

Lake Auburn Watershed Protection Commission

www.lakeauburnwater.org

Wednesday, September 11, 2024, at **3:00pm – 5:00pm** AVCOG, 125 Manley Road, Auburn,
ME

AGENDA

1. Presentation from City of Auburn Planning Department on Septic Inspections- John Blais
 - a. Amended Lake Auburn Watershed Overlay District ordinance and associated maps
 - b. Auburn City Council Resolve regarding funding of septic inspections
2. Public Comment
3. Minutes
 - a. 8/14/2024- Special Meeting
4. Consent Agenda
 - a. Financial report
5. Water Quality & Watershed Report- Erica
6. Executive Session regarding negotiations of potential land transactions in accordance with 1 M.R.S.A. 405 (6) (B)
7. Clerk and Staff Reports
 - a. Mike Broadbent- as deemed necessary
 - b. Erica Kidd- as deemed necessary
8. Old Business
 - a. Septic inspection program subcommittee update- Mike/Kevin/Erica
 - b. Water hauler funds available- Tracy
9. New Business
10. Other Business
11. Adjournment

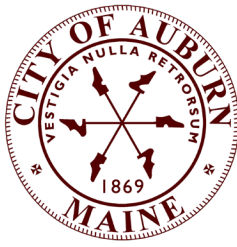
FUTURE REGULAR MEETING SCHEDULE

November 13

December 4 (as needed for budget adoption)

TENTATIVE MEETING DATES (AS NEEDED)

October 9



City Council Ordinance

IN CITY COUNCIL

BE IT ORDAINED by the Auburn City Council, that Chapter 60, Zoning, of the Code of Ordinances be amended as follows:

Chapter 60 ZONING

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ARTICLE XII. ENVIRONMENTAL REGULATIONS

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DIVISION 4. LAKE AUBURN WATERSHED OVERLAY DISTRICT

• • •

Sec. 60-951. Boundaries and definitions.

(a) *Boundaries.* The Lake Auburn Watershed Overlay District is that section of the city in which surface and subsurface waters ultimately flow or drain into Lake Auburn as such section is delineated on a watershed map and survey by the Auburn Water District on file in the office of the Auburn Water District, the city ~~planning, permitting and code department~~~~department of planning and permitting services~~ and the city clerk. The Lake Auburn Watershed Overlay District shall be superimposed over underlying zoning districts within ~~such section~~the city. Permitted uses in the underlying districts shall continue subject to compliance with the provisions of the Lake Auburn Watershed Overlay District.

(b) *Definitions.* For purposes of this division, the following words and terms as used herein shall have the meanings or limitations of meaning hereby defined, explained or assigned.

Building has the same meaning as in section 60-2.

Curtain drain means a ~~franch-trench~~ trench to intercept laterally moving ground water and divert it away from a septic system disposal field.

Dwelling Unit has the same meaning as in section 60-2.

Hobby agricultural use means uses of land for chicken farms, cattle farms, horse farms, egg farms, piggeries, sheep farms, stables, crop farming and other agricultural purposes where:

- (1) The products produced through such use of the land is for personal consumption, pleasure or sustenance by those occupying the land and does not involve the sale of the products produced through such use of the land for profit; and
- (2) The allowances set forth in section 60-2 regarding "farm, livestock" of this chapter and the allowances set forth in article VII, division 4 of chapter 8 of this Code are not exceeded.

Lake Auburn Watershed Protection Commission or *LAWPC* means the commission formed through an interlocal cooperation agreement between and among the Auburn Water District, City of Lewiston, and the Town of Turner, consisting of three commissioners appointed by the Auburn Water District, three commissioners appointed by the City of Lewiston, one commissioner appointed by the Town of Turner, one commissioner appointed by the Towns of Hebron, Minot and Buckfield, and one commissioner appointed by the Androscoggin Valley Council of Governments.

Local plumbing inspector means a plumbing inspector or alternate plumbing inspector as defined in Section 12-22.

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Benjamin J. Weisner, Ward Four
Belinda A. Gerry, At Large

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Stephen G. Milks, Ward Three
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City Council Ordinance

Non-hobby agricultural use means uses of land for chicken farms, cattle farms, horse farms, egg farms, piggeries, sheep farms, stables, crop farming and other agricultural purposes where the products produced through such use of the land are sold for profit.

Normal high-water line and Normal high-water mark means that line which is apparent from visible markings, changes in the character of soils due to prolonged action of the water or changes in vegetation, and which distinguishes between predominantly aquatic and predominantly terrestrial land.

Soil horizon means a layer within a soil profile differing from the soil above or below it in one or more soil morphological characteristics. The characteristics of the layer include the color, texture, rock-fragment content, and ~~consistence~~consistency of each parent soil material.

Soil horizon, limiting or limiting soil horizon means any soil horizon or combination of soil horizons, within the soil profile or any parent material below the soil profile, that limits the ability of the soil to provide treatment or disposal of septic tank effluent. Limiting horizons include bedrock, hydraulically restrictive soil horizons and parent material excessively coarse soil horizons and parent material, and the seasonal groundwater table. Any of these limiting horizons may from time to time be ~~Also sometimes~~ referred to as a "limiting factor."

Soil profile means a vertical cross section of the undisturbed soil showing the characteristic soil horizontal layers or soil horizons that have formed as a result of the combined effects of parent material, topography, climate, biological activity, and time.

Soil filter media means a soil mixture that consists of a loamy sand lower fill layer meeting the following lower fill layer specifications, plus a minimum of six inches of upper fill layer meeting the following upper fill layer specifications.

Soil Filter Media Specifications

Upper fill layer	
Sieve #	% passing by weight
No. 4	75—95
No. 10	60—90
No. 40	35—85
No. 200	20—40
200 (clay size)	< 2.0

Lower fill layer	
Sieve #	% passing by weight
No. 10	85—100
No. 20	70—100
No. 60	15—400
No. 200	6—8
200 (clay size)	< 2.0

State licensed site evaluator means a person licensed by the Maine Department of Health and Human Services to evaluate soils for the purpose of designing subsurface wastewater disposal systems.

Stream or Brook means a channel between defined banks as depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map.

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Subsurface wastewater disposal system inspector means a person who holds a current certification issued by the Maine Department of Health and Human Services, Division of Environmental and Community Health as a Subsurface Wastewater Disposal System Inspector.

(Ord. of 9-21-2009, § 5.3B; Ord. No. 28-11202023, 12-4-2023)



Sec. 60-952. Use and environmental regulations.

1. Subsurface Wastewater Disposal Systems.

(ba) ~~Residential-d~~dwelling units in the agriculture and resource protection zoning district. Notwithstanding the provisions of subsections 60-145(a)(1), 60-145(b)(18) and 60-146(1)c., new dwelling units are prohibited in ~~the that part of the~~ Lake Auburn Watershed Overlay District which overlies the Agriculture and Resource Protection Zone. Pursuant to 30-A M.R.S.A. §§ 4364(9), 4364-A(1-A), and 4364-B(1-A), each as may be amended from time to time, the affordable housing density, residential density and accessory dwelling unit provisions of P.L. 2021, ch. 672, "An Act to Implement the Recommendations of the Commission to Increase Housing Opportunities in Maine by Studying Zoning and Land Use Restrictions" and any related state regulations do not apply in the Lake Auburn Watershed Overlay District.

(fb) Private subsurface wastewater disposal systems. Each new building, or any existing building for which there is any addition, alteration, or change of use, each new dwelling unit, or any existing dwelling unit for which there is an addition or alteration thereto that includes the addition of one or more bedrooms, in the Lake Auburn Watershed Overlay District, not served by public sewer, shall, in the development of a private subsurface wastewater disposal system, adhere to the requirements of this section as well as the requirements of the latest version of the Maine Subsurface Wastewater Disposal Rule, 10-144 C.M.R. ch. 241. Notwithstanding any provision of the Maine Subsurface Wastewater Disposal Rule, 10-144 C.M.R. ch. 241 the Rule shall be applied regardless of whether the addition or alteration is an initial or subsequent addition or alteration. The following regulations shall be adhered to in the development of private subsurface wastewater disposal systems in the Lake Auburn Watershed Overlay District:

- (1) Disposal fields are prohibited on sites with less than 12 inches to the limiting soil horizon. In addition to having at least 12 inches to the limiting soil horizon, disposal fields shall have at least 24 inches of suitable natural soil or soil filler media below the bottom of the disposal field, such that there is at least a 36-inch separation between the bottom of the disposal field and the limiting soil horizon. The local plumbing inspector shall require that a state licensed site evaluator affirm that these design ~~criteria~~ requirements are met before the ~~LP~~ local plumbing inspector finds the design or installation of the system to comply with this section.
- (2) ~~No new~~ (first use), expanded, or replacement disposal fields shall be ~~set back from~~ installed closer than 400 feet to the normal high-water mark of any lake, pond, ~~or year-round or intermittent stream,~~ or brook (as depicted on a 7.5 minute series USGS topographic map, dated 1981). ~~Where the daily wastewater flow is or is reasonably likely to be in excess of 2,000 gallons, the system shall be located at least 1,000 feet from the normal high-water mark of any lake, pond or year-round or intermittent stream—as follows:~~
 - a. ~~Where the daily wastewater flow is or is reasonably likely to be in excess of 2,000 gallons, the system shall be located at least 1,000 feet from the normal high-water mark of any lake, pond or year-round or intermittent stream—~~
 - a. Where the daily wastewater flow is, or is reasonably likely to be, 2,000 gallons or less, the system shall be set back at least 400 feet from the normal high-water mark of any lake, pond, stream, or brook.

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b. Where the daily wastewater flow is, or is reasonably likely to be, in excess of 2,000 gallons, the system shall be set back at least 1,000 feet from the normal high-water mark of any lake, pond, stream, or brook.

~~(3) All disposal fields, replacement or new, shall meet the design criteria set forth in subsection (f)(1) above, except that if a replacement system disposal field cannot meet the design criteria set forth in subsection (f)(1) above, the local plumbing inspector must, in consultation with and the concurrence of the Auburn Water District, or its designee, evaluate the design and then require the disposal field to meet as much of the design criteria as is physically possible under the site-specific circumstances.~~

~~(43) All new (first use), expanded, or replacement private subsurface wastewater disposal systems, replacement or new, shall include one of the two following design elements. The selection of which design element is most appropriate shall be determined by a state licensed site evaluator based upon the evaluation of the groundwater conditions, soils, and slopes present at the site where the system is to be installed, either have:~~

~~a. A curtain drain installed per Section 1112(H) of the Maine Subsurface Wastewater Disposal Rules, 10-144 C.M.R. ch. 241 (20152023), as may be amended from time to time; or~~

~~b. A diversion ditch, upslope of the disposal field, installed for the disposal field's entire length (including fill extensions, and constructed so that the curtain drain or diversion ditch is located to prevent any under drain short circuiting of the disposal field),~~

~~whichever installation is determined to be the most appropriate based on the evaluation of groundwater conditions on the site by a state licensed site evaluator.~~

~~The local plumbing inspector shall require that a state licensed site evaluator affirm that one of these two types of installation is part of the design of the system before the LPI finds the design or installation of the system to comply with this section.~~

~~(54) All new (first use), expanded, or replacement private subsurface wastewater disposal systems, replacement or new, shall be installed on the same lot as the building or dwelling unit being served by the system, unless the system can be developed outside of the Lake Auburn Watershed Overlay District or, in the case of an expanded or replacement system, the property owner can demonstrate to the local plumbing inspector that it is physically impossible for the replacement system to be located on the same lot, in which case the local plumbing inspector may approve all or a portion of the expanded or replacement system's location on adjacent lots if the property owner holds a perpetual easement from the adjacent lot owner allowing the installation and maintenance of the system.~~

~~(56) Commencing July 1, 2024, LAWPC or its designee shall have the right to inspect all private subsurface wastewater disposal systems in the Lake Auburn Watershed Overlay District every five years and/or at the time that a property sold, whichever time frame is deemed most appropriate by LAWPC or its designee. the owner of each building or dwelling unit in the Lake Auburn Watershed Overlay District, not served by public sewer, shall have their private subsurface wastewater disposal system inspected to ensure continuing compliance with this section and the latest version of the Maine Subsurface Wastewater Disposal Rule, 10-144 C.M.R. ch. 241.~~

~~a. Inspections. An initial inspection shall be completed by the completion date specified in the Lake Auburn Watershed Overlay District Septic Systems Inspection Map, dated March 19, 2024, which is on file in the office of the city planning, permitting and code department.~~

~~Subsequent inspections shall be completed within five years of the initial inspection and every subsequent inspection, unless the property is sold, in which case a subsequent inspection shall be conducted at the time of sale.~~



City Council Ordinance

Such inspections shall be completed by a certified subsurface wastewater disposal system inspector. Such inspector shall inspect the private subsurface wastewater disposal system using the minimum requirements established by the Maine Department of Health and Human Services, Division of Environmental and Community Health for evaluating and reporting on existing subsurface wastewater disposal systems.

b. *City record keeping and notifications.* The city planning, permitting and code department shall maintain, within the city GIS system, a record of each subsurface wastewater disposal system within the Lake Auburn Watershed Overlay District that requires inspection. The record must include, at a minimum, the city parcel identifier, date the next inspection is due, and date of the last inspection. The city planning, permitting and code department shall provide the owner of each building or dwelling unit written notices by regular mail, to the address shown on the city property tax records, of the date by which the inspection of the subsurface wastewater disposal system must be completed. The first notice shall be mailed 12 months prior to each required completion date and the second notice six months prior to each required completion date.

c. *Reporting and reviewing of results of inspections.* Reporting shall be made utilizing the latest version of the HHE-240 reporting form, for initial inspections, and the Supplement HHE-240 reporting form, for subsequent inspections, as published by the Maine Department of Health and Human Services, Division of Environmental and Community Health. Such reports shall be submitted to the local plumbing inspector.

The local plumbing inspector shall review the report and determine if corrective action is required to ensure that;

1. for subsurface wastewater disposal systems for which a design is on file with the planning, permitting and code department, the system is functioning per the design on file,
2. for subsurface wastewater disposal systems for which there is no design on file with the planning, permitting and code department, the system is functioning as built.

d. *Alternative design for replacement subsurface wastewater disposal systems.* For buildings or dwelling units that exist in the Lake Auburn Watershed Overlay District as of July 1, 2024, should the local plumbing inspector determine, upon review of the report from the subsurface wastewater disposal system inspector, through personal observation, or through independent means, that the subsurface wastewater disposal system is not functioning as designed or built and a replacement system is required, and:

1. a state licensed site evaluator informs the local plumbing inspector that the parcel on which the building or dwelling unit is situated is not suitable to site a replacement subsurface wastewater disposal system that meets the requirements of this section and the latest version of the Maine Subsurface Wastewater Disposal Rule, 10-144 C.M.R. ch. 241; and
2. the local plumbing inspector determines that the replacement subsurface wastewater disposal system cannot be sited pursuant to Subsection 4;

then a state licensed site evaluator may propose, and the local plumbing inspector may approve, after consultation with the Lake Auburn Water Protection Commission, an alternative subsurface wastewater design that does not meet the requirements of this section and the latest version of the Maine Subsurface Wastewater Disposal Rule, 10-144 C.M.R. ch. 241 but which meets as many of the requirements as possible, and for those requirements that cannot be met, includes design elements that maximize the efficacy of the treatment of the wastewater.



City Council Ordinance

- (76) ~~The Auburn Water District~~In coordination with the local plumbing inspector, LAWPC, or its designee, shall have the right to inspect any subsurface wastewater disposal system within the Lake Auburn Watershed Overlay District during its construction and operation and may notify the City of Auburn health officer, police chief, local plumbing inspector or ~~housing inspector~~code enforcement officer of any observed defects or malfunction that require ~~abatement~~corrective action by the property owner or operator.
- (87) The local plumbing inspector shall furnish a copy of all site evaluation and inspection reports in the Lake Auburn Watershed Overlay District to ~~the Auburn Water District or its designee~~LAWPC.
- 8) Commencing on July 1, 2024, a maximum of three new dwelling units per calendar year are permitted in that part of the Lake Auburn Watershed Overlay District in which new dwelling units are permitted. The city planning, permitting, and code department shall, on an annual basis, provide a report to the Planning Board as to the extent and effect of the construction of new dwelling units in the Lake Auburn Watershed Overlay District. The report shall include, at a minimum, the number of new dwelling units constructed in the past year, the cumulative number of new dwelling units constructed since July 1, 2024, and the effect of such construction on the Lake Auburn water quality. Should the Planning Board conclude, based on the city planning, permitting and code department report that the construction of new dwelling units has had an adverse effect on the Lake Auburn water quality, the Planning Board shall consider what action is to be taken to prevent further degradation of Lake Auburn water quality from the construction of new dwelling units.

2. Agricultural, Forestry, and Erosion Control.

- (a) *Agricultural uses.* Non-hobby agricultural uses not in existence as of January 1, 2024 are prohibited, and expansions of non-hobby agricultural uses in existence as of December 31, 2023 are prohibited. As of January 1, 2024, new hobby agricultural uses or expansions of hobby agricultural uses in existence as of December 31, 2023 are only allowed if:
- (1) The owner or operator first demonstrates to LAWPC's watershed manager that such use or expansion will not cause groundwater contamination and will not contaminate or disturb the normal course of surface water runoff; and
 - (2) LAWPC's watershed manager approves such use or expansion in writing and so notifies the code enforcement officer.
- (c) *Agricultural buffer strip.* Where land adjoining Lake Auburn or its perennial tributaries (as depicted on a 7.5 minute series USGS topographic map, dated 1981) is tilled for agricultural purposes, an untilled buffer strip 100 feet wide shall be retained between the tilled area and the normal high-water mark. This subsection (c) shall not be interpreted as permitting agricultural tillage in any zoning district in which it is not otherwise permitted.
- (d) *Manure and sludge disposal.* Spreading and disposal of sludge is prohibited. All spreading and disposal of manure shall be accomplished in conformance with the then-current edition of the Maine Department of Agriculture, Conservation and Forestry's rules, regulations and guidelines for manure spreading and disposal.
- (e) *Erosion control.* The following provisions shall be observed for the control of erosion in the Lake Auburn Watershed:
- (1) Any earth cutting, moving or removal activities that will result in erosion or runoff which is likely to increase sedimentation of Lake Auburn, or any tributaries or other water bodies in the watershed are prohibited.
 - (2) Vegetative cover shall not be removed except in a manner which will minimize erosion. Harvesting of trees shall be permitted only after a plan prepared by a qualified forester is submitted to and approved

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City Council Ordinance

by the Auburn Water District. Such plan will be approved or disapproved on the basis of its conformance with good watershed management practice for domestic water supplies.

- (3) Trees may be cleared, provided the cleared areas are covered with other vegetation, for approved construction and landscaping. Where such clearing is extended to the shoreline, a cleared opening or openings not greater than 30 feet in width for every 100 feet of shoreline (measured along the high-water mark) may be created in the strip extending 50 feet inland from the normal high-water mark. For purposes of this section, clearing is the removal of adjacent dominant trees which extend into the canopy and shrubs within ten feet of the shoreline. Where natural vegetation is removed, it shall be replaced with other vegetation which is equally effective in retarding erosion and preserving natural beauty. When the vegetative cover is changed in areas greater than three acres, a plan shall be filed with the Auburn Water District indicating the changes so that a record can be maintained of watershed water yields to the system.

3. Enforcement

The city planning, permitting and code department shall have authority to enforce all requirements of this Division in accordance with section 60-1403.

(Ord. of 9-21-2009, § 5.3C; Ord. No. 19-12022019, 12-9-2019; Ord. No. 10-06202023, 7-10-2023; Ord. No. 28-11202023, 12-4-2023)

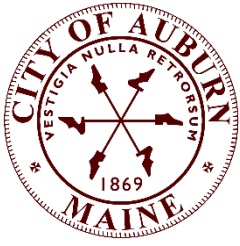


Sec. 60-953. Dimensional regulations; building setbacks.

~~All~~ Any new or expanded buildings ~~and or~~ structures, except those requiring direct access to the water as an operational necessity, shall be constructed not less than ~~75~~100 feet inland from the normal high-water mark ~~of Lake Auburn~~. Operational necessity shall include private docks, but shall not include boathouses, storage sheds, garages, or other structures. Marinas and boat rental facilities shall not be permitted within ~~75~~100 feet of the normal high-water mark of Lake Auburn.

(Ord. of 9-21-2009, § 5.3D)





**City of Auburn
City Council Information Sheet**

Council Workshop or Meeting Date: July 15, 2024

Ordinance: 14-07012024

Author: Eric J. Cousens, Planning & Permitting Director

Subject: Second Reading of a Zoning Map Amendment regarding a Subsurface Wastewater System Inspection Map in the Lake Auburn Watershed Overlay District as proposed by the Lake Auburn Stakeholder Group pursuant to order 04-01022024 and order 71-05062024.

Information: This item proposes adopting a map which lays out a timeline for a new septic system inspection program referenced in the amendments to Division 4 Lake Auburn Watershed Overlay District. Staff recommends this map amendment. This map will serve as a guide for the city to plan inspections in a timely way according to their proximity and risk to Lake Auburn.

The planning board recommended two minor amendments in the motion to forward a favorable recommendation to city council to adopt the Lake Auburn Watershed Overlay District Septic Inspection Map. The recommended amendments included 1.) to remove the dots from the map as they don't provide specific information relative to the actual areas that are being tested and the focus should be on the zones/color-coded areas, 2.) Update the dates on the map to reference year 1 through year 5 and eliminate actual dates. These amendments were made and passed at the first reading held on July 1, 2024.

A public hearing notice was placed for second reading and public hearing to be held at the July 15, 2024 meeting.

City Budgetary Impacts: Staff Time

Staff Recommended Action: Second Reading and Public Hearing.

Previous Meetings and History: Recommendations originate from approximately ten stakeholder meetings from February through May. The Planning Board held a workshop on this text amendment on May 14, and made a positive recommendation on June 18. Amended and passed first reading on July 1, 2024.

City Manager Comments:

I concur with the recommendation. Signature:

Attachments:

June 18 Planning Board Motion, Staff Report, Cost estimation sheet, Ordinance, Division 4- Lake Auburn Watershed Overlay District Septic Inspection Map (as amended)



City of Auburn, Maine

Office of Planning & Permitting

Eric Cousens, Director

60 Court Street | Auburn, Maine 04210

www.auburnmaine.gov | 207.333.6601

To: Auburn Planning Board
From: John Blais, Deputy Director of Planning & Permitting
Re: Item #6 Map Amendment Related to Lake Auburn Stakeholders Group
Date: May 14, 2024

I. PROPOSAL: The Planning Board is to review Septic System Inspection Map in relation to Lake Auburn Watershed Overlay District as proposed by the Lake Auburn Stakeholder Group pursuant to order 04-01022024 and order 71-05062024. (See attached map)

II. DEPARTMENT REVIEW:

- Police - No Comments
- Auburn Water and Sewer – No Comments
- Fire Department/Code Enforcement – No Comments
- Engineering – No Comments
- Public Services - No Comments
- Airport – No Comments
- 911 - No Comments

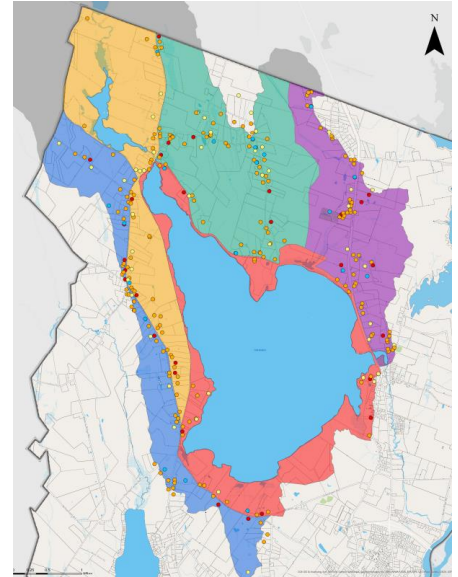
III. SUGGESTED FINDINGS OF FACT:

1. The amendments are consistent with the growth pattern specified in the Future Land Use Plan in Auburn’s Comprehensive Plan.
2. The proposed map and text amendments serve Goal A.1 in the Comprehensive Plan to maintain the exceptional water quality of Lake Auburn and existing waiver from filtration to avoid or delay the need for costly treatment (pages 4-9)
3. These proposed amendments are in service of Goal B.1 in the Comprehensive plan, to ensure sufficient clean water supplies to meet current and future needs (pages 20-21).
4. These amendments align with the Lake Auburn Study, 2021; and the report by FB Environmental: Lake Auburn Memo from August 2022.
5. These amendments are the result of several public meetings with the Lake Auburn Stakeholders Group as ordered by City Council.

IV. PLANNING BOARD ACTION/STAFF RECOMMENDATIONS:

E.) Lake Auburn Watershed Overlay District Septic Systems Inspection Map: This item proposes adopting a map which lays out a timeline for a new septic system inspection program referenced in the amendments to Division 4 Lake Auburn Watershed Overlay District. Staff recommends this map amendment. This map will serve as a guide for the city to plan inspections in a timely way according to their proximity and risk to Lake Auburn.

POTENTIAL MOTION: I make a motion to forward a favorable recommendation to City Council to adopt the Lake Auburn Watershed Overlay District Septic Systems Inspection Map in accordance with Chapter 60, Article XVII Division 2- Amendment to the Zoning Ordinance or Zoning Map.





City of Auburn, Maine

Planning & Permitting Department

Eric Cousens, Director

60 Court Street | Auburn, Maine 04210

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Date: 06/24/2024

To: Auburn City Council

From: Auburn Planning Board

Subject: Planning Board Motion on Lake Auburn Watershed Map Amendment (Septic System Inspection Program)

The following is the report from the Planning Board regarding adopting the Septic System Inspection map. After notice and Public Hearings held on June 18th, 2024, the Planning Board forwards this report to the City Council.

PUBLIC HEARING/ MAP AMENDMENT: Consider adopting the Lake Auburn Watershed Overlay District Septic Systems Inspection Map. This map will be referred to in Chapter 60 Article XII Division 4 Lake Auburn Watershed Overlay District and will be considered in accordance with Chapter 60, Article XVII Division 2-Amendment to the Zoning Ordinance or Zoning Map.

Summary and Discussion: John Blais clarifies that if either the house or the septic system is partly in the watershed, it would be subject to inspection. The dots on the map are only for reference. Staff recommends that this map become an interactive GIS layer for the public to reference. There is more discussion about updating records of septic systems as the inspection program rolls out. There was also discussion about the possibility of submitting a septic inspection before the deadline prescribed on the map. Staff answered that getting the inspection earlier and counting it in the inspection program will be permitted. They made the motion, made two (2) amendments to their original motion, and then voted to forward a favorable recommendation to the Council.

Motion: I make a motion to forward a favorable recommendation to city council to adopt the Lake Auburn Watershed Overlay District Septic Inspection Map in accordance with Ch. 60, Article XVII Division 2-Amendment to the Zoning Ordinance or Zoning Map **Second:** Bob Hayes seconds the motion.

Amendment 1: Dave Trask makes an amendment to update the dates on the map to reference year 1 through year 5 rather than date certain given our previous discussions **Second:** Riley Bergeron seconds the amendment. **Amendment passes 5-0-0**

Amendment 2: Dave Trask makes an amendment to remove the dots from the map as they don't provide specific information relative to the actual areas that are being tested and the focus should be on the color-coded areas. **Second:** Bob Hayes seconds.

Amendment passes 5-0-0

Final Motion: Dave Trask seeks motion for the original motion with the two (2) amendments. **Second:** Darren Finnegan Seconds.

Vote 5-0-0 motion passes.

Number of Septic Systems:

Number of Rate Payers in Auburn & Lewiston:

Number of Customers in Auburn & Lewiston

Year	Number of Inspection		Cost of Inspection
1	50	\$	425.00
2	46	\$	425.00
3	78	\$	425.00
4	78	\$	425.00
5	79	\$	425.00

Mike Locombe
Pillar to Post
949 Sabattus Street
Lewiston, Maine
207.754.1724

\$
michael.lacombe@pillartopost.com

Stanleys Septic Tank Service
187 Norridgwock Rd.
Fairfield, ME
Inspection & Pump Tank

375.00 *\$475 includes pumping
stanleysseptic@roadrunner.com

Septic Inspection Cost Worksheet

330
18,000
39000

	Cost per Year		Cost Per Customer (Year)		Rate Payer Cost (Year)		Cost Per Quarter
\$	21,250.00	\$	0.54	\$	1.18	\$	0.30
\$	19,550.00	\$	0.50	\$	1.09	\$	0.27
\$	33,150.00	\$	0.85	\$	1.84	\$	0.46
\$	33,150.00	\$	0.85	\$	1.84	\$	0.46
\$	33,575.00	\$	0.86	\$	1.87	\$	0.47

Focused Property Inspections

347 Main Street. Unit 1B

Gorham, Maine

Inspection Only

207-839-6595

\$ 325.00

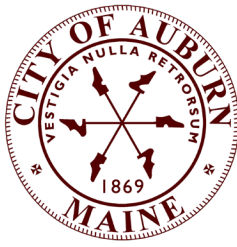
jeffreypfi-web.com

W.E. Fenderson

Tank Pumping

207.782.4265

\$ 350.00



City Council Ordinance

IN CITY COUNCIL

Creating the Lake Auburn Watershed Overlay District Septic Inspection Map

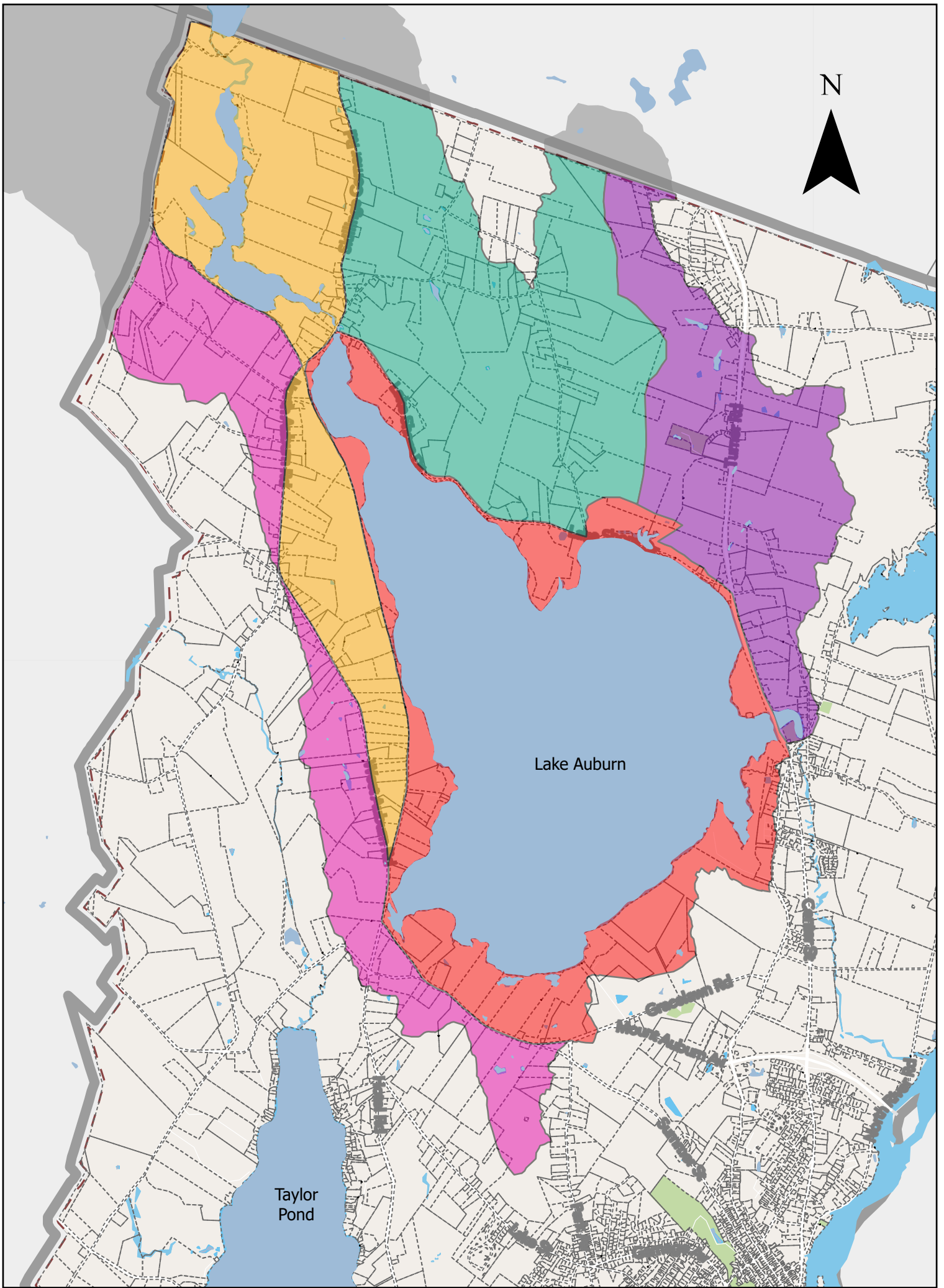
Be it ordained, by the Auburn City Council, that the Official Zoning Map of the City of Auburn to be amended to create the Lake Auburn Watershed Overlay District Septic Inspection Map. This map will be referred to in Chapter 60 Article XII Division 4 Lake Auburn Watershed Overlay District and appears as attached.

Richard S. Whiting, Ward One
Benjamin J. Weisner, Ward Four
Belinda A. Gerry, At Large

Timothy M. Cowan, Ward Two
Leroy G. Walker, Sr., Ward Five
Jeffrey D. Harmon, Mayor

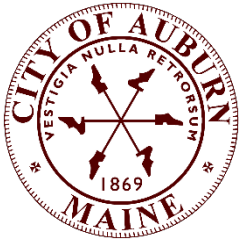
Stephen G. Milks, Ward Three
Adam R. Platz, At Large
Phillip L. Crowell, Jr., City Manager

Lake Auburn Watershed Overlay District Septic System Inspection Map



Septic Inspection Areas by Year

- Year 1
- Year 2
- Year 3
- Year 4
- Year 5
- Remaining Area



**City of Auburn
City Council Information Sheet**

Council Workshop or Meeting Date: July 15, 2024

Ordinance: 15-07012024

Author: Eric J. Cousens, Planning & Permitting Director

Subject: Second Reading on a Zoning Map Amendment adopting the Lake Auburn Watershed Overlay District 400-foot setback to Lake, Stream & Brook, for Subsurface Wastewater Fields Map as proposed by the Lake Auburn Stakeholder Group pursuant to order 04-01022024 and order 71-05062024.

Information: This item proposes codifying a visual to show the proposed 400-foot buffers from the high-water mark of any lake, pond, stream or brook as identified on the USGS 7.5 minute series map. Staff recommends this map amendment. This map will serve as a reference to property owners and for city staff to ensure that new subsurface wastewater disposal systems are located a safe distance away from tributaries which feed Lake Auburn. The language requiring septic systems be at least 400 feet away from a tributary of Lake Auburn was already passed in the previous text amendment and the map is a visual representation of the text.

The planning board voted to forward a favorable recommendation to city council to adopt the Lake Auburn Watershed Overlay District 400 feet setback to Lake, Stream, and Brook for Subsurface Wastewater Fields, attached in this meeting's materials. This item was given first reading and passed on July 1, 2024. A public hearing notice was placed for second reading and public hearing to be held at the July 15, 2024 meeting.

City Budgetary Impacts: Staff Time

Staff Recommended Action: Second Reading and Public Hearing.

Previous Meetings and History: Recommendations originate from approximately ten stakeholder meetings from February through May. The Planning Board made a favorable recommendation on June 18. This item was given first reading and passed on July 1, 2024.

City Manager Comments:

I concur with the recommendation. Signature:

Attachments:

Division 4- Lake Auburn Watershed Overlay District 400 feet setback to Lake, Stream, and Brook for Subsurface Wastewater Fields, June 18 Planning Board Motion, Ordinance



City of Auburn, Maine

Planning & Permitting Department

Eric Cousens, Director

60 Court Street | Auburn, Maine 04210

www.auburnmaine.gov | 207.333.6601

Date: 06/24/2024

To: Auburn City Council

From: Auburn Planning Board

Subject: Planning Board Motion on Lake Auburn Watershed Map Amendment (400 Foot Resource Setback)

The following is the report from the Planning Board regarding adopting the Septic System Resource Setback Map for new, expanded, and replacement septic systems. After notice and Public Hearings held on June 18th, 2024, the Planning Board forwards this report to the City Council.

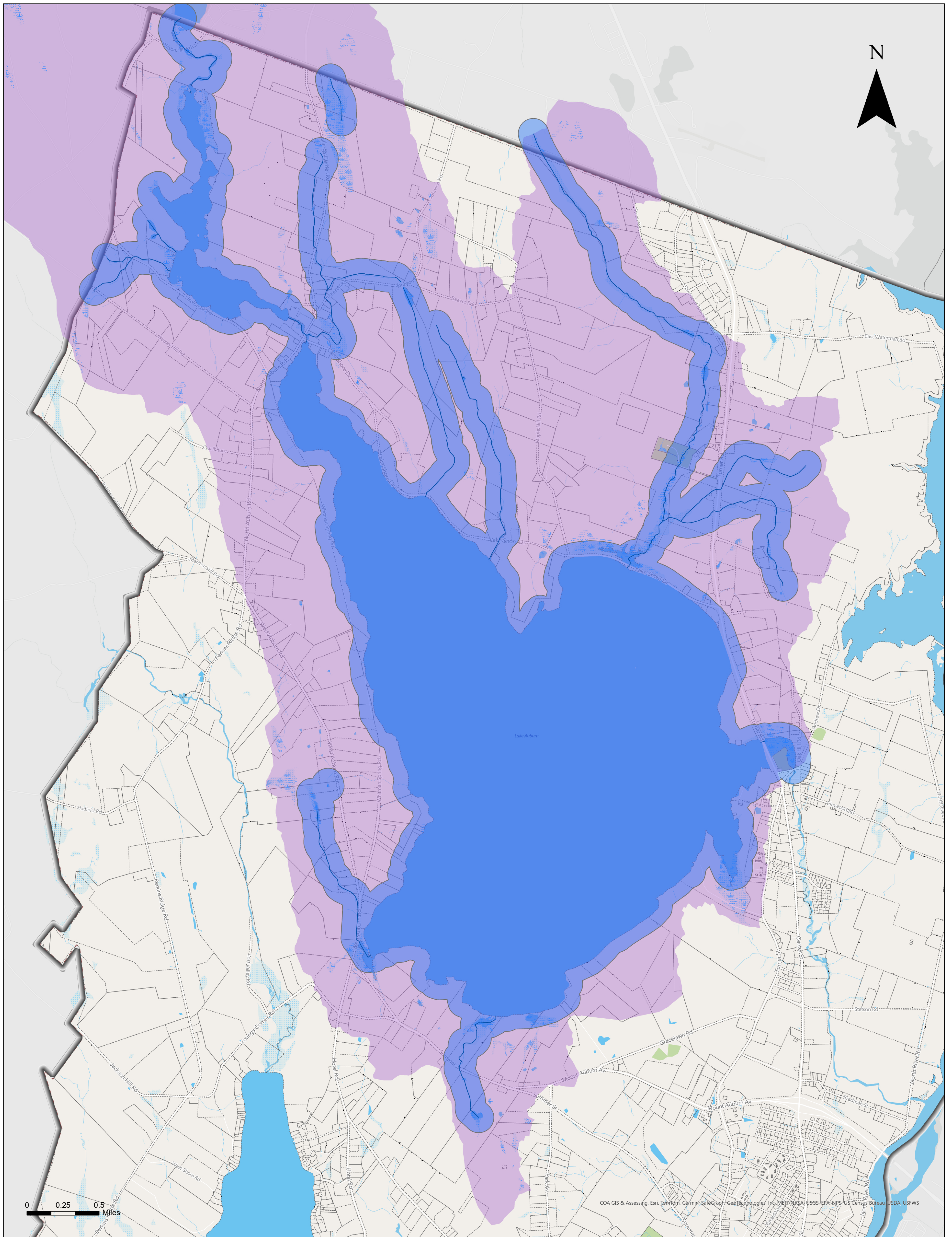
PUBLIC HEARING/ MAP AMENDMENT: Consider adopting the Official Lake Auburn Overlay District 400 ft. Setback to Lake, Stream, and Brook for Subsurface Wastewater Fields map. This map will be referenced in Chapter 60 Article XII Division 4 Lake Auburn Watershed Overlay District and will be considered in accordance with Chapter 60, Article XVII Division 2- Amendment to the Zoning Ordinance or Zoning Map.

Summary and Discussion: Discussion about whether this amendment means that ADUs or home expansions cannot be added if they require a new or expanded septic system within one of the mapped buffer areas. Staff confirms, but also points out that this language requiring septic systems be at least 400 feet away from a tributary of Lake Auburn was already passed in the previous text amendment and the map is a visual representation of the text. They made a favorable recommendation to the Official Lake Auburn Overlay District 400' setback to Lake, Stream and Brook for Subsurface Wastewater Fields Map.

Motion: Darren Finnegan makes a motion to forward a favorable recommendation to city council to adopt the Official Lake Auburn Watershed Overlay District 400 feet setback to Lake, Stream & Brook, for Subsurface Wastewater Fields Map in accordance with Ch. 60, Article XVII Division 2- Amendment to the Zoning Ordinance or Zoning Map **Second:** Bob Hayes seconds the motion.

Vote: 5-0-0 motion passes.

Official Lake Auburn Overlay District 400' setback to Lake, Stream, and Brook for Subsurface Wastewater Fields



- Lake Auburn Watershed
- USGS 7.5 Minute Streams
- Lake Auburn Watershed Streams Buffer 400 ft
- Wetlands



* This Map was created on April 23, 2024 using USGS 7.5 minute lakes and streams



City of Auburn, Maine

Office of Planning & Permitting

Eric Cousens, Director

60 Court Street | Auburn, Maine 04210

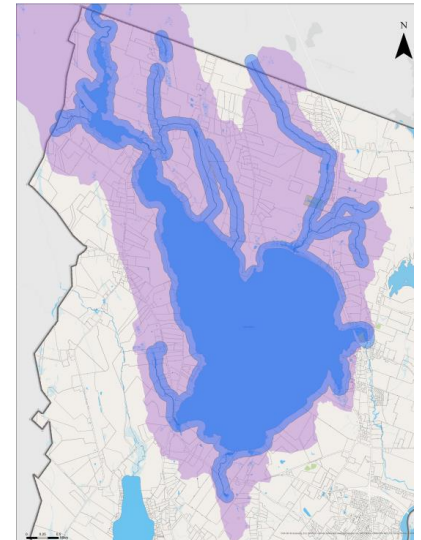
www.auburnmaine.gov | 207.333.6601

To: Auburn Planning Board
From: John Blais, Deputy Director of Planning & Permitting
Re: Item #7 Map Amendments Related to Lake Auburn Stakeholders Group
Date: June 18, 2024

I. PROPOSAL: The Planning Board is to review resource 400' setback map for septic systems to support language Article II General Provisions, Division 2, Lake Auburn Watershed Overlay District as proposed by the Lake Auburn Stakeholder Group pursuant to order 04-01022024 and order 71-05062024. (See attached map)

II. DEPARTMENT REVIEW:

- Police - No Comments
- Auburn Water and Sewer – No Comments
- Fire Department/Code Enforcement – No Comments
- Engineering – No Comments
- Public Services - No Comments
- Airport – No Comments
- 911 - No Comments



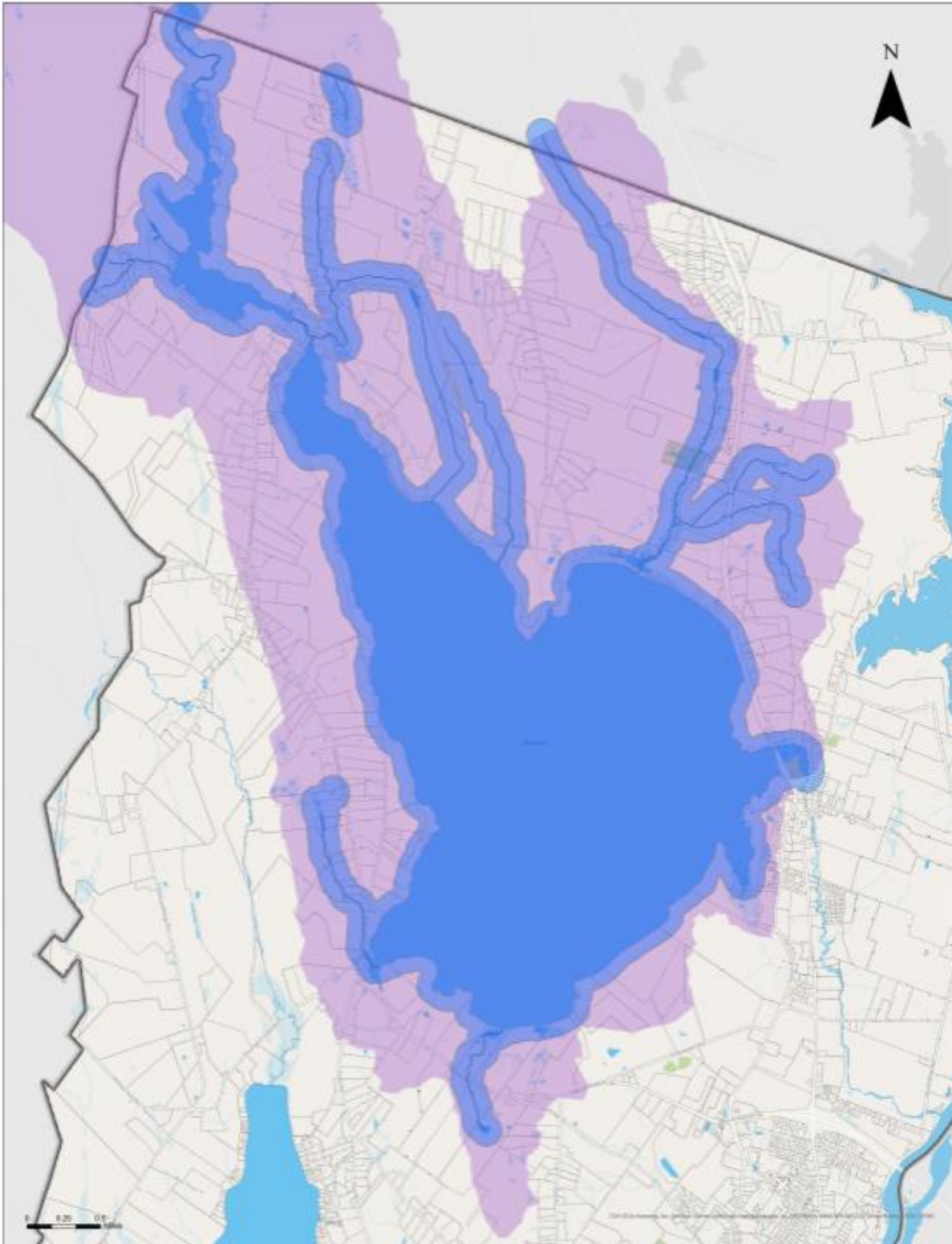
III. SUGGESTED FINDINGS OF FACT:

1. The amendments are consistent with the growth pattern specified in the Future Land Use Plan in Auburn's Comprehensive Plan.
2. The proposed map and text amendments serve Goal A.1 in the Comprehensive Plan to maintain the exceptional water quality of Lake Auburn and existing waiver from filtration to avoid or delay the need for costly treatment (pages 4-9)
3. These proposed amendments are in service of Goal B.1 in the Comprehensive plan, to ensure sufficient clean water supplies to meet current and future needs (pages 20-21).
4. These amendments align with the Lake Auburn Study, 2021; and the report by FB Environmental: Lake Auburn Memo from August 2022.
5. These amendments are the result of several public meetings with the Lake Auburn Stakeholders Group as ordered by City Council.

IV. PLANNING BOARD ACTION/STAFF RECOMMENDATIONS:

D.) Official Lake Auburn Overlay District 400-foot setback to Lake, Stream, and Brook for Subsurface Wastewater Fields: This item proposed codifying a visual to show the proposed 400-foot buffers from the high-water mark of any lake, pond, stream or brook. Staff recommends this map amendment. This map will serve as a reference to property owners and for city staff to ensure that new subsurface wastewater disposal systems are located a safe distance away from tributaries which feed Lake Auburn. This buffer is referenced in the Division 4 Lake Auburn Watershed Overlay District Text Amendment. Staff recommends adopting this resource setback map as an official zoning map.

POTENTIAL MOTION: I make a motion to forward a favorable recommendation to City Council to adopt the Official Lake Auburn Overlay District 400 ft. Setback to Lake, Stream, and Brook for Subsurface Wastewater Fields map in accordance with Chapter 60 Article XVII Division 2- Amendment to the Zoning Ordinance or Zoning Map.





City Council Ordinance

IN CITY COUNCIL

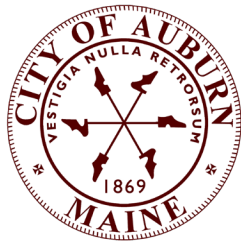
Creating the Official Lake Auburn Overlay District 400-foot Setback to Lake, Stream, and Brook for Subsurface Wastewater Fields:

Be it ordained, by the Auburn City Council, that the Official Zoning Map of the City of Auburn to be amended to create the Official Lake Auburn Overlay District 400 ft. Setback to Lake, Stream, and Brook for Subsurface Wastewater Fields map in accordance with Chapter 60 Article XVII Division 2- and appears as follows:

Richard S. Whiting, Ward One
Benjamin J. Weisner, Ward Four
Belinda A. Gerry, At Large

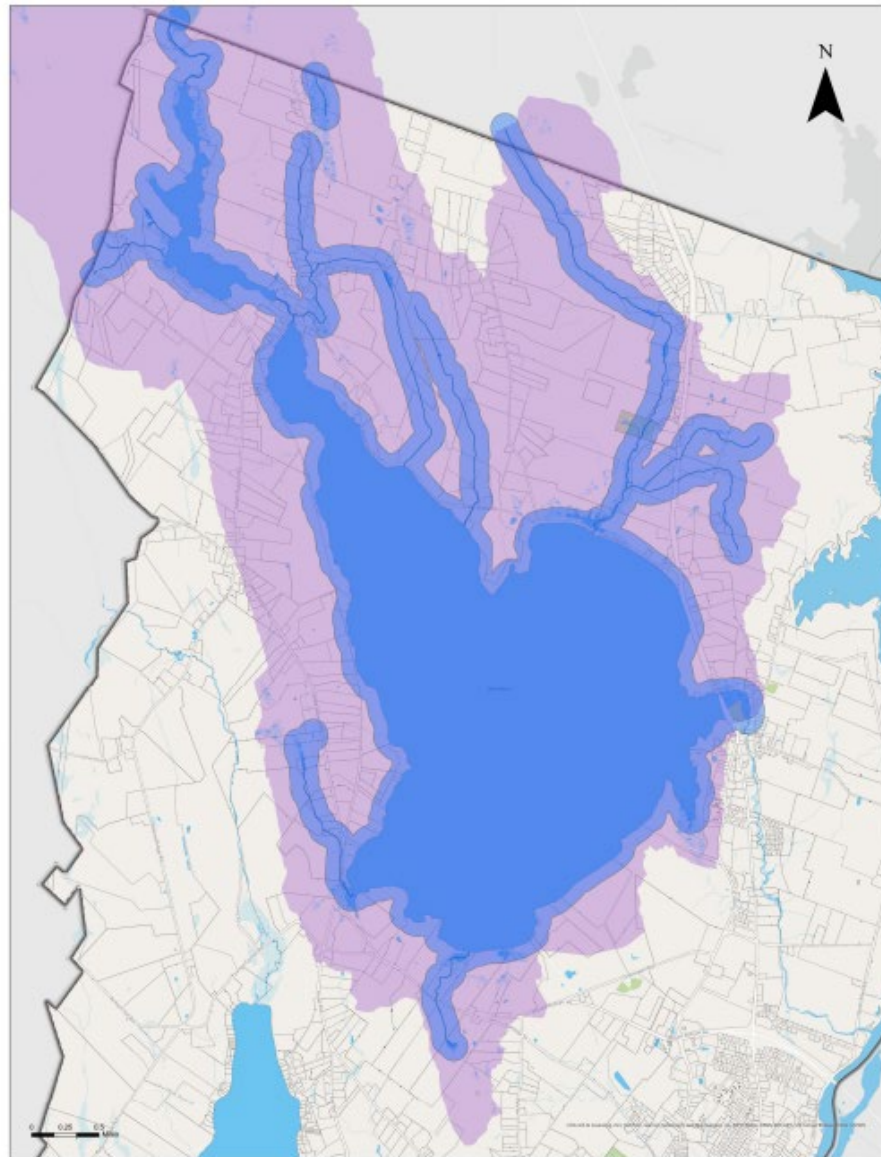
Timothy M. Cowan, Ward Two
Leroy G. Walker, Sr., Ward Five
Jeffrey D. Harmon, Mayor

Stephen G. Milks, Ward Three
Adam R. Platz, At Large
Phillip L. Crowell, Jr., City Manager



City Council Ordinance

Official Lake Auburn Overlay District 400' setback to Lake, Stream, and Brook for Subsurface Wastewater Fields



- Lake Auburn Watershed
- USGS 7.5 Minute Streams
- Lake Auburn Watershed Streams Buffer 400 ft
- Wetlands

* This Map was created on April 23, 2024 using USGS 7.5 minute lakes and streams



Richard S. Whiting, Ward One
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Timothy M. Cowan, Ward Two
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Jeffrey D. Harmon, Mayor

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Adam R. Platz, At Large
Phillip L. Crowell, Jr., City Manager



City Council Resolve

IN CITY COUNCIL

BE IT RESOLVED, WHEREAS, Lake Auburn is a great pond owned by the State of Maine in trust for the benefit of the citizens of the State; and

WHEREAS, the Maine State Legislature has granted the Auburn Water District and the City of Lewiston the right to draw water from Lake Auburn for the purpose of providing drinking water to the residents and other water users within the cities of Auburn and Lewiston; and

WHEREAS, in 1993 the Auburn Water District and the City of Lewiston entered into an interlocal cooperation agreement for the protection of Lake Auburn; and

WHEREAS, through the 1993 interlocal cooperation agreement the Auburn Water District and the City of Lewiston created the Lake Auburn Watershed Protection Commission; and

WHEREAS, the Lake Auburn Water Protection Commission receives its general fund budget from the Auburn Water District and the City of Lewiston on an equal basis; and

WHEREAS, the purpose of the Lake Auburn Water Protection Commission is to take reasonable steps to protect Lake Auburn from pollution; and

WHEREAS, the State of Maine Drinking Water Program has, through its statutory authority, defined the watershed boundary for Lake Auburn; and

WHEREAS, the Auburn Water District, City of Auburn, City of Lewiston, and the Lake Auburn Water Protection Commission have all adopted the Lake Auburn Watershed boundary as set forth by the State of Maine Drinking Water Program; and

WHEREAS, the City of Auburn has enacted municipal ordinances to create a Lake Auburn Watershed Overlay District that conforms to the Lake Auburn Watershed Boundary; and

Richard S. Whiting, Ward One
Benjamin J. Weisner, Ward Four
Belinda A. Gerry, At Large

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Adam R. Platz, At Large
Phillip L. Crowell, Jr., City Manager



City Council Resolve

WHEREAS, the City of Auburn has enacted municipal ordinances regulating the installation and use of subsurface wastewater treatment systems that are used within the Lake Auburn Watershed Overlay District in order to protect Lake Auburn from pollution; and

WHEREAS, to ensure that subsurface wastewater treatment systems operating within the Lake Auburn Watershed Overlay District are functioning in compliance with City ordinances, the City of Auburn has enacted municipal ordinances that require the owner of the property to have their subsurface wastewater treatment system inspected on a periodic basis by a qualified inspector who shall report their findings to the City; and

WHEREAS, the cost of such inspections may be burdensome to property owners who must have such inspections performed; and

WHEREAS, most residents of the Lake Auburn Watershed Overlay District do not receive drinking water from the Auburn Water District and the primary beneficiary of the subsurface wastewater treatment system inspections performed in the Lake Auburn Overlay District are the customers of the Auburn Water District and City of Lewiston Water Division.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Auburn that, we call upon the Lake Auburn Water Protection Commission to institute a program to perform, without charge, the subsurface wastewater treatment system inspections within the Lake Auburn Watershed Overlay District to protect Lake Auburn from pollution and to remove the burdensome cost from residents within the Lake Auburn Watershed Overlay District who do not enjoy the benefit of receiving drinking water from Lake Auburn.

AND BE IT FURTHER RESOLVED, that we call upon the Auburn Water District and the City of Lewiston to provide adequate appropriations to the Lake Auburn Water Protection Commission to fund a program to perform the subsurface wastewater treatment system inspections within the Lake Auburn Watershed Overlay District.

Richard S. Whiting, Ward One
Benjamin J. Weisner, Ward Four
Belinda A. Gerry, At Large

Timothy M. Cowan, Ward Two
Leroy G. Walker, Sr., Ward Five
Jeffrey D. Harmon, Mayor

Stephen G. Milks, Ward Three
Adam R. Platz, At Large
Phillip L. Crowell, Jr., City Manager

Lake Auburn Watershed Protection Commission

Special Meeting

Wednesday, August 14, 2024

Location: Androscoggin Valley Council of Governments (AVCOG), Auburn, Maine

Time: Meeting began at 3:00 PM

Recording: The meeting was video recorded. A link to the video is on the Commission website.

Commissioners Present: Alan Holbrook, Amy Landry, Bruce Damon, David Chittim, Kevin Gagne, Glen Holmes, Evan Cyr, Dan Bilodeau and Camille Parrish.

Commissioners Absent: There are currently two vacancies on the Commission.

Others Present: Michael Broadbent Commission Clerk, Erica Kidd Watershed Manager, Tracy Roy Commission Treasurer.

Agenda Item 1, Minutes

Vote 1 On a Motion by Commissioner Chittim and seconded by Commissioner Gagne to approve the minutes of the June 12, 2024 Commission Meeting.

Passed 9-0

Agenda Item 2, Commission seats- new members/vacancies

Bruce Damon was appointed to the Commission as a Lewiston Resident representative, Mr. Damon replaced Commissioner Hunter's vacancy. The Auburn Water District appointed Evan Cyr as a Auburn Resident Representative to the Commission. Mr. Cyr's appointment is to fill the remainder of a 3-year term previously held by Commissioner Kowalski. The Auburn Water District also appointed a Trustee representative to the Commission, Dan Bilodeau. Mr. Bilodeau has been appointed to this position for the two previous terms.

Agenda Item 3, Public Comment

Steven Beale of 575 Johnson Hill Rd, commented that the City of Lewiston's suit against the Auburn Water District was dropped shortly after the City of Auburn adopted new ordinances for the protection of Lake Auburn.

Agenda Item 4, Executive session in accordance with 1 M.R.S.A § 405 (6)(C) to discuss a personnel matter.

Vote 2 On a motion by Commissioner Chittim and seconded by Commissioner Holbrook to go into executive session in accordance with 1 M.R.S.A § 405 (6)(C) to discuss a personnel matter.

Passed 9-0

Executive Session ended at 3:16 pm

Agenda Item 5, Executive session in accordance with 1 M.R.S.A § 405 (6)(C) to discuss a potential land transaction.

Vote 3 On a motion by Commissioner Chittim and seconded by Commissioner Landry to go into executive session in accordance with 1 M.R.S.A § 405 (6)(C) to discuss a potential land transaction.

Passed 9-0

Executive Session ended at 3:34 pm

Vote 4 On a motion by Commissioner Holmes and seconded by Commissioner Chittim to authorize Erica Kidd to negotiate with a property owner as discussed in executive session.

Passed 9-0

Agenda Item 6, Clerk and Staff reports

Commission Clerk Broadbent reported that the Auburn Water District was once again hosting the measuring of the lake event at the Lake Auburn Water Treatment Plant. Commissioners and staff have all been invited and are encouraged to attend.

Commission Clerk Kidd reported that Lake water quality is looking very favorable for this time of year. The water is exceptionally clear, phosphorus numbers are relatively low and temperatures in the lake are already starting to drop.

Agenda Item 7, Old Business

Commission Clerk Broadbent reported that the City had passed ordinances that would require all septic systems in the watershed to be inspected over a 5-year period. While the ordinance does not require the Commission to conduct the inspections there has been significant discussions that the Commission is asked to fund the program.

Vote 5 On a motion by Commissioner Chittim and seconded by Commissioner Holmes to form a sub-committee to review the ordinances and actions of Auburn City Counsel as they relate to septic inspections and to draft a proposal on how to complete the inspections as outlined. The Committee was asked to present their initial findings to the Commission at the September 11, regular Commission meeting.

Passed 9-0

Commissioners Cyr and Gagne volunteered to serve on the Committee, both Clerks and the Watershed Manager will also serve.

Agenda Item 8, Request to use water hauler funds for a new potable water fill station.

For years, the Commission collected funds from water haulers who withdrew water from lake Auburn. Haulers went through an inspection program and withdrew from a designated location. In 2022 Rt 4 was redesigned and the new design eliminated the only suitable location for water haulers and this program was abandoned. Lewiston is requesting use of the collected funds to install a new fill station in Lewiston.

The Commissioners were receptive of this but they wanted to know how much money is currently in the account.

Agenda Item 9, Other Business

Vote 6 On a motion by Commissioner Landry and seconded by Commissioner Holmes to appoint Erica Kidd to the vacant Lewiston Co-clerk position on the Commission.

Passed 9-0

Vote 7 On a motion by Commissioner Holmes and seconded by commissioner Chittim to adjourn the meeting.

Passed 9-0

A true record, attest;

Amy Landry

LAWPC Secretary

**Lake Auburn Watershed Commission
Statement of Revenues & Expenditures
28-Aug-24**

	Original Operating Budget	Final Operating Budget	Operating Account	Balance	Sinking Fund	YTD Combined	12/31/23 Combined	12/31/22 Combined
Revenues:								
Contributions - AWD	60,000.00	60,000.00	7,289.10	52,710.90	16,666.64	23,955.74	85,000.00	78,250.00
Contributions - LWD	60,000.00	60,000.00	40,000.00	20,000.00	3,123.90	43,123.90	85,000.00	78,250.00
Timber Harvesting	2,000.00	2,000.00	-	2,000.00	-	-	2,625.00	29,312.96
Reimbursement	-	-	-	-	-	-	87.46	-
Gain on Sale of Assets	-	-	-	-	-	-	2,119.50	-
Water Withdrawal Revenue	-	-	-	-	-	-	-	386.70
Intergovernmental	2,000.00	2,000.00	-	2,000.00	29,250.33	29,250.33	43,375.00	2,250.00
Interest	35.00	35.00	4,224.27	(4,189.27)	934.58	5,158.85	8,498.28	2,312.40
Total Revenues	124,035.00	124,035.00	51,513.37	72,521.63	49,975.45	101,488.82	226,705.24	190,762.06
Expenditures:								
Auburn Water Department	6,000.00	6,000.00	3,396.48	2,603.52	-	3,396.48	18,619.01	5,945.74
Lewiston Water Division	6,000.00	6,000.00	4,881.15	1,118.85	-	4,881.15	29,838.93	23,636.17
Executive Administration	550.00	550.00	-	550.00	-	-	-	511.54
Forestry	3,500.00	3,500.00	525.00	2,975.00	-	525.00	1,025.00	7,125.19
Outside Services	3,325.00	3,325.00	1,820.00	1,505.00	-	1,820.00	8,185.00	1,850.00
Sanitary Facilities	3,760.00	3,760.00	2,040.00	1,720.00	-	2,040.00	2,750.00	2,745.00
Source Protection	63,150.00	63,150.00	35,485.54	27,664.46	21,396.85	56,882.39	84,822.74	114,663.40
Repairs to Property & Equipment	3,800.00	3,800.00	-	3,800.00	-	-	1,329.09	4,077.26
Public Education	1,775.00	1,775.00	-	1,775.00	-	-	543.54	-
Public Ed. - Labor	30,515.00	30,515.00	-	30,515.00	-	-	26,628.41	24,284.33
Public Ed. - Supplies	1,400.00	1,400.00	-	1,400.00	-	-	2,362.67	899.38
Public Ed. - Events	2,000.00	2,000.00	-	2,000.00	-	-	429.47	570.81
Public Ed. - Outside Services	2,400.00	2,400.00	1,393.00	1,007.00	-	1,393.00	3,074.99	1,184.00
Public Ed. - Public Relations	2,800.00	2,800.00	-	2,800.00	-	-	-	1,852.88
Public Ed. - Miscellaneous	250.00	250.00	-	250.00	-	-	91.98	392.68
Liability & D&O Insurance	12,000.00	12,000.00	11,440.40	559.60	-	11,440.40	11,182.83	10,958.05
Legal	10,500.00	10,500.00	-	10,500.00	-	-	2,094.50	9,427.50
Audit/Financial Services	7,395.00	7,395.00	5,445.00	1,950.00	-	5,445.00	5,622.81	7,191.25
Property Taxes	4,165.00	4,165.00	1,037.44	3,127.56	-	1,037.44	4,928.91	3,994.73
Operational Supplies	1,000.00	1,000.00	-	1,000.00	-	-	766.04	755.39
Depreciation/Amortization Expense	-	-	-	-	-	-	3,844.94	3,796.94
Miscellaneous	850.00	850.00	289.08	560.92	-	289.08	20,325.56	1,460.36
Total Expenditures	167,135.00	167,135.00	67,753.09	99,381.91	21,396.85	89,149.94	228,466.42	227,322.60
Excess Revenues Over Expenditures	(43,100.00)	(43,100.00)	(16,239.72)		28,578.60	12,338.88	(1,761.18)	(36,560.54)
Retained Earnings/Fund Balance, 1/1			2,198,445.72		3,425,580.31	5,624,026.02	5,625,787.19	5,662,347.73
Retained Earnings/Fund Balance, 12/31			<u>2,182,206.00</u>		<u>3,454,158.91</u>	<u>5,636,364.90</u>	<u>5,624,026.02</u>	<u>5,625,787.19</u>

Lake Auburn Watershed Commission Balance Sheet 28-Aug-24

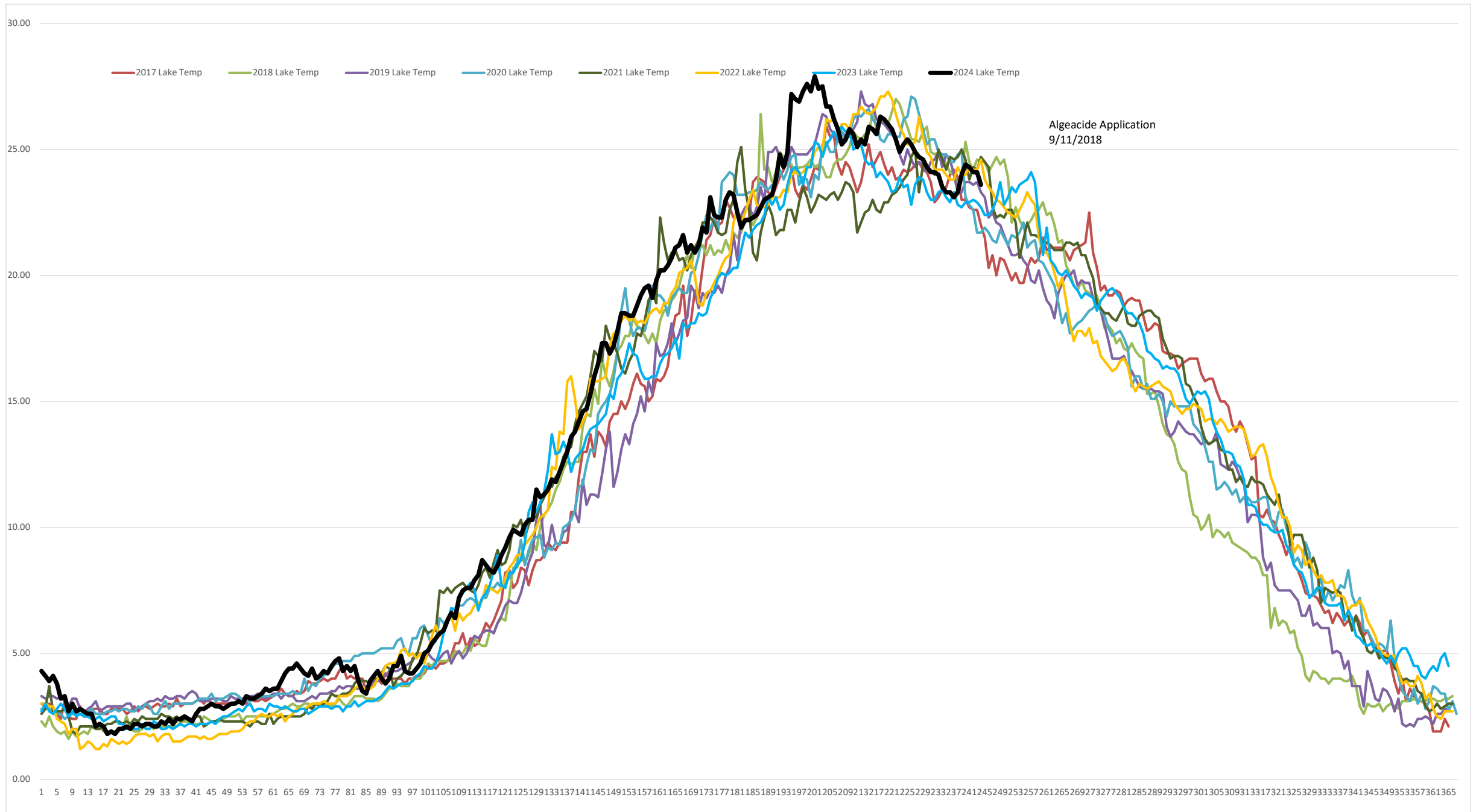
	Operating Account	Sinking Fund	YTD Combined	2023 Combined	2022 Combined	2021 Combined
Assets:						
Cash - Interest Bearing Accounts	305,305.03	5,797.57	311,102.60	260,175.32	272,193.54	396,433.64
Cash - TD Bank			-	74,980.12	-	-
Savings - Key Bank	-		-	-	101,765.20	101,755.02
Savings - Milestones		57,168.33	57,168.33	56,250.80	54,714.20	54,372.14
ASB Certificate of Deposit	111,279.50	111,279.50	222,559.00	222,559.00	216,973.79	215,459.80
Accounts Receivable			-	8,787.46	750.00	45,465.00
Due From Other Funds		33,278.93	33,278.93	5,634.91	(15,110.24)	34,711.36
Prepaid Insurance	6,023.67		6,023.67	6,023.67	5,887.50	6,654.55
Total Current Assets	422,608.20	207,524.33	630,132.53	634,411.28	637,173.99	854,851.51
Property, Plant & Equipment:						
Land	1,723,425.00	3,246,634.58	4,970,059.58	4,970,059.58	4,969,790.02	4,846,808.52
Improvements to Facility	37,344.32	184,463.45	221,807.77	221,807.77	221,807.77	221,807.77
Dam	169,288.98		169,288.98	169,288.98	169,288.98	169,288.98
Equipment	199,856.37		199,856.37	199,856.37	148,008.89	148,008.89
Intangible Assets	25,791.08	326,771.57	352,562.65	352,562.65	352,562.65	352,562.65
Construction Work in Process			-	-		
	2,155,705.75	3,757,869.60	5,913,575.32	5,913,575.32	5,861,458.28	5,738,476.78
Less Amortization of Intangible Assets	(25,791.08)	(326,771.57)	(352,562.65)	(352,562.65)	(352,562.27)	(352,562.27)
Less Accumulated Depreciation	(337,037.94)	(184,463.45)	(521,501.39)	(521,501.39)	(519,911.32)	(516,114.38)
Total Property, Plant & Equipment	1,792,876.73	3,246,634.58	5,039,511.28	5,039,511.28	4,988,984.69	4,869,800.13
Total Assets	2,215,484.93	3,454,158.91	5,669,643.83	5,673,922.58	5,626,158.68	5,724,651.65
Liabilities, Retained Earnings and Fund Balance:						
Liabilities:						
Due to Other Funds	33,278.93		33,278.93	5,634.91	(15,110.24)	34,711.36
Accounts Payable			-	44,261.65	15,481.73	27,592.56
Total Liabilities	33,278.93	-	33,278.93	49,896.56	371.49	62,303.92
Retained Earnings & Fund Balance:						
Retained Earnings	2,182,206.00		2,182,206.00	2,198,445.72	2,225,576.54	2,218,418.12
Reserve for Future Land Acquisitions		3,454,158.91	3,454,158.91	3,425,580.31	3,400,210.66	3,443,929.61
Total Retained Earnings & Fund Balance	2,182,206.00	3,454,158.91	5,636,364.90	5,624,026.02	5,625,787.19	5,662,347.73
Total Liabilities, Retained Earnings and Fund Balance	2,215,484.93	3,454,158.91	5,669,643.83	5,673,922.58	5,626,158.68	5,724,651.65

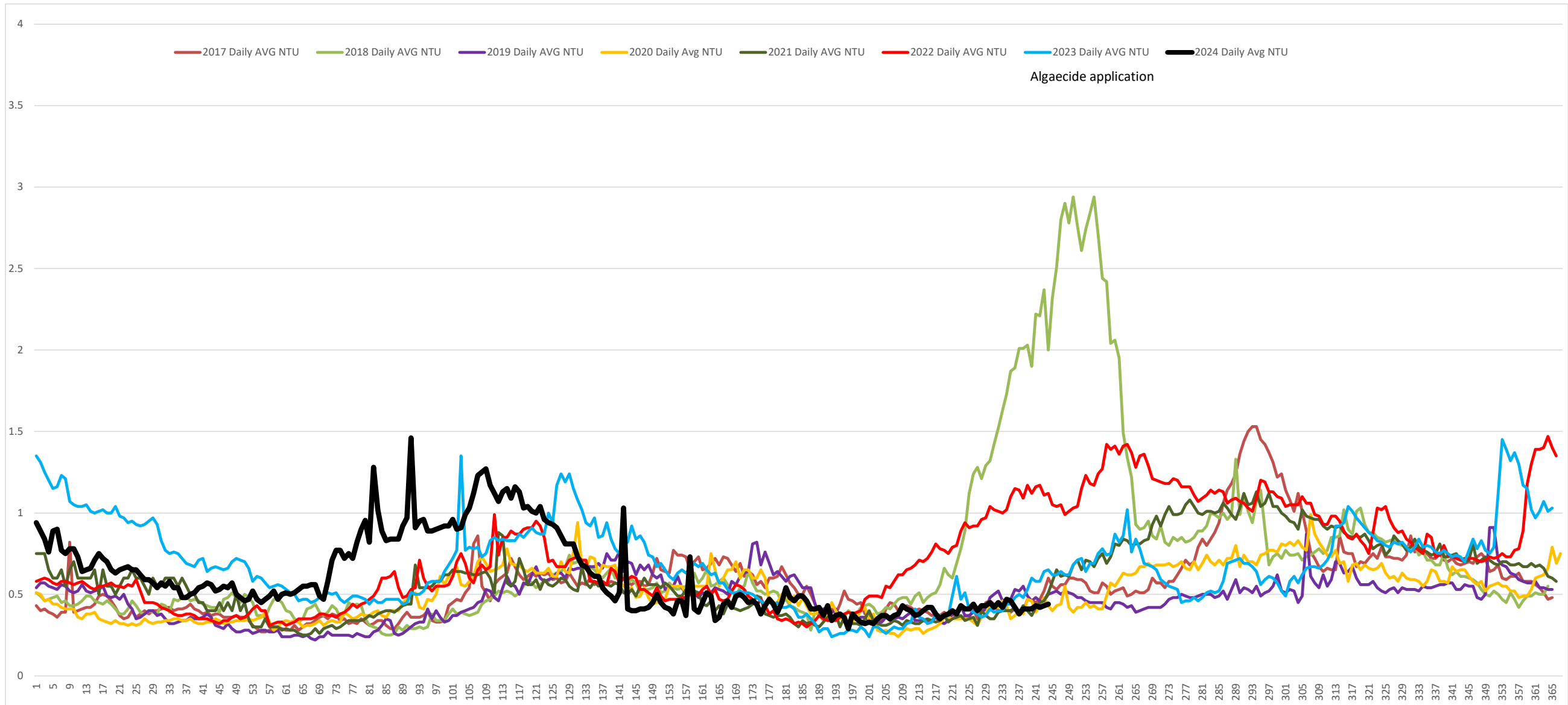
Water Quality Report

1. Average turbidity:
 - a. June was 0.45 NTU in 2024, and 0.56 NTU in 2023.
 - b. July was 0.38 NTU in 2024, and 0.31 NTU in 2023.
 - c. August was 0.42 NTU in 2024, and 0.44 NTU in 2023.
2. Please see attached turbidity and temperature graphs for reference.
3. June and July fecal datasheets are attached.
4. In-lake phosphorus has stayed relatively low this summer. Data attached.
5. Tributary phosphorus readings were high this summer, however there was not a lot of rain and therefore not a lot of flow in the tributaries, which can lead to higher readings due to lack of flushing.

Watershed Report

1. USDA is actively working to disperse gulls that are present on the lake. This time of year, the biologists tend to see an increase in activity.
2. Water quality has remained great throughout the summer season, based on turbidity, clarity, and phosphorus measurements.
3. Danielle Olsen is the new Watershed Manager. Her start date was 8/28/24.

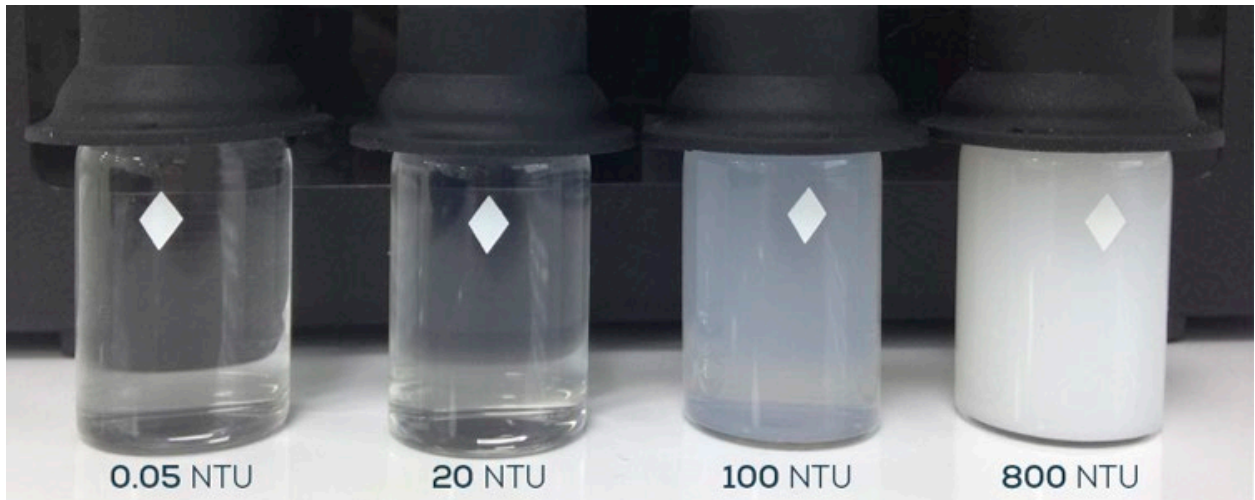




Information for turbidity:

- Unfiltered drinking water supplies cannot pump raw water into a treatment plant that is greater than 5 NTU.
- NTU stands for Nephelometric Turbidity unit. The unit is used to measure the turbidity of a fluid or the presence of suspended particles in water. The higher the concentration of suspended solids in the water is, the dirtier it looks and the higher the turbidity is.

The following picture is for reference:



- On average, the turbidity of raw water in Lake Auburn is around 0.5 NTU.
- The water treatment plant will alarm when raw water turbidity is measured at 3.8 NTU, and will stop pumping raw water at 4.2 NTU.

Jun-24

INLINE

Collected			Temp *C	Turbidity		Ph 230 A	Amount Sample	FECAL	QUANTITRAY		Fecal
DATE	TIME	BY		1720E	TU5200			BACTERIA CFU	TOTAL	E.COLI	Confirmation
6/1	08:15	LRB	18.40	0.45	0.55	7.16	100 mL	0			
6/2	08:20	LRB	18.40	0.40	0.50	7.13	100 mL	0			
6/3	03:10	DAF	18.80	0.45	0.55	7.16	100 mL	0	79.4	2	
6/4	03:15	DAF	19.20	0.60	0.65	7.31	100 mL	0			
6/5	03:10	DAF	19.50	0.40	0.55	7.23	100 mL	0			
6/6	03:15	DAF	19.60	0.40	0.55	7.27	100 mL	0			
6/7	03:15	DAF	19.10	0.45	0.55	7.24	100 mL	0			
6/8	05:45	DAF	19.80	0.40	0.50	7.33	100 mL	2			P/P,P/P
6/9	05:20	DAF	20.20	0.40	0.50	7.35	100 mL	0			
6/10	03:15	DAF	20.20	0.45	0.50	7.28	100 mL	0	58.1	3.1	
6/11	03:05	DAF	20.40	0.45	0.50	7.33	100 mL	0			
6/12	03:10	DAF	20.70	0.50	0.60	7.38	100 mL	1			P/P
6/13	03:05	DAF	21.10	0.45	0.55	7.42	100 mL	0			
6/14	03:20	DAF	21.20	0.45	0.55	7.37	100 mL	0			
6/15	08:15	LRB	21.60	0.45	0.50	7.32	100 mL	0			
6/16	08:10	LRB	20.90	0.40	0.50	7.21	100 mL	0			
6/17	02:55	DAF	21.20	0.50	0.55	7.33	100 mL	0	178.9	4.1	
6/18	03:05	DAF	20.90	0.55	0.60	7.28	100 mL	0			
6/19	05:50	DAF	21.20	0.50	0.55	7.36	100 mL	0			
6/20	03:15	DAF	21.90	0.50	0.60	7.42	100 mL	0			
6/21	03:10	DAF	21.70	0.55	0.60	7.28	100 mL	0			
6/22	06:25	LRB	23.10	0.50	0.60	7.27	100 mL	0			
6/23	06:10	DAF	22.40	0.50	0.60	7.32	100 mL	0			
6/24	03:15	DAF	22.30	0.45	0.60	7.20	100 mL	0	>2419.6	<1	
6/25	03:05	DAF	22.30	0.65	0.70	7.26	100 mL	2			p,p/p,p
6/26	03:10	DAF	23.00	0.50	0.60	7.27	100 mL	0			
6/27	03:15	DAF	23.30	0.50	0.60	7.25	100 mL	0			
6/28	03:05	DAF	23.20	0.45	0.55	7.26	100 mL	0			
6/29	08:15	LRB	22.50	0.55	0.70	7.45	100 mL	1			P,P
6/30	08:10	LRB	21.90	0.45	0.55	7.42	100 mL	2			p,p/p,p

Jul-24

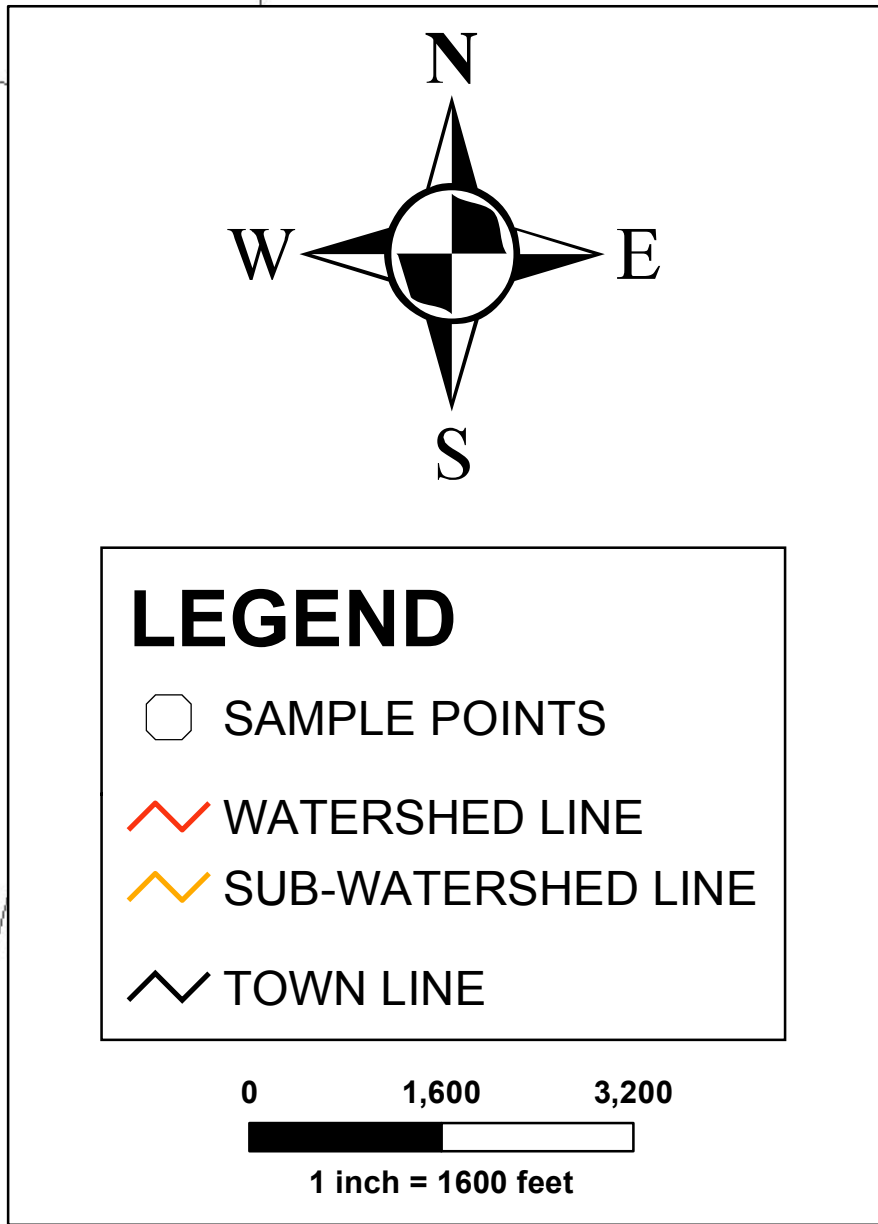
INLINE

Collected			Temp	Turbidity		Ph	Amount	FECAL	QUANTITRAY		Fecal
DATE	TIME	BY	*C	1720E	TU5200	230 A	Sample	BACTERIA CFU	TOTAL	E.COLI	Confirmation
7/1	03:05	DAF	22.2	0.45	0.55	7.42	100 mL	0	133.3	1	
7/2	03:00	DAF	22.2	0.45	0.55	7.38	100 mL	0			
7/3	03:05	DAF	22.3	0.50	0.55	7.40	100 mL	0			
7/4	05:50	DAF	22.4	0.50	0.55	7.45	100 mL	1			P,P
7/5	05:45	DAF	22.7	0.45	0.55	7.41	100 mL	0			
7/6	06:10	DAF	23.0	0.40	0.50	7.43	100 mL	0			
7/7	06:30	DAF	23.1	0.40	0.50	7.40	100 mL	1			
7/8	03:10	DAF	23.2	0.40	0.50	7.31	100 mL	1	325.5	<1	
7/9	03:05	DAF	23.8	0.45	0.55	7.35	100 mL	0			
7/10	03:15	DAF	24.8	0.35	0.50	7.36	100 mL	0			
7/11	03:00	DAF	24.3	0.40	0.50	7.33	100 mL	0			
7/12	03:00	DAF	24.9	0.40	0.50	7.41	100 mL	0			
7/13	08:10	LRB	27.2	0.30	0.45	7.38	100 mL	0			
7/14	08:15	LRB	27.0	0.30	0.40	7.29	100 mL	0			
7/15	03:15	DAF	26.9	0.35	0.45	7.21	100 mL	0	648.8	2	
7/16	03:05	DAF	27.3	0.35	0.45	7.31	100 mL	0			
7/17	03:10	DAF	27.6	0.40	0.50	7.23	100 mL	0			
7/18	03:15	DAF	27.3	0.35	0.50	7.26	100 mL	1			P,P
7/19	01:55	DAF	27.9	0.35	0.45	7.28	100 mL	1			P,P
7/20	05:30	DAF	27.4	0.35	0.45	7.32	100 mL	0			
7/21	06:20	DAF	27.5	0.35	0.45	7.30	100 mL	0			
7/22	03:15	DAF	26.7	0.40	0.45	7.27	100 mL	0	204.6	<1	
7/23	02:40	DAF	26.7	0.35	0.45	7.30	100 mL	0			
7/24	02:45	DAF	26.2	0.35	0.45	7.36	100 mL	0			
7/25	03:05	DAF	25.8	0.35	0.45	7.28	100 mL	0			
7/26	08:10	LRB	25.2	0.35	0.45	7.39	100 mL	0			
7/27	08:10	LRB	25.4	0.40	0.50	7.39	100 mL	0			
7/28	08:10	LRB	25.8	0.35	0.45	7.43	100 mL	0			
7/29	07:50	LRB	25.6	0.40	0.50	7.43	100 mL	0	186	<1	
7/30	07:40	LRB	25.1	0.35	0.45	7.38	100 mL	0			
7/31	03:05	DAF	25.4	0.35	0.45	7.32	100 mL	0			

Information for fecal datasheets:

- Unfiltered drinking water supplies are required to sample for fecal bacteria
- CFU stands for colony forming unit
- Raw water from the intake is sampled for fecal bacteria every day
- A fecal bacteria reading of over 20 CFU is considered an event
- No more than 10% of the samples taken in a rolling 6 month period can be over 20 CFU without getting a violation
- Total coliform and E. coli are not required to be tested, these are tested for our own reference
- Fecal coliform confirmation column: when P/P is listed, that means Positive test with a confirmed Positive second test. This only has to be done for the first 10 positive tests of the month.

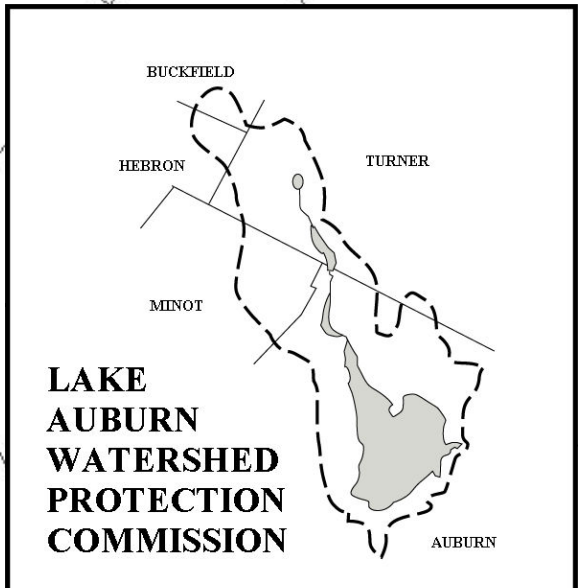
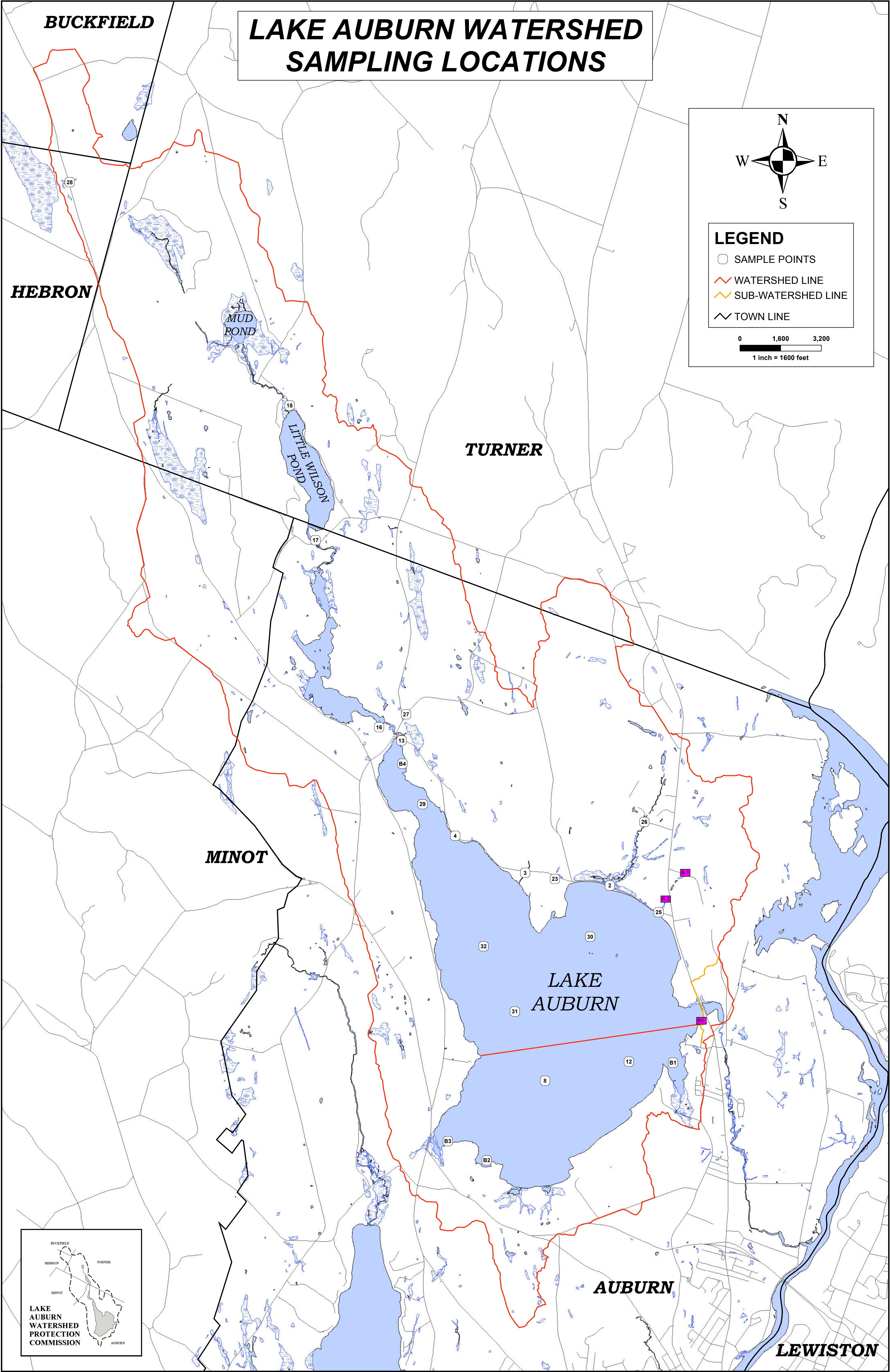
LAKE AUBURN WATERSHED SAMPLING LOCATIONS



LEGEND

- SAMPLE POINTS
- WATERSHED LINE
- SUB-WATERSHED LINE
- TOWN LINE

0 1,600 3,200
1 inch = 1600 feet



In-lake phosphorus samples

Year	Day	Date	Time	Location Site #	CORE	Depth M	Total P ug/L	Ortho P mg/L
2024	129	5/8/2024	805	12-4M	CORE	4	8	1
2024	129	5/8/2024	810	12-4M			8	<1
2024	129	5/8/2024	820	30-9M	CORE	9	8	1
2024	129	5/8/2024	825	30-9M			10	1
2024	129	5/8/2024	835	29-9M	CORE	9	10	1
2024	129	5/8/2024	840	29-9M			11	1
2024	129	5/8/2024	850	32-10M	CORE	10	8	1
2024	129	5/8/2024	855	32-17M			9	<1
2024	129	5/8/2024	900	31-10M	CORE	10	10	1
2024	129	5/8/2024	905	31-27M			7	1
2024	129	5/8/2024	920	8-10M	CORE	10	12	2
2024	129	5/8/2024	925	8-33M			9	<1
2024	136	5/15/2024	730	12-4M	CORE	4	8	1
2024	136	5/15/2024	735	12-4M			7	1
2024	136	5/15/2024	745	30-9M	CORE	9	7	1
2024	136	5/15/2024	750	30-9M			7	1
2024	136	5/15/2024	800	29-9M	CORE	9	7	1
2024	136	5/15/2024	805	29-9M			8	1
2024	136	5/15/2024	815	32-10M	CORE	10	6	1
2024	136	5/15/2024	820	32-17M			7	1
2024	136	5/15/2024	830	31-10M	CORE	10	7	<1
2024	136	5/15/2024	835	31-27M			8	1
2024	136	5/15/2024	850	8-10M	CORE	10	9	1
2024	136	5/15/2024	855	8-33M			7	1
2024	142	5/21/2024	720	12-4M	CORE	4	6	<1
2024	142	5/21/2024	725	12-4M			9	<1
2024	142	5/21/2024	730	30-9M	CORE	9	6	1
2024	142	5/21/2024	735	30-9M			12	<1
2024	142	5/21/2024	745	29-9M	CORE	9	7	<1
2024	142	5/21/2024	750	29-9M			9	<1
2024	142	5/21/2024	755	32-10M	CORE	10	4	<1
2024	142	5/21/2024	800	32-17M			6	<1
2024	142	5/21/2024	810	31-10M	CORE	10	7	1
2024	142	5/21/2024	815	31-27M			7	1
2024	142	5/21/2024	820	8-10M	CORE	10	7	1
2024	142	5/21/2024	825	8-33M			6	<1

2024	150	5/29/2024	720	12-4M	CORE	4	8	1
2024	150	5/29/2024	725	12-4M			7	<1
2024	150	5/29/2024	730	30-9M	CORE	9	7	<1
2024	150	5/29/2024	735	30-9M			9	<1
2024	150	5/29/2024	745	29-9M	CORE	9	7	<1
2024	150	5/29/2024	750	29-9M			8	1
2024	150	5/29/2024	800	32-10M	CORE	10	7	<1
2024	150	5/29/2024	805	32-17M			8	1
2024	150	5/29/2024	815	31-10M	CORE	10	7	<1
2024	150	5/29/2024	820	31-27M			9	2
2024	150	5/29/2024	830	8-10M	CORE	10	7	1
2024	150	5/29/2024	835	8-33M			9	2
2024	156	6/4/2024	730	12-4M	CORE	4	5	1
2024	156	6/4/2024	735	12-4M			5	<1
2024	156	6/4/2024	740	30-9M	CORE	5	5	1
2024	156	6/4/2024	745	30-9M			14	1
2024	156	6/4/2024	755	29-9M	CORE	5	5	<1
2024	156	6/4/2024	800	29-9M			9	1
2024	156	6/4/2024	810	32-10M	CORE	6	7	1
2024	156	6/4/2024	815	32-17M			10	1
2024	156	6/4/2024	820	31-10M	CORE	6	5	<1
2024	156	6/4/2024	825	31-27M			9	2
2024	156	6/4/2024	850	8-10M	CORE	6	5	<1
2024	156	6/4/2024	855	8-33M			10	2
2024	163	6/11/2024	755	12-4M	CORE	4	8	1
2024	163	6/11/2024	800	12-4M			7	<1
2024	163	6/11/2024	805	30-9M	CORE	6	6	1
2024	163	6/11/2024	810	30-9M			7	1
2024	163	6/11/2024	820	29-9M	CORE	6	5	1
2024	163	6/11/2024	825	29-9M			7	<1
2024	163	6/11/2024	830	32-10M	CORE	6	9	<1
2024	163	6/11/2024	835	32-17M			8	1
2024	163	6/11/2024	845	31-10M	CORE	6	5	1
2024	163	6/11/2024	850	31-27M			9	3
2024	163	6/11/2024	900	8-10M	CORE	6	6	<1
2024	163	6/11/2024	905	8-33M			9	3
2024	170	6/18/2024	735	12-4M	CORE	4	6	

2024	170	6/18/2024	740	12-4M			9	
2024	170	6/18/2024	745	30-9M	CORE	6	6	
2024	170	6/18/2024	750	30-9M			9	
2024	170	6/18/2024	755	29-9M	CORE	6	6	
2024	170	6/18/2024	800	29-9M			11	
2024	170	6/18/2024	810	32-10M	CORE	6	6	
2024	170	6/18/2024	815	32-17M			13	
2024	170	6/18/2024	825	31-10M	CORE	6	6	
2024	170	6/18/2024	830	31-27M			10	
2024	170	6/18/2024	845	8-10M	CORE	6	7	
2024	170	6/18/2024	850	8-33M			11	
2024	178	6/26/2024	730	12-4M	CORE	4	6	<1
2024	178	6/26/2024	735	12-4M			5	<1
2024	178	6/26/2024	740	30-9M	CORE	7	11	2
2024	178	6/26/2024	745	30-9M			8	1
2024	178	6/26/2024	750	29-9M	CORE	7	8	1
2024	178	6/26/2024	755	29-9M			11	1
2024	178	6/26/2024	810	32-10M	CORE	7	13	1
2024	178	6/26/2024	815	32-17M			7.5	2
2024	178	6/26/2024	825	31-10M	CORE	7	16	6
2024	178	6/26/2024	830	31-27M			10	4
2024	178	6/26/2024	845	8-10M	CORE	7	18	3
2024	178	6/26/2024	850	8-33M			9	4
2024	184	7/2/2024	730	12-4M	CORE	4	6	<1
2024	184	7/2/2024	735	12-4M			33	10
2024	184	7/2/2024	740	30-9M	CORE	7	7	1
2024	184	7/2/2024	745	30-9M			9	<1
2024	184	7/2/2024	755	29-9M	CORE	7	8	<1
2024	184	7/2/2024	800	29-9M			15	2
2024	184	7/2/2024	805	32-10M	CORE	7	6	1
2024	184	7/2/2024	810	32-17M			7	1
2024	184	7/2/2024	820	31-10M	CORE	8	8	<1
2024	184	7/2/2024	825	31-27M			10	5
2024	184	7/2/2024	845	8-10M	CORE	7	6	<1
2024	184	7/2/2024	850	8-33M			11	5
2024	192	7/10/2024	730	12-4M	CORE	4	6	<1
2024	192	7/10/2024	735	12-4M			9	1
2024	192	7/10/2024	740	30-9M	CORE	7	8	<1

2024	192	7/10/2024	745	30-9M			9	<1
2024	192	7/10/2024	750	29-9M	CORE	7	5	<1
2024	192	7/10/2024	755	29-9M			12	1
2024	192	7/10/2024	805	32-10M	CORE	7	4	1
2024	192	7/10/2024	810	32-17M			5	1
2024	192	7/10/2024	820	31-10M	CORE	7	8	<1
2024	192	7/10/2024	825	31-27M			10	3
2024	192	7/10/2024	845	8-10M	CORE	7	8	<1
2024	192	7/10/2024	850	8-33M			8	4
2024	199	7/17/2024	720	12-4M	CORE	4	5	<1
2024	199	7/17/2024	725	12-4M			4	<1
2024	199	7/17/2024	730	30-9M	CORE	7	6	<1
2024	199	7/17/2024	735	30-9M			8	<1
2024	199	7/17/2024	745	29-9M	CORE	7	6	<1
2024	199	7/17/2024	750	29-9M			12	<1
2024	199	7/17/2024	755	32-10M	CORE	7	4	<1
2024	199	7/17/2024	800	32-17M			8	<1
2024	199	7/17/2024	815	31-10M	CORE	7	7	<1
2024	199	7/17/2024	820	31-27M			11	3
2024	199	7/17/2024	830	8-10M	CORE	7	5	<1
2024	199	7/17/2024	835	8-33M			11	4
2024	207	7/25/2024	715	12-4M	CORE	4	6	<1
2024	207	7/25/2024	720	12-4M			6	<1
2024	207	7/25/2024	725	30-9M	CORE	7	5	<1
2024	207	7/25/2024	730	30-9M			11	1
2024	207	7/25/2024	740	29-9M	CORE	7	5	<1
2024	207	7/25/2024	745	29-9M			9	1
2024	207	7/25/2024	755	32-10M	CORE	7	5	<1
2024	207	7/25/2024	800	32-17M			8	1
2024	207	7/25/2024	810	31-10M	CORE	7	5	<1
2024	207	7/25/2024	815	31-27M			7	3
2024	207	7/25/2024	830	8-10M	CORE	7	5	<1
2024	207	7/25/2024	835	8-33M			12	4

There are 6 sampling stations in Lake Auburn (see map for reference). They are listed in the Location Site # column. Water is collected at each site using two different methods to test for phosphorus. One method is a Core sample (noted in the table), the other is a grab sample. A Core sample collects water from the surface down to the depth noted in the table. A grab sample collects water from the bottom depth at each sampling station, noted in meters in the Location Site #. Total phosphorus is shown as

Total P and is measured in micrograms per liter (ug/L). This is a measure of all forms of phosphorus present in the water. Orthophosphorus is shown as Ortho P and is also measured in micrograms per liter. Ortho P is a measure of “available” phosphorus, particularly which can be used by algae to grow.

The Total P numbers listed are within the normal range for what we have seen in the lake in years past. When Total P numbers get above 15 ug/L that is starting to get elevated. Ortho P typically will range from <1 to 4 ug/L, with 4 ug/L being high.

Phosphorus samples are collected by staff and then sent the State lab for analysis. Turnaround times for results can be over a month. These are all results we have received so far.

Tributary phosphorus samples

Year	Day	Date	Time	Location Site #	Total P ug/L	Ortho P mg/L
2024	71	3/11/2024	725	25	32	6
2024	71	3/11/2024	730	2	20	2
2024	71	3/11/2024	735	23	18	2
2024	71	3/11/2024	740	3	9	2
2024	71	3/11/2024	745	4	11	2
2024	71	3/11/2024	750	13	12	1
2024	71	3/11/2024	810	16	12	<1
2024	71	3/11/2024	815	27	21	2
2024	71	3/11/2024	830	18	14	1
2024	71	3/11/2024	800	5A	24	23
2024	71	3/11/2024	835	17	13	1
2024	71	3/11/2024	850	26	20	2
2024	71	3/11/2024	900	B-1	72	27
2024	71	3/11/2024	905	R-2	39	3
2024	128	5/7/2024	655	25	28	3
2024	128	5/7/2024	705	2	16	2
2024	128	5/7/2024	710	23	24	5
2024	128	5/7/2024	715	3	8	2
2024	128	5/7/2024	720	4	11	2
2024	128	5/7/2024	730	13	10	1
2024	128	5/7/2024	745	16	10	1
2024	128	5/7/2024	755	27	9	2
2024	128	5/7/2024	805	18	13	1
2024	128	5/7/2024	815	17	7	<1
2024	128	5/7/2024	825	TBR	11	4
2024	128	5/7/2024	835	26	12	4
2024	128	5/7/2024	845	R-2	27	3
2024	149	5/28/2024	720	25	110	11
2024	149	5/28/2024	730	2	42	4
2024	149	5/28/2024	735	23	57	6
2024	149	5/28/2024	745	3	37	3
2024	149	5/28/2024	750	4	31	4
2024	149	5/28/2024	755	13	13	<1
2024	149	5/28/2024	815	16	7	<1
2024	149	5/28/2024	820	27	28	3

2024	149	5/28/2024	830	18	17	2
2024	149	5/28/2024	800	5A	74	21
2024	149	5/28/2024	840	17	7	<1
2024	149	5/28/2024	855	TBR	24	5
2024	149	5/28/2024	900	26	39	4
2024	149	5/28/2024	910	B-1	110	7
2024	149	5/28/2024	915	R-2	130	11
2024	177	6/25/2024	705	25	50	5
2024	177	6/25/2024	710	2	32	3
2024	177	6/25/2024	715	23	47	7
2024	177	6/25/2024	725	3	14	4
2024	177	6/25/2024	730	4	27	5
2024	177	6/25/2024	735	13	14	1
2024	177	6/25/2024	745	16	13	<1
2024	177	6/25/2024	750	27	15	4
2024	177	6/25/2024	800	18	21	1
2024	177	6/25/2024	810	17	8	<1
2024	177	6/25/2024	825	TBR	23	5
2024	177	6/25/2024	830	26	31	6
2024	177	6/25/2024	845	R-2	71	3

There are 15 routinely sampled tributary locations in the Lake Auburn watershed (see map for reference). They are listed in the Location Site # column. Sampling at each site depends on if there is water flowing in the tributary, so some weeks certain sites may be omitted, or others may be added. Water is collected at each site using a grab sample to test for total phosphorus and orthophosphorus.

Total phosphorus can vary greatly in tributary samples, often due to wet or dry periods of weather. The highlighted cells are elevated levels of total and orthophosphorus.

Sites B-1 and R-2 are part of the Blanchard Pond tributary system. Site 2 is the outlet of this system to the lake. Site 25 is the outlet of Townsend Brook to the lake. Site 5A is a stream that goes under Whitman Spring Road.

Phosphorus samples are collected by staff and then sent the State lab for analysis. Turnaround times for results can be over a month. These are all results we have received so far.

DATE	Secchi (m)
5/8/2024	6.2
5/15/2024	7.3
5/21/2024	7.9
5/29/2024	8.7
6/4/2024	9.4
6/11/2024	9.6
6/18/2024	9.6
6/26/2024	9
7/2/2024	9.8
7/10/2024	10.6
7/17/2024	10.5
7/25/2024	9.6
7/31/2024	9.4
8/7/2024	9.8
8/13/2024	10
8/21/2024	9.9
8/27/2024	9.8

Secchi disk readings are a measure of water transparency. The readings tell you how clear the water, and are measured by how far down in the water you can see a black and white disk. The measurement is taken in meters. Early in the year after ice-out, it's typical for the readings to be below 10 meters. The further we get into summer, it's typical to see readings of 10 meters or above. All readings reported here are from the deep hole sampling station.