Sheri Finn/eew/28	**Project No.**	11225022
Project Name	Miromar Lakes Surface Water Sampling		
Subject	Analytical Results Compliance Report Surface Water Quality Monitoring Miromar Lakes Fort Myers, Florida August 2023		

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

1. Compliance Review

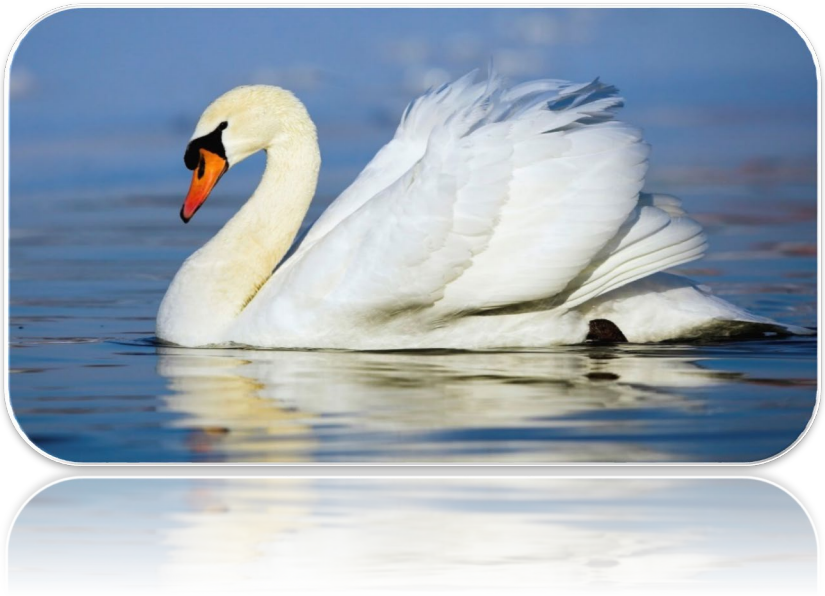
Samples were collected in August 2023 in support of the Miromar Lakes Surface Water Quality Monitoring sampling. The analytical results are summarized in Table 1. All samples were prepared and analyzed within the method required holding times. The method blank results were non-detect. All reported laboratory control sample (LCS) analyses demonstrated acceptable accuracy. Laboratory duplicate analyses were performed for some analytes. All results were acceptable, indicating good analytical precision. The matrix spike (MS) results were evaluated per the laboratory limits. The MS analyses performed were acceptable, demonstrating good analytical accuracy.

Based on this compliance review, the results in Table 1 are acceptable for use.

Regards

Sheri Finn
Analyst

MIROMAR LAKES COMMUNITY DEVELOPMENT DISTRICT



FINANCIAL STATEMENTS – OCTOBER 2023

FISCAL YEAR 2024

PREPARED BY:

JPWARD & ASSOCIATES, LLC, 2301 NORTHEAST 37TH STREET, FORT LAUDERDALE, FL 33308

T: 954-658-4900 **E:** JimWard@JPWardAssociates.com

Miromar Lakes Community Development District

Table of Contents

JPWard & Associates, LLC
2301 NORTHEAST 37 STREET
FORT LAUDERDALE,
FLORIDA 33308

Miromar Lakes Community Development District
Balance Sheet
for the Period Ending October 31, 2023

	Governmental Funds					Account Groups		Totals (Memorandum Only)
		Debt Service Funds			Capital Projects Fund			
	General Fund	Series 2012	Series 2015	Series 2022	Series 2022	General Long Term Debt	General Fixed Assets	
Assets								
Cash and Investments								
General Fund - Invested Cash	$ 1,079,436	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,079,436
Debt Service Fund	-	-	-	-	-	-	-	-
Interest Account	-	-	-	28	-	-	-	28
Sinking Account	-	-	-	0	-	-	-	0
Reserve Account	-	-	452,250	-	-	-	-	452,250
Revenue	-	-	516,989	164,803	-	-	-	681,792
Prepayment Account	-	-	-	-	-	-	-	-
Escrow Fund Account	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Cost of Issuance	-	-	-	-	-	-	-	-
Due from Other Funds								
General Fund	-	-	1,615	2,266	-	-	-	3,881
Debt Service Fund(s)			-	-	-	-	-	-
Market Valuation Adjustments	-	-	-	-	-	-	-	-
Accrued Interest Receivable	-	-	-	-	-	-	-	-
Assessments Receivable	-	-	-	-	-	-	-	-
Accounts Receivable	-	-	-	-	-	-	-	-
Amount Available in Debt Service Funds	-	-	-	-	-	1,137,951	-	1,137,951
Amount to be Provided by Debt Service Funds	-	-	-	-	-	14,467,049	-	14,467,049
Investment in General Fixed Assets (net of depreciation)	-	-	-	-	-	-	36,514,917	36,514,917
Total Assets	**$ 1,079,436**	**$ -**	**$ 970,854**	**$ 167,097**	**$ -**	**$ 15,605,000**	**$ 36,514,917**	**$ 54,337,305**

Miromar Lakes Community Development District
Balance Sheet
for the Period Ending October 31, 2023

	Governmental Funds					Account Groups		Totals (Memorandum Only)
		Debt Service Funds			Capital Projects Fund			
	General Fund	Series 2012	Series 2015	Series 2022	Series 2022	General Long Term Debt	General Fixed Assets	
Liabilities								
Accounts Payable & Payroll Liabilities	$ 1,601	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,601
Due to Other Funds								
General Fund	-	-	-	-	-	-	-	-
Debt Service Fund(s)	3,881	-	-	-	-	-	-	3,881
Other Developer	-	-	-	-	-	-	-	-
Bonds Payable								
Current Portion - Series 2012	-	-	-	-	-	0	-	-
Current Portion - Series 2015	-	-	-	-	-	0	-	-
Current Portion - Series 2022	-	-	-	-	-	0	-	-
Long Term - Series 2012	-	-	-	-	-	0	-	-
Long Term - Series 2015	-	-	-	-	-	8,645,000	-	8,645,000
Long Term - Series 2022	-	-	-	-	-	6,960,000	-	6,960,000
Total Liabilities	**$ 5,482**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 15,605,000**	**$ -**	**$ 15,610,482**
Fund Equity and Other Credits								
Investment in General Fixed Assets	-	-	-	-	-	-	36,514,917	36,514,917
Fund Balance	-	-	-	-	-	-	-	-
Restricted								
Beginning: October 1, 2022 (Unaudited)	-	690,801	965,334	164,130	-	-	-	1,820,265
Results from Current Operations	-	(690,801)	5,520	2,967	-	-	-	(682,313)
Unassigned								
Beginning: October 1, 2022 (Unaudited)	1,050,708	-	-	-	-	-	-	-
Allocation of Fund Balance								
System-Wide Reserves	200,000	-	-	-	-	-	-	-
Reserve For First Three Months Operations	850,708	-	-	-	-	-	-	850,708
Results of Current Operations	23,246	-	-	-	-	-	-	23,246
Total Fund Equity and Other Credits	**$ 1,073,954**	**$ 0**	**$ 970,854**	**$ 167,097**	**$ -**	**$ -**	**$ 36,514,917**	**$ 38,726,822**
Total Liabilities, Fund Equity and Other Credits	**$ 1,079,436**	**$ 0**	**$ 970,854**	**$ 167,097**	**$ -**	**$ 15,605,000**	**$ 36,514,917**	**$ 54,337,305**

Miromar Lakes Community Development District
General Fund
Statement of Revenues, Expenditures and Changes in Fund Balance
Through October 31, 2023

Description	October	Year to Date	Total Annual Budget	% of Budget
Revenue and Other Sources				
Carryforward	$ -	-	-	N/A
Interest				
Interest - General Checking	-	-	75	0%
Special Assessment Revenue				
Special Assessments - On-Roll	2,741	2,741	1,007,091	0%
Special Assessments - Off-Roll	45,253	45,253	181,010	25%
Miscellaneous Revenue	-	-	-	N/A
Easement Encroachments	-	-	-	N/A
Intragovernmental Transfer In	-	-	-	N/A
Total Revenue and Other Sources:	**$ 47,993**	**47,993**	**$ 1,188,176**	**4%**
Expenditures and Other Uses				
Legislative				
Board of Supervisor's - Fees	1,000	1,000	12,000	8%
Board of Supervisor's - Taxes	77	77	918	8%
Executive				
Professional Management	3,500	3,500	42,000	8%
Financial and Administrative				
Audit Services	-	-	4,500	0%
Accounting Services	-	-	-	N/A
Assessment Roll Services	1,500	1,500	18,000	8%
Arbitrage	-	-	1,500	0%
Bond Re-amortization	-	-	-	N/A
Other Contractual Services				
Legal Advertising	305	305	1,200	25%
Trustee Services	-	-	9,300	0%
Dissemination	-	-	-	N/A
Bond Amortization Schedules	-	-	-	N/A
Property Appraiser/Tax Collector Fees	-	-	1,300	0%
Bank Services	-	-	250	0%
Travel and Per Diem	-	-	-	N/A
Communications & Freight Services				

Miromar Lakes Community Development District
General Fund
Statement of Revenues, Expenditures and Changes in Fund Balance
Through October 31, 2023

Description	October	Year to Date	Total Annual Budget	% of Budget
Postage, Freight & Messenger	70	70	300	23%
Insurance	17,300	17,300	8,100	214%
Printing & Binding	-	-	300	0%
Website Maintenance	-	-	1,200	0%
Office Supplies	-	-	-	N/A
Subscription & Memberships	-	-	175	0%
Legal Services				
Legal - General Counsel	385	385	18,000	2%
Legal - Encroachments	312	312	-	N/A
Other General Government Services				
Engineering Services - General Services	-	-	7,000	0%
Asset Maps/Cost Estimates	-	-	-	N/A
Asset Administrative Services	-	-	10,000	0%
Reserve Analysis	-	-	-	N/A
Encroachment Agreements	-	-	-	N/A
Contingencies	-	-	-	N/A
Sub-Total:	**24,448**	**24,448**	**136,043**	**18%**
Stormwater Management Services				
Professional Services				
Asset Management	-	-	46,000	0%
NPDES	-	-	3,500	0%
Mitigation Monitoring	-	-	-	N/A
Stormwater Management Services				
Water MGT - Debris Removal	-	-	-	N/A
Utility Services				
Electric - Aeration Systems	299	299	5,000	6%
Repairs & Maintenance				
Lake System				
Aquatic Weed Control	-	-	80,000	0%
Lake Bank Maintenance	-	-	2,500	0%
Water Quality Testing	-	-	19,000	0%
Water Control Structures	-	-	28,000	0%
Grass Carp Installation	-	-	-	N/A

Miromar Lakes Community Development District
General Fund
Statement of Revenues, Expenditures and Changes in Fund Balance
Through October 31, 2023

Description	October	Year to Date	Total Annual Budget	% of Budget
Litoral Shelf Barrier/Replanting	-	-	-	N/A
Cane Toad Removal	-	-	37,000	0%
Midge Fly Control	-	-	35,000	0%
Aeration System	-	-	8,000	0%
Fish Re-Stocking	-	-	98,000	0%
Contingencies	-	-	15,375	0%
Wetland System				
Routine Maintenance	-	-	54,000	0%
Water Quality Testing	-	-	-	N/A
Contingencies	-	-	2,700	0%
Capital Outlay				
Aeration Systems	-	-	12,000	0%
Littortal Shelf Replanting/Barrier	-	-	6,000	0%
Lake Bank Restoration	-	-	108,500	0%
Turbidity Screens	-	-	-	N/A
Erosion Restoration	-	-	-	N/A
Video Stormwater Pipes/Repairs	-	-	52,000	0%
Contingencies	-	-	-	N/A
Sub-Total:	**299**	**299**	**612,575**	**0%**
Other Current Charges				
Hendry County - Panther Habitat Taxes	-	-	-	N/A
Payroll Expenses	-	-	-	N/A
Reserves for General Fund				
Water Management System	-	-	-	N/A
Disaster Relief Reserve	-	-	-	N/A
Sub-Total:	**-**	**-**	**-**	**N/A**
Total Expenditures and Other Uses:	**$ 24,747**	**$ 24,747**	**$ 748,618**	**3%**
Net Increase/ (Decrease) in Fund Balance	23,246	23,246	439,558	
Fund Balance - Beginning	1,050,708	1,050,708	1,050,708	
Fund Balance - Ending	**$ 1,073,954**	**1,073,954**	**$ 1,490,266**	

Miromar Lakes Community Development District
Debt Service Fund - Series 2015 Bonds
Statement of Revenues, Expenditures and Changes in Fund Balance
Through October 31, 2023

Description	October	Year to Date	Total Annual Budget	% of Budget
Revenue and Other Sources				
Carryforward	$ -	-	$ -	N/A
Interest Income				
Reserve Account	1,836	1,836	12,000	15%
Interest Account	-	-	-	N/A
Sinking Fund Account	-	-	-	N/A
Prepayment Account	-	-	-	N/A
Revenue Account	2,070	2,070	20	10348%
Special Assessment Revenue				
Special Assessments - On-Roll	1,615	1,615	593,699	0%
Special Assessments - Off-Roll	-	-	325,534	0%
Special Assessments - Prepayments	-	-	-	N/A
Net Inc (Dec) Fair Value Investments	-	-	-	N/A
Operating Transfers In (From Other Funds)	-	-	-	N/A
Bond Proceeds	-	-	-	N/A
Total Revenue and Other Sources:	**$ 5,520**	**$ 5,520**	**$ 931,253**	N/A
Expenditures and Other Uses				
Debt Service				
Principal Debt Service - Mandatory				
Series 2015 Bonds	-	-	$ 510,000	0%
Principal Debt Service - Early Redemptions				
Series 2015 Bonds	-	-	-	N/A
Interest Expense				
Series 2015 Bonds	-	-	407,250	0%
Original Issue Discount	-	-	-	N/A
Operating Transfers Out (To Other Funds)	-	-	-	N/A
Total Expenditures and Other Uses:	**$ -**	**-**	**$ 917,250**	N/A
Net Increase/ (Decrease) in Fund Balance	5,520	5,520	14,003	
Fund Balance - Beginning	965,334	965,334	-	
Fund Balance - Ending	**$ 970,854**	**970,854**	**$ 14,003**	

Miromar Lakes Community Development District
Debt Service Fund - Series 2022 Bonds
Statement of Revenues, Expenditures and Changes in Fund Balance
Through October 31, 2023

Description	October	Year to Date	Total Annual Budget	% of Budget
Revenue and Other Sources				
Carryforward	$ -	-	$ -	N/A
Interest Income				
Reserve Account	-	-	-	N/A
Interest Account	0	0	-	N/A
Sinking Fund Account	-	-	-	N/A
Prepayment Account	-	-	-	N/A
Revenue Account	701	701	-	N/A
Escrow Fund Account	-	-	-	N/A
Special Assessment Revenue				
Special Assessments - On-Roll	2,266	2,266	856,835	0%
Special Assessments - Off-Roll	-	-	-	N/A
Special Assessments - Prepayments	-	-	-	N/A
Net Inc (Dec) Fair Value Investments	-	-	-	N/A
Operating Transfers In (From Other Funds)	-	-	-	N/A
Total Revenue and Other Sources:	**$ 2,967**	**$ 2,967**	**$ 856,835**	N/A
Expenditures and Other Uses				
Debt Service				
Principal Debt Service - Mandatory				
Series 2022 Bonds	-	-	$ 635,000	N/A
Principal Debt Service - Early Redemptions				
Series 2022 Bonds	-	-	-	N/A
Interest Expense				
Series 2022 Bonds	-	-	168,324	N/A
Original Issue Discount	-	-	-	N/A
Operating Transfers Out (To Other Funds)	-	-	-	N/A
Total Expenditures and Other Uses:	**$ -**	**-**	**$ 803,324**	N/A
Net Increase/ (Decrease) in Fund Balance	2,967	2,967	53,511	
Fund Balance - Beginning	164,130	164,130	-	
Fund Balance - Ending	**$ 167,097**	**167,097**	**$ 53,511**	