# AQUATIC CONSULTING \& TESTING, INC. 

1525 W. University Drive, Suite 106
P.O. Box 1510

Tempe, Arizona 85281
Phone: (480) 921-8044 • Fax: (480) 921-0049
Lic. No. AZOOO3

Ms. Fran Pawlak, Executive Director
Dobson Ranch HOA
2719 South Reyes
Mesa, Arizona 85202

## November 2023 Lake Report

The following abbreviated report presents the results of field inspections on the Dobson Ranch lakes for the month of November 2023. This report summarizes data collected under the revised program initiated in 2019 that includes comprehensive testing of onehalf of the lakes on a monthly basis from March through October and bi-weekly field inspections twice per month throughout the year. Therefore, this report provides visual inspection and field data for Lakes 1-8 completed during the month. Field sheets for the inspections are also included. Additionally, special E. coli and total phosphorus data are presented for Lake 8.

## November 2023 Report Narrative Summary

The following pages provide a summary of the monthly survey results. A brief narrative description is provided for each lake.

## Lake 1

The Lake 1 temperature moved lower and ranged from a high of 19.4 C to a low of 19.0 C (67-66 F). Water pH ranged 8.2-8.3 SU indicating low to moderate algae density. Dissolved oxygen ( $8.2-8.3 \mathrm{mg} / \mathrm{L}$ ) was satisfactory for the fishery and fish activity appeared normal. Transparency was consistent with the previous reporting period at over one meter and turbidity ranged from 6.1 to 8.1 NTU. Fountains were in service throughout the reporting period.

Waterfowl mean density was less than two birds per acre (<2/A) which is considered excellent (Arizona Game \& Fish Department rating system shown below). No cormorants were noted. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

Waterfowl Density Ranking System (AZG\&FD)

| No. waterfowl per acre | Ranking |
| :--- | :--- |
| $<3$ | Excellent |
| $3-4$ | Good |
| $5-6$ | Fair |
| $>6$ | Poor |

No abnormal algae growth or submerged weeds were observed. The diatoms Nitzschia and Navicula dominated the phytoplankton. Cell density was low. No golden algae (Prymnesium parvum or related species) were detected.


## Lake 2

The water temperature of Lake 2 was 18.9-19.2 C ( $65-66 \mathrm{~F}$ ). Water pH ranged from 8.2 to 8.3 SU indicating probable low algae density. Dissolved oxygen ( $8.1-8.7 \mathrm{mg} / \mathrm{L}$ ) was satisfactory for the fishery and fish activity appeared normal. Transparency was approximately one meter and turbidity was typical at 4.5 to 5.5 NTU. Fountains were in operation.

About two waterfowl per acre ( $\sim 2 / \mathrm{A}$ ) were observed and the density is considered excellent for an urban lake. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. The dominant alga was Nitzschia and Scenedesmus. Total cell density was low in the lake. No golden algae (Prymnesium parvum or related species) were detected.


## Lake 3

Lake temperature range was 19.2 to $19.3 \mathrm{C}(66 \mathrm{~F})$. Water pH ranged from 8.3 to 8.4 SU. Dissolved oxygen concentration ranged from 8.1 to $8.7 \mathrm{mg} / \mathrm{L}$ and remained satisfactory for the fishery. Fish activity appeared normal. Transparency was stable at just under one meter. Turbidity was stable, ranging from 7.2 to 12.0 NTU. Fountains were operating throughout the reporting period.

Waterfowl density ranged from 6 to 7 birds per acre; a "poor" rating. Minimal cormorants were observed. Increased numbers of waterfowl was expected during the migratory season. Adult midge flies did not appear to produce any nuisance issues o lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. The dominant algae present in Lake 3 during the reporting period were Cyclotella and Navicula. Very low total phytoplankton density prevented any problems. No golden algae (Prymnesium parvum or related species) were detected.


## Lake 4

The temperature of Lake 4 ranged between 18.7 and 19.2 C ( $66-67 \mathrm{~F}$ ). Water pH was moderate at 8.3 SU and indicated a low to moderate algae density. Dissolved oxygen ( $8.4-8.8 \mathrm{mg} / \mathrm{L}$ ) was satisfactory for the fishery and fish activity appeared normal. Transparency was slightly over one meter and turbidity remained low (7.6-8.1 NTU). Fountains were in operation.

Waterfowl density was less than 1 per acre (<1/A) which is considered excellent. No cormorant issues were reported. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. The green colony Palmellococcus and unicellular diatom Surirella were the dominant forms of algae during the repodring period. These alga are not likely to be problematic. Total phytoplankton density also was relatively low. No golden algae (Prymnesium parvum or related species) were detected.


## Lake 5

Lake temperature ranged from 19.2 to $19.6 \mathrm{C}(67 \mathrm{~F})$ during the month. Water pH was 8.3 SU, indicative of a low to moderate algal density. Dissolved oxygen (8.2-8.8 mg/L) was more than satisfactory for the fishery and fish activity appeared normal. Transparency was just under one meter and turbidity ranged from 9.2 to 9.8 NTU.

Waterfowl density was about three to five birds per acre (3-5/A); "good to fair" by the AZG\&F ranking system. Few cormorants were observed. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. The dominant algae were green (Chlorophyta) forms: Chlorella and Chlamydomonas. The total cell density was very low. No golden algae (Prymnesium parvum or related species) were detected. The decrease in blue-green algae density is a positive sign in terms of water quality.


## Lake 6

The temperature of Lake 6 ranged from 19.3 to 19.5 C ( 67 F ) during the reporting period. Water pH ranged from $8.2-8.3$, indicating low algae density. Dissolved oxygen ( $8.7-9.2 \mathrm{mg} / \mathrm{L}$ ) was more than satisfactory for the fishery and fish activity appeared normal. Turbidity ranged from 7.4-9.9 NTU during the month and transparency was less than one meter.

Waterfowl density ranged from four to eight birds per acre (4-8/A) which is considered fair. Cormorants were occasionally observed. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth (other than increased density) or submerged weeds were observed. The dominant alga was the green (Chlorophyta) and blue-green (Cyanophyta) colonies Pediastrum and Merismopedia. These algae are not typically operationally problematic and no issues occurred. Golden algae (Prymnesium parvum or related species) were not detected.


## Lake 7

Lake temperature ranged from 19.7 to 20.5 C ( $68-69 \mathrm{~F}$ ). Water pH ranged from 8.3 to 8.5 SU, indicating low to moderate algae density. Dissolved oxygen ranged from 8.6 to $9.0 \mathrm{mg} / \mathrm{L}$ and was more than satisfactory for the fishery. Fish activity appeared normal. Transparency was about one meter, with turbidity of 8.4-10.0 NTU. Fountains were in operation.

Waterfowl density was less than one bird per acre ( $<1 / \mathrm{A}$ ); excellent according to the Arizona Game \& Fish Department rating system. No cormorants were noted. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

The dominant suspended algae in the lake were blue-green and green forms; colonies of Merismopedia and Oocystis. Density of algae was low to moderate. No golden algae were identified in the lake.


## Lake 8

Lake temperatures ranged from 19.9 to 20.3 C ( $68-69 \mathrm{~F}$ ) during the month. Water pH was 8.4 SU . Dissolved oxygen concentration was $8.1-8.5 \mathrm{mg} / \mathrm{L}$ and was satisfactory for the fishery. Fish activity appeared normal. Transparency was about one meter and turbidity correspondingly measured 4.2 to 7.6 NTU. Aerators were in operation.

Waterfowl density was about seven birds per acre (7/A). This would equate to a poor rating based on the Arizona Game \& Fish Department rating system. Cormorants were not observed. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No submerged weeds were observed. The phytoplankton was dominated by blue-green algae colonies of Merismopedia. The alga can make the water appear turbid and olive green in color. Minor surface scum was observed. Cell density was in the moderate range. No golden algae were detected in the reservoir.

## Special Testing

E. coli_bacteria and total phosphorus were measured in Lake 8 on two dates during the month. Data are presented below.

| Date | E. coli, MPN/100 mL) | Phosphorus, $\mathrm{mg} / \mathrm{L}$ |
| :--- | :---: | :---: |
| $11-02-23$ | 62 | 0.027 |
| $11-16-23$ | 32 | 0.034 |

The measured bacteria concentrations are below the maximum levels established for partial and full body contact recreation by the State.

The table at the conclusion of the report summarizes phosphorus concentrations in Lake 8 during the recent study period. Noting the Phoslock ${ }^{\circledR}$ application occurred on 29 November 2021, no dramatic reduction in phosphorus is shown. However, the impact may be more long-term if it reduces recycling of phosphorus from the sediment. Data collection will be continued.

An application of 325 Kg of SchlixX Plus $^{\circledR}$ was made in early November. The product is designed to degrade organic sludge at the lake bottom, while inactivating and preventing phosphorus recycling. The product was supplied by and application was assisted and supervised by the manufacturer (Oase, Horstel Germany) at no cost to Dobson Association. Sludge depth and phosphorus concentrations will be periodically monitored to track the success of the application.

## Next Month:

Lakes $1-8$ are scheduled for routine weekly golden algae monitoring next month. All lakes will be visually inspected and field data collected two times during the month. Additional monitoring of Lake 8 phosphorus and $E$. coli will continue.

TOTAL PHOSPHORUS LAKE 8


Respectfully:
Aquatic Consulting \& Testing, Inc.


Frederick A. Amalfi, Ph.D., C.L.M.


## SUPPORTING DOCUMENTATION

- Laboratory reports
- Field Inspection Sheets
- Pesticide application documents (none)


# AQUATIC CONSULTING \& TESTING, INC. 

## LABORATORY REPORT

Client: Dobson Ranch Association 2719 South Reyes Road Mesa, AZ 85202

Date Submitted: 11/02/23
Date Reported: 11/14/23

Project: Monthly Lake 1-8 Monitoring

## RESULTS

## Client ID: Lake 1 <br> ACT Lab No.: CF07699

Parameter
Golden Algae
Oxygen, Dissolved Field
pH, Field
Temperature, Field
Turbidity

## RESULTS

| Client ID: Lake 3 |  |  | Sample Type: Surface Water |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| ACT Lab No.: CF07701 |  |  |  |  |
| Sample Time: 11/02/23 09:15 |  |  |  |  |

## RESULTS

| Client ID: Lake 6 <br> ACT Lab No.: CF07704 |  |  | Sample Type: Surface Water Sample Time: 11/02/23 09:40 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Analysi | s Date |  |  |  |
| Parameter | Start | End | Method No. | Result | Unit |
| Golden Algae | 11/02/23 | 11/02/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/02/23 | 11/02/23 | SM4500 O G | 9.2 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH , Field | 11/02/23 | 11/02/23 | SM4500H+B | 8.2 | SU |
| Temperature, Field | 11/02/23 | 11/02/23 | SM2550 B | 19.5 | C |
| Turbidity | 11/02/23 | 11/02/23 | 180.1 | 9.9 | NTU |
| Client ID: Lake 7 <br> ACT Lab No.: CF07705 |  |  | Sample Type: Surface Water <br> Sample Time: 11/02/23 09:50 |  |  |
|  | Analysis Date |  |  |  |  |
| Parameter | Start | End | Method No. | Result | Unit |
| Golden Algae | 11/02/23 | 11/02/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/02/23 | 11/02/23 | SM4500 O G | 9.0 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH , Field | 11/02/23 | 11/02/23 | SM4500H+B | 8.3 | SU |
| Temperature, Field | 11/02/23 | 11/02/23 | SM2550 B | 20.5 | C |
| Turbidity | 11/02/23 | 11/02/23 | 180.1 | 8.4 | NTU |





## AQUATIC CONSULTING \& TESTING, INC.

## LABORATORY REPORT

Client: Dobson Ranch Association
2719 South Reyes Road Mesa, AZ 85202

Date Submitted: 11/08/23
Date Reported: 11/20/23

Attn: Fran Pawlak, Executive Director
Project: Monthly Lake 1-8 Monitoring

## RESULTS

| Client ID: Lake 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACT Lab No.: CF07854 |  |  | Sample Type: Surface Water |
| Sample Time: 11/08/23 07:00 |  |  |  |

## RESULTS

| Client ID: Lake 5 <br> ACT Lab No.: CF07858 | Sample Type: Surface Water Sample Time: 11/08/23 07:30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Parameter <br> Golden Algae | $\begin{aligned} & \text { Analysis Date } \\ & \text { Start } \\ & \frac{\text { End }}{11 / 08 / 23} \\ & \hline 11 / 08 / 23 \end{aligned}$ | Method No. P/C Microscopy | Result Absent | Unit <br> Pres/Abs |
| Client ID: Lake 6 <br> ACT Lab No.: CF07859 | Sample Type: Surface Water Sample Time: 11/08/23 07:40 |  |  |  |
| Parameter <br> Golden Algae | $\begin{gathered} \text { Analysis Date } \\ \frac{\text { Start }}{\text { Sta }} \\ \text { 11/08/23 } \\ \hline 11 / 08 / 23 \end{gathered}$ | Method No. P/C Microscopy | Result Absent | Unit <br> Pres/Abs |
| Client ID: Lake 7 <br> ACT Lab No.: CF07860 | Sample Type: Surface Water Sample Time: 11/08/23 07:50 |  |  |  |
| Parameter <br> Golden Algae | $$ | Method No. P/C Microscopy | Result Absent | Unit Pres/Abs |
| Client ID: Lake 8 <br> ACT Lab No.: CF07861 | Sample Type: Surface Water Sample Time: 11/08/23 07:55 |  |  |  |
| Parameter Golden Algae | $$ | Method No. P/C Microscopy | Result Absent | Unit <br> Pres/Abs |



## AQUATIC CONSULTING \& TESTING, INC.

## LABORATORY REPORT

Client: Dobson Ranch Association
2719 South Reyes Road
Mesa, AZ 85202

Date Submitted: 11/16/23
Date Reported: 11/29/23

Project: Monthly Lake 1-8 Monitoring

## RESULTS

| Client ID: Lake 1 <br> ACT Lab No.: CF08059 |  |  | Sample Type: Surface Water Sample Time: 11/16/23 08:40 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Analys | Date |  |  |  |
| Parameter | Start | End | Method No. | Result | Unit |
| Golden Algae | 11/16/23 | 11/16/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/16/23 | 11/16/23 | SM4500 O G | 8.2 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH, Field | 11/16/23 | 11/16/23 | SM4500H+B | 8.3 | SU |
| Temperature, Field | 11/16/23 | 11/16/23 | SM2550 B | 19.4 | C |
| Turbidity | 11/16/23 | 11/16/23 | 180.1 | 6.1 | NTU |
| Client ID: Lake 2 <br> ACT Lab No.: CF08060 |  |  | Sample Type: Surface Water Sample Time: 11/16/23 08:50 |  |  |
| Parameter | Analysis Date |  | Method No. | Result | Unit |
| Golden Algae | 11/16/23 | 11/16/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/16/23 | 11/16/23 | SM4500 O G | 8.1 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH , Field | 11/16/23 | 11/16/23 | SM4500H+B | 8.3 | SU |
| Temperature, Field | 11/16/23 | 11/16/23 | SM2550 B | 19.2 | C |
| Turbidity | 11/16/23 | 11/16/23 | 180.1 | 4.5 | NTU |

## RESULTS

| Client ID: Lake 3 <br> ACT Lab No.: CF08061 | Sample Type: Surface Water <br> Sample Time: 11/15/23 09:00 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Analysi Start | Date End | Method No. | Result | Unit |
| Golden Algae | 11/16/23 | 11/16/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/16/23 | 11/16/23 | SM4500 O G | 8.1 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH , Field | 11/16/23 | 11/16/23 | SM4500H+B | 8.3 | SU |
| Temperature, Field | 11/16/23 | 11/16/23 | SM2550 B | 19.3 | c |
| Turbidity | 11/16/23 | 11/16/23 | 180.1 | 7.2 | NTU |
| Client ID: Lake 4 <br> ACT Lab No.: CF08062 | Sample Type: Surface Water Sample Time: 11/15/23 09:05 |  |  |  |  |
| Parameter | Analysi Start | Date End | Method No. | Result | Unit |
| Golden Algae | 11/16/23 | 11/16/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/16/23 | 11/16/23 | SM4500 O G | 8.4 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH , Field | 11/16/23 | 11/16/23 | SM4500H+B | 8.3 | SU |
| Temperature, Field | 11/16/23 | 11/16/23 | SM2550 B | 19.2 | c |
| Turbidity | 11/16/23 | 11/16/23 | 180.1 | 8.1 | NTU |


| Client ID: Lake 5 <br> ACT Lab No.: CF08063 | Sample Type: Surface Water Sample Time: 11/15/23 09:10 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Analys | Date |  |  |  |
| Parameter | Start | End | Method No. | Result | Unit |
| Golden Algae | 11/16/23 | 11/16/23 | P/C Microscopy | Absent | Pres/Abs |
| Oxygen, Dissolved Field | 11/16/23 | 11/16/23 | SM4500 O G | 8.2 | $\mathrm{mg} / \mathrm{L}$ as O 2 |
| pH, Field | 11/16/23 | 11/16/23 | SM4500H+B | 8.3 | SU |
| Temperature, Field | 11/16/23 | 11/16/23 | SM2550 B | 19.6 | c |
| Turbidity | 11/16/23 | 11/16/23 | 180.1 | 9.8 | NTU |

## RESULTS



## Client ID: Lake 8 <br> ACT Lab No.: CF08066

Parameter
Golden Algae
Oxygen, Dissolved Field
pH , Field
Temperature, Field
Phosphorus, Total
E. coli, Colilert

Turbidity

Sample Type: Surface Water
Sample Time: 11/16/23 09:30


Reviewed by:

| Analysis Date <br> Start |  |
| :---: | :---: |
|  | End |
| $11 / 16 / 23$ | $11 / 16 / 23$ |
| $11 / 16 / 23$ | $11 / 16 / 23$ |
| $11 / 16 / 23$ | $11 / 16 / 23$ |
| $11 / 16 / 23$ | $11 / 16 / 23$ |
| $11 / 17 / 23$ | $11 / 22 / 23$ |
| $11 / 16 / 23$ | $11 / 17 / 23$ |
| $11 / 16 / 23$ | $11 / 16 / 23$ |

Sample Type: Surface Water
Sample Time: 11/16/23 09:25


Frederick A. Amalfi, PAiD.
Laboratory Director
Aquatic Consulting \& Testing, Inc.
1525 W. University Drive, Suite 106
Tempe, AZ 85281
480-921-8044 fax: 480-921-0049
lab@aquaticconsulting.com
AC\&T Client Reporting Information:
Dobson Ranch Association
2719 South Reyes
Mesa, AZ 85202
Attn: Fran Paqwlak, Community Manager
P: 4/80-831-8314

AC\&T Sampler

| Sample Location 1D: | Data: | Tee: | Matrix: |
| :--- | :--- | :--- | :--- | :--- |

Lake 1
lake 2
Lake 3
Lake 5
Lake 6
Lake 7
Lake 8
Print Nama: $M$ )
1045

\section*{| Chain of Custody |
| :--- |}


$q n_{1} \times \times \times \times \times \times \times 1$ $\qquad$




> | Signature: |
| :--- |
| Print Name: |
| Date: |

Signature:
Print Name:

## AQUATIC CONSULTING \& TESTING, INC.

## 1525 W. University Drive, Suite 106

P.O. Box 1510

## GOLDEN ALGAE REPORT

## Client: Dobson Ranch Association 2719 South Reyes Road Mesa, AZ 85202

Attn: Fran Pawlak, Executive Director

Date Submitted: 11/22/23
Date Reported: 11/29/23

Project: Monthly Lake 1-8 Monitorin

RESULTS

| Client ID: Lake 1 <br> ACT Lab No.: CF08234 | Sample Type: Surface Water Sample Time: 11/22/23 07:15 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Analysis Date |  | Method No. | MRL | Result | Unit | Analyst |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |
| Client ID: Lake 2 <br> ACT Lab No.: CF08235 |  |  |  | ple Typ le Tim | $\begin{aligned} & \text { urface W: } \\ & 1 / 22 / 230 \end{aligned}$ |  |  |
| Parameter | Analysis Start | Date End | Method No. | MRL | Result | Unit | Analyst |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |
| Client ID: Lake 3 <br> ACT Lab No.: CF08236 |  |  | Sam | le Typ le Tim | $\begin{aligned} & \text { ufface W: } \\ & 1 / 22 / 230 \end{aligned}$ |  |  |
| Parameter | Analysis Start | Date End | Method No. | MRL | Result | Unit | Analyst |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |

Client ID: Lake 4
ACT Lab No.: CF08237
Sample Type: Surface Water
Sample Time: 11/22/23 07:40
Analysis Date

| ar | Start | End | Method No. | MRL | Result | Unit | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |

## RESULTS

| Client ID: Lake 5 <br> ACT Lab No.: CF08238 | Sample Type: Surface Water Sample Time: 11/22/23 07:45 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Analysis Date Start End |  | Method No. | MRL | Result | Unit | Analyst |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |
| Client ID: Lake 6 <br> ACT Lab No.: CF08239 | Sample Type: Surface Water <br> Sample Time: 11/22/23 07:50 |  |  |  |  |  |  |
| $\frac{\text { Parameter }}{\text { Golden Algae }}$ | Analysi Start $11 / 22 / 23$ | $\begin{aligned} & \text { s Date } \\ & \text { End } \\ & 11 / 22 / 23 \end{aligned}$ | Method No. <br> P/C Microscopy | MRL <br> 1 | Result <br> Absent | Unit <br> Pres/Abs | $\frac{\text { Analyst }}{\text { FAA }}$ |
| Client ID: Lake 7 <br> ACT Lab No.: CF08240 | Sample Type: Surface Water <br> Sample Time: 11/22/23 07:55 |  |  |  |  |  |  |
| Parameter | Analysis Date |  | Method No. | MRL | Result | Unit | Analyst |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |
| Client ID: Lake 8 <br> ACT Lab No.: CF08241 | Sample Type: Surface Water |  |  |  |  |  |  |
| Parameter | Analysis Date |  | Method No. | MRL | Result | Unit | Analyst |
| Golden Algae | 11/22/23 | 11/22/23 | P/C Microscopy | 1 | Absent | Pres/Abs | FAA |

## Explanation of Terms:

Absent $=$ No golden algae* were detected in the submitted sample.
Present 1 Golden algae* were detected, but rarely observed in the submitted sample.
Present 2 Golden algae* were detected and commonly observed in the submitted sample.
Present 3 Golden algae* were detected and were the dominant algae in the submitted sample.
*Prymnesium parvum or toxin producing related species.


DOBSON RANCH LAKES
Bi-Monthly Lake Inspection

| Lake | Temp | $\begin{gathered} \text { Dis. } \\ \text { oxygen } \end{gathered}$ | pH | Clarity | Algae | Submerged weeds | Fish behavior | Waterfowl density | Insect activity | Mechanical issues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 19.0 c | $8.3 \mathrm{mg} / \mathrm{L}$ | $8.3 \mathrm{su}$ | $\overline{8.1} \text { SDz }$ | aSuspended - Floating - Bottom $\square$ Attached | $\square$ Present - Absent | a Normal <br> - Distress <br> - Dead $\qquad$ | No. <br> NolA $\qquad$ | - Normal - Infestation | Fountain -Operating $\square$ No service |
| 2 | 189 c | $0.7 \mathrm{mg} / \mathrm{L}$ | $\theta, \mathrm{B}_{\mathrm{su}}$ | $\begin{array}{r} \mathrm{SDz} \\ 5.5 \mathrm{NTU} \end{array}$ | $\square$ Suspended $\square$ Floating $\square$ Bottom $\square$ Attached | $\square$ Present - Absent | a Rormal <br> - Distress <br> $\square$ Dead $\qquad$ | No. <br> No/A | - Normal - Infestation | Fountain -Operating $\square$ No service |
| 3 | 192 c | $8.7 \mathrm{mg} / \mathrm{L}$ | $8.4 \mathrm{su}$ | $\underset{12.0}{\mathrm{SDz}}$ | $\square$ Suspended <br> $\square$ Floating <br> $\square$ Bottom <br> $\square$ Attached | $\square$ Present oAbsent | - Kormal <br> - Distress <br> $\square$ Dead $\qquad$ | No. NolA $\qquad$ | t-Normal $\square$ Infestation | $\begin{aligned} & \text { Fountain } \\ & \text { \& Operating } \\ & \text { مNo service } \end{aligned}$ |
| 4 | $80$ | $8.8 \mathrm{mg} / \mathrm{L}$ | $8.3 \mathrm{su}$ | $\begin{array}{r} \text { SDz } \\ 2.6 \text { NTU } \end{array}$ | $\square$ Suspended <br> $\square$ Floating <br> $\square$ Bottom <br> $\square$ Attached | $\square$ Present EAbsent | a Normal <br> - Distress <br> $\square$ Dead $\qquad$ | No. No/A | Eyormal $\square$ Infestation | Fountain ©Operating $\square$ No service |
| 5 | $192 c$ | $88_{m g / L}$ | 8s su | $\begin{array}{r} \mathrm{SDz} \\ \bar{q}^{\mathrm{N}} \mathrm{NTU} \end{array}$ | $\square$ Suspended <br> $\square$ Floating <br> $\square$ Bottom <br> $\square$ Attached | $\square$ Present -Absent | - Nermal <br> $\square$ Distress <br> $\square$ Dead $\qquad$ | No. NolA $\qquad$ | * Kormal - Infestation |  |
| 6 | $19.5 \mathrm{c}$ | $9.2 \mathrm{mg} / \mathrm{L}$ | $8.250$ | $\begin{gathered} \mathrm{SDz} \\ 9 \cdot 9.9 \mathrm{NTU} \end{gathered}$ | -Suspended <br> $\square$ Floating <br> - Bottom <br> - Attached | $\square$ Present qAbsent | $\propto$ Kormal <br> - Distress <br> $\square$ Dead $\qquad$ | No. No/A | GNormal - Infestation |  |
| 7 | $00.5 \mathrm{c}$ | $90 \mathrm{mg} / \mathrm{L}$ | $8.3 \mathrm{su}$ | $\begin{array}{r} \mathrm{SDz} \\ \overline{8, j}_{\mathrm{NTU}} \end{array}$ | $\square$ Suspended <br> $\square$ Floating <br> $\square$ Bottom <br> $\square$ Attached | $\square$ Present Absent | $\checkmark$ Normal - Distress <br> $\square$ Dead $\qquad$ | No. No/A $\qquad$ | A Normal - Infestation | Fountain \&Óperating $\square$ No service |
| 8 | 20,3c | $8.5 \mathrm{mg} / \mathrm{L}$ | $8.4 \mathrm{su}$ | $\frac{\mathrm{SDz}}{4 \cdot \mathrm{NTU}}$ | -Suspended <br> $\square$ Floating <br> - Bottom <br> $\square$ Attached | - Présent -Absent | 4 Kormal - Distress <br> $\square$ Dead $\qquad$ | No. No/A $\qquad$ | - Normal I Infestation | Aerators 14) Operating $\square$ No service |

Notes and recommendations for treatment/operation:
DOBSON RANCH LAKES
Bi-Monthly Lake Inspection

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Lake \& Temp \& \[
\begin{gathered}
\text { Dis. } \\
\text { oxygen }
\end{gathered}
\] \& pH \& Clarity \& Algae \& Submerged weeds \& Fish behavior \& Waterfowl density \& Insect activity \& Mechanical issues \\
\hline 1 \& \[
19.46
\] \& \[
82 \mathrm{mg} / \mathrm{L}
\] \& \[
83
\] \& \[
\begin{gathered}
\mathrm{SDz} \\
6.1 \\
\text { NTU }
\end{gathered}
\] \& \begin{tabular}{l} 
■Suspended \\
\(\square\) Floating \\
\(\square\) Bottom \\
\(\square\) Attached \\
\hline .
\end{tabular} \& \(\square\) Present a-Absent \& \begin{tabular}{l}
t-Normal \\
- Distress \\
\(\square\) Dead
\(\qquad\)
\end{tabular} \& No. NolA
\(\qquad\) \& tNormal - Infestation \& Fountain opperating \(\square\) No service \\
\hline 2 \& \[
192 \mathrm{c}
\] \& \[
8.1 \mathrm{mg} / \mathrm{L}
\] \& \[
8.38 u
\] \& \[
\begin{array}{r}
\mathrm{SDz} \\
4.5 \mathrm{NTU}
\end{array}
\] \&  \& \(\square\) Present - Absent \& \begin{tabular}{l}
uNormal \\
\(\square\) Distress \\
- Dead
\(\qquad\)
\end{tabular} \& No. No/A
\(\qquad\) \& a Kormal \(\square\) Infestation \& Fountain qoperating \(\square\) No service \\
\hline 3 \& \[
19.3 \mathrm{c}
\] \& \[
8.1 \mathrm{mg} / \mathrm{L}
\] \& \[
8.3 \mathrm{su}
\] \& \[
\frac{\mathrm{SDz}}{\overline{72} \mathrm{NTU}}
\] \& \begin{tabular}{l}
aSuspended \\
- Floating \\
- Bottom \\
- Attached
\end{tabular} \& \(\square\) Present aiAbsent \& \begin{tabular}{l}
- Wormal \\
- Distress \\
- Dead
\(\qquad\)
\end{tabular} \& \begin{tabular}{l}
No. \\
NolA
\(\qquad\)
\end{tabular} \& © Arrmal - Infestation \& Fountain Operating \(\square\) No service \\
\hline 4 \& \[
19.2 \mathrm{c}
\] \& \[
0.4 \mathrm{mg} / \mathrm{L}
\] \& \[
83
\] \& 8.1 STz \& \begin{tabular}{l}
aSuspended \\
\(\square\) Floating \\
- Bottom \\
\(\square\) Attached
\end{tabular} \& \(\square\) Present a Absent \& \begin{tabular}{l}
antrmal \\
\(\square\) Distress \\
- Dead
\(\qquad\)
\end{tabular} \& No. No/A
\(\qquad\) \& anormal - Infestation \& Fountain Operating \(\square\) No service \\
\hline 5 \& \[
196 c
\] \& mg/L \& \[
8.3 \mathrm{su}
\] \& \[
\begin{array}{r}
\mathrm{SDz} \\
9.8 \mathrm{NTU}
\end{array}
\] \& \begin{tabular}{l}
aSuspended \\
\(\square\) Floating \\
- Bottom \\
- Attached
\end{tabular} \& \(\square\) Present D Absent \& \begin{tabular}{l}
onormal \\
Distress \\
Dead
\(\qquad\)
\end{tabular} \& \[
\begin{aligned}
\& \text { No. Z1 } \\
\& \text { No/A }
\end{aligned}
\] \& ANormal \(\square\) Infestation \& \\
\hline 6 \& \[
19.3 c
\] \& \[
8.7 \mathrm{mg} / \mathrm{L}
\] \& \[
8.3 \mathrm{su}
\] \& \[
\begin{array}{r}
\mathrm{SDz} \\
\underline{\mathrm{~V}} \mathrm{NTU}
\end{array}
\] \& \begin{tabular}{l}
\(\square\) Suspended \\
\(\square\) Floating \\
Bottom \\
\(\square\) Attached \\
\hline
\end{tabular} \& - Prosent aAbsent \& \begin{tabular}{l}
EDormal \\
\(\square\) Distress \\
\(\square\) Dead
\(\qquad\)
\end{tabular} \& \begin{tabular}{l}
No. \\
No/A
\end{tabular} \& GHormal - Infestation \& \\
\hline 7 \& \[
19.7 \mathrm{c}
\] \& \[
8.6 \mathrm{mg} / \mathrm{L}
\] \& \[
8.5 \mathrm{su}
\] \& \[
\begin{array}{r}
\mathrm{SDz} \\
10.0 \\
\text { NTU }
\end{array}
\] \& \begin{tabular}{l}
aSuspended \\
\(\square\) Floating \\
- Bottom \\
Attached
\end{tabular} \& \begin{tabular}{l}
Present \\
\(\square\) Absent \\
/
\end{tabular} \& \begin{tabular}{l}
a Aormal \\
\(\square\) Distress \\
- Dead
\end{tabular} \& \[
\begin{aligned}
\& \mathrm{No} 21 \\
\& \mathrm{NolA} \\
\& \hline
\end{aligned}
\] \& \begin{tabular}{l}
batormal - Infestation \\

 \& 

Fountain operating <br>
$\square$ No service
\end{tabular} <br>

\hline 8 \& $$
10.9 \mathrm{c}
$$ \&  \& \[

8,45

\] \& \[

\overline{7 \cdot 6} \mathrm{NDZ}

\] \& | -Suspended |
| :--- |
| $\square$ Floating |
| Bottom |
| $\square$ Attached | \& | Present |
| :--- |
| $\square$ Absent | \& | D Normal |
| :--- |
| - Distress |
| $\square$ Dead $\qquad$ | \&  \& enormal - Infestation \& Aerators 18 Operating $\square$ No service <br>

\hline
\end{tabular}

Notes and recommendations for treatment/operation:

