

WALLOON
LAKE
ASSOCIATION AND
CONSERVANCY

ANNUAL MEETING

THURSDAY | AUGUST 3 | 2023



MISSION

Our mission is to deliver Walloon Lake, a place where people and nature thrive, to the next generations through the power of conservation.



AGENDA

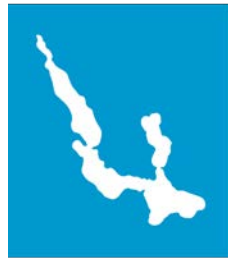
- I. President's Report – Mary Pat Goldich, WLAC President
- II. 2022 Annual Meeting Minutes - Marianne Barry, WLAC Secretary
- III. 2022 Treasurer's Report – Eden Haven, WLAC Director of Finance
- IV. A Moment of Silence for Departed Members - Russ Kittleson, WLAC Vice President
- V. Retiring Trustees Recognition – Russ Kittleson, WLAC Vice President
- VI. Speaker Introductions - Mary Pat Goldich, WLAC President
 - a. 2022 Water Quality Report - Connor Dennis, Land & Water Protection Specialist
 - b. Tips + Tricks: Shoreline Restoration and Greenbelts – Jen Buchanan,
Red Twig Environmental
- VII. Proxy Results - Mary Pat Goldich, WLAC President
- VIII. 2023-2024 WLAC Board President, Russ Kittleson
- IX. Closing Remarks & Adjournment - Mary Pat Goldich, WLAC President



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PRESIDENT'S REPORT

Mary Pat Goldich, *WLAC President*



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TRUSTEE CANDIDATES

Mary Ann Smith

John Fettig

Marty Makinen (Incumbent)

2022-2023 YEAR IN REVIEW



2022-2023 YEAR IN REVIEW





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2022-2023 YEAR IN REVIEW





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2022-2023 YEAR IN REVIEW





LAND

- Maus Conservation Easement Land Acquisition: 60 acres adjacent to the Mill Pond Nature Area
- Frog Hollow Expansion: 40-acre wetland addition to Frog Hollow Preserve
- Pollinator Protector Program at Wildwood Harbor Preserve and Voran Family Preserve
- Kiosks installed at all Ambassador properties
- Critical Lands Campaign: An ambitious effort to raise funds for several land protection projects in the Walloon Lake watershed



WATER

- Permanent Boat Cleaning Stations: 4 of 6 launch sites protected!
- Launch of the *Move Your Wake, Respect the Lake* Campaign
- Ongoing paid Marine Patrol Hours
- Organizational boat donated for water quality monitoring
- Contracted with Jen Buchanan at Red Twig Environmental for shoreline, greenbelt, watershed management and grants
- 3rd Annual Native Plant Sale



PEOPLE

- Lake Ambassador Program Relaunch
- New 5-Year Strategic Plan
- Seven Wander Walloons Hikes & Events
- Two Boater Safety Certificate Classes with the Charlevoix County Sheriff's Office
- 75 Dog Memberships
- July "Safety Month"
- Walloon Women's Luncheon
- Intergovernmental Agreement in progress
- Successful Boots on the Ground FUNdraiser!



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2022 MEETING MINUTES

Marianne Barry, *WLAC Secretary*

Introduce Mary Pat Goldich as the upcoming new board president.

Goldich Presentation of the Past President's Burgee

Hatch Closing Remarks

Hatch Adjournment



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2022 TREASURER'S REPORT

Eden Haven, *WLAC Director of Finance*

2022 AUDITED FINANCIALS

WALLOON LAKE ASSOCIATION AND CONSERVANCY

STATEMENTS OF FINANCIAL POSITION

December 31, 2022 and 2021

ASSETS



Current Assets:

Cash in bank
Pledges and accounts receivable due within one year
Inventory

Total current assets



Investments, at market
Pledges and accounts receivable, net of current portion
Land and land conservation easements
Office equipment and furnishings, net of
accumulated depreciation of \$15,014

Total assets

	2022	2021
\$ 454,890	\$ 422,668	
159,459	116,459	
4,874	-	
619,223	539,127	
3,973,561	4,890,117	
76,832	176,291	
8,137,137	7,782,137	
10,400	-	
\$ 12,817,153	\$ 13,387,672	

LIABILITIES AND NET ASSETS

Current Liabilities:

Accounts payable
Retirement payable
Prepaid dues and advertising
Notes payable due within one year

Total current liabilities

Long-Term Liabilities:

Notes payable, less portion due within one year

Total liabilities

Net Assets:

Without donor restrictions
With donor restrictions

Total net assets

Total liabilities and net assets

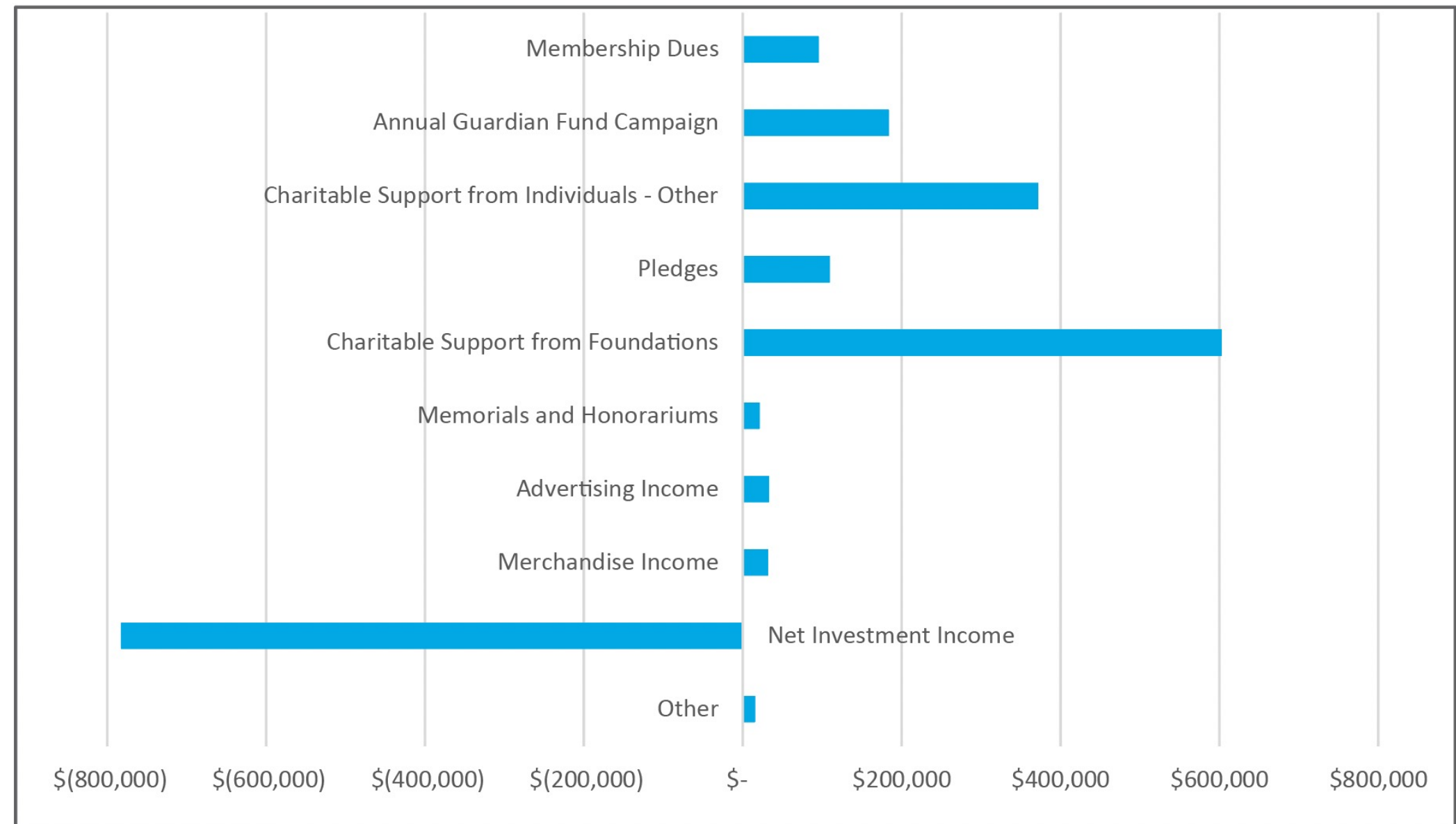
\$ 7,595	\$ -
19,308	3,725
22,615	15,275
57,271	38,401
106,789	57,401
457,408	836,858
564,197	894,259
8,884,693	8,932,564
3,368,263	3,560,849
12,252,956	12,493,413
\$ 12,817,153	\$ 13,387,672

The accompanying notes are a part of the financial statements.

2022 AUDITED FINANCIALS

2022 Support and Revenues	
Membership Dues	\$95,455
Annual Guardian Fund Campaign	\$183,877
Charitable Support from Individuals - Other	\$371,672
Pledges	\$109,500
Charitable Support from Foundations	\$602,736
Memorials and Honorariums	\$21,032
Advertising Income	\$32,820
Net Investment Income	\$(782,657)
Other	\$15,651
Total:	\$681,589

2022 SUPPORT AND REVENUES

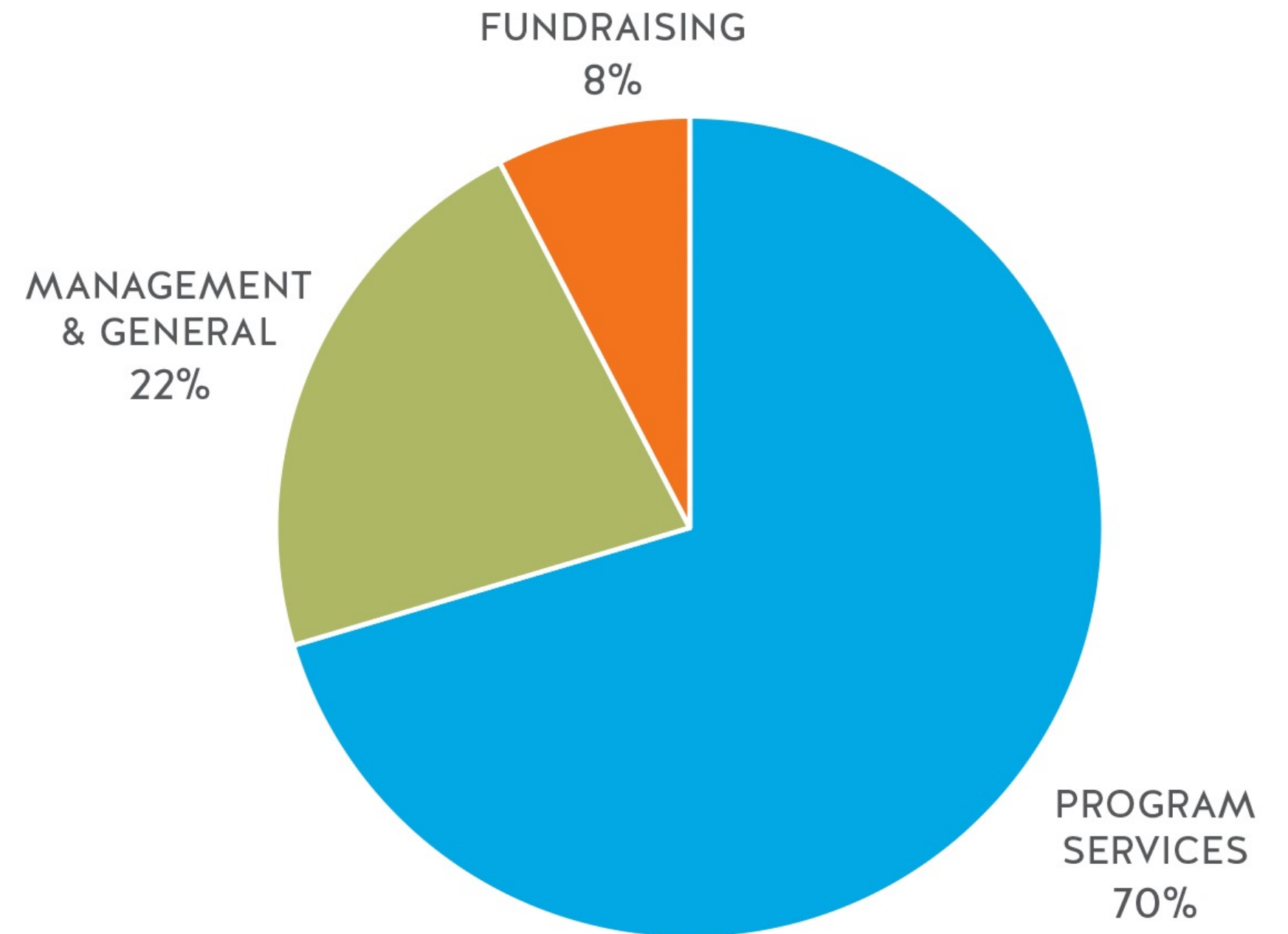




2022 AUDITED FINANCIALS

2022 Functional Expenses	
Program Services	\$648,933
Management and General	\$203,082
Fundraising	\$70,031
Total:	\$922,046

2022 FUNCTIONAL EXPENSES





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A moment of silence
for our departed
members and friends...





William "Bill" Barringer

Mary Erb

Maria Furgeson

Patricia Harkaway

Robert Hermann

Dana Lapekas

Mary Jo Maguire

James Marshall Sr.

Beverly McKenney

William "Bill" Norcross

Bud Pohl

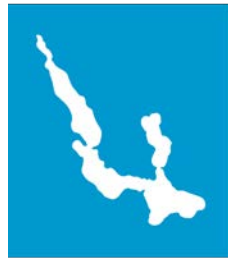
**Stephen "Coach"
Rentschler**

David Ryan

Tobey Steinman

Howard "Jim" Ternes

Eleanor Zent



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**THANK YOU TO
OUR RETIRING
WLAC TRUSTEES!**

JOHN MARKLEWITZ,
Water Quality Committee
Member, Stewardship
Committee Member/Past Chair,
Water Quality CHAMPION
Volunteer

MARY PAT GOLDICH,
WLAC President, Government
Affairs Committee Chair



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2022 WATER QUALITY REPORT

Connor Dennis, *WLAC Land + Water Protection Specialist*,
in partnership with Tip of the Mitt Watershed Council

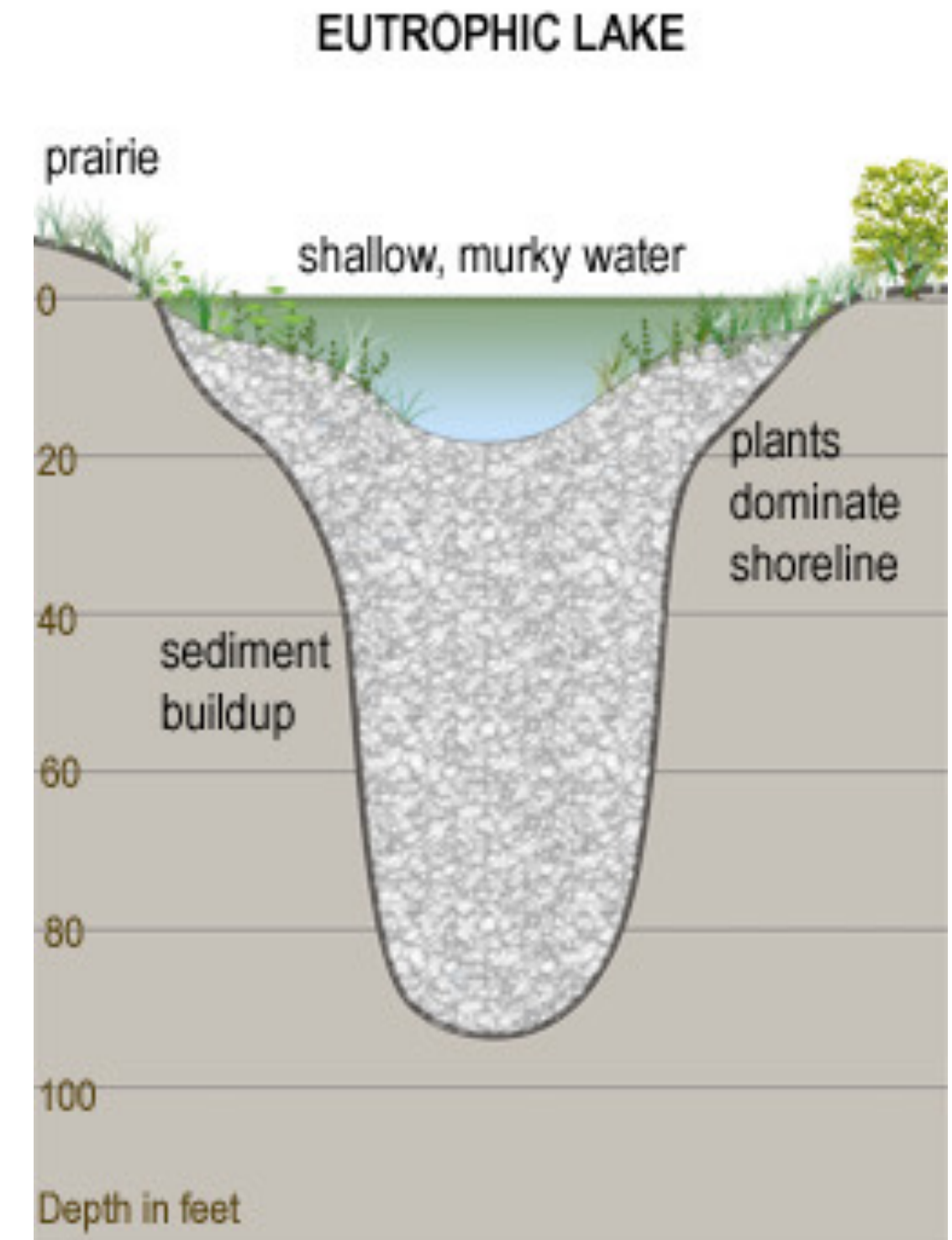
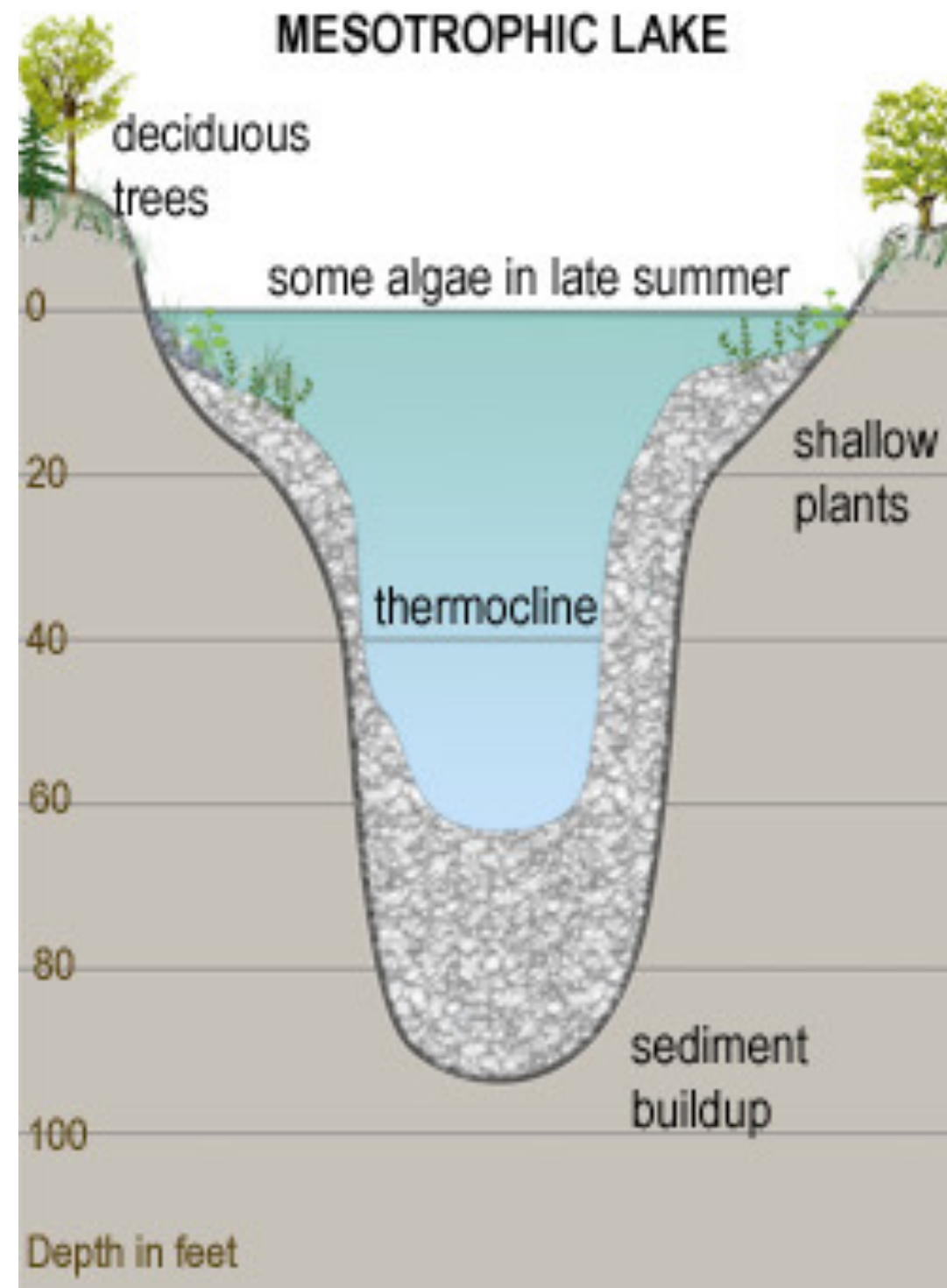
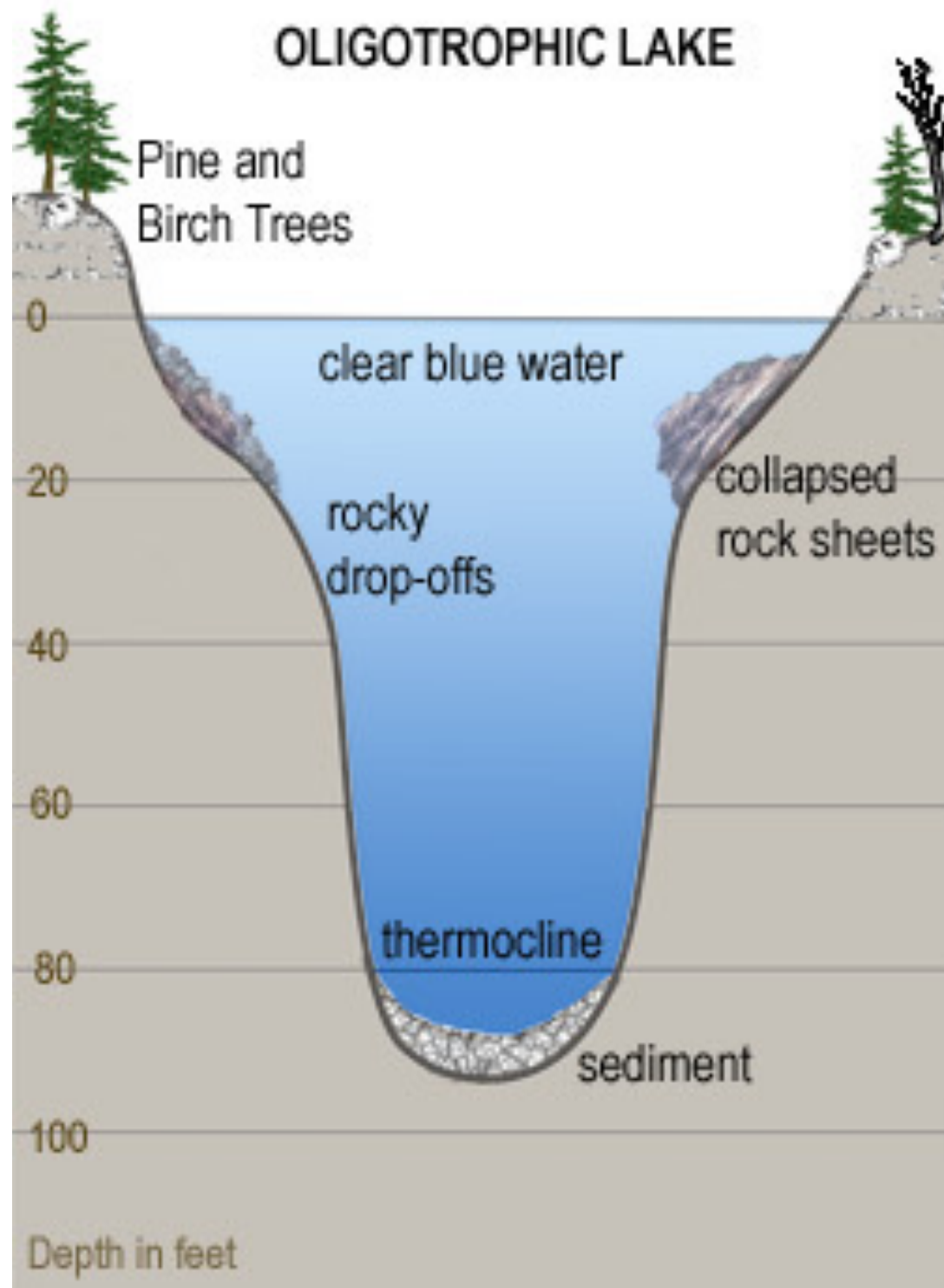


We are pleased to present the results of lake monitoring performed in 2022 by Walloon Lake volunteers as part of the Tip of the Mitt Watershed Council Volunteer Lake Monitoring Program.

- Volunteers collected data following protocols outlined in **Tip of the Mitt Watershed Council's Volunteer Lake Monitoring Quality Assurance Project Plan (QAPP)**.
- Water transparency was **measured weekly** by lowering a black and white Secchi disk into the water and recording the depth at which it is no longer visible.
- **Chlorophyll-a**, a pigment found in all green plants and algae, was collected using a water sampler lowered to twice the depth of the Secchi reading. Water was then filtered and later analyzed to **estimate the density** of phytoplankton in the water column. Higher chlorophyll-a concentrations indicate greater phytoplankton densities, which reduce water clarity.
- These **two parameters together** can tell us about a **lake's productivity**, or ability to support aquatic life.
- Water that is clear can indicate a lake without a lot of plant growth, while water that is turbid, or cloudy, can indicate abundant plant life.
- Most lakes in Northern Michigan are phosphorus-limited, meaning the biological productivity (i.e., algal growth) is limited by the amount of phosphorus available. Phosphorus is an important nutrient for plant and algal growth; however, too much can have a negative impact on water quality.



TROPHIC LEVELS



TROPHIC STATE INDEX

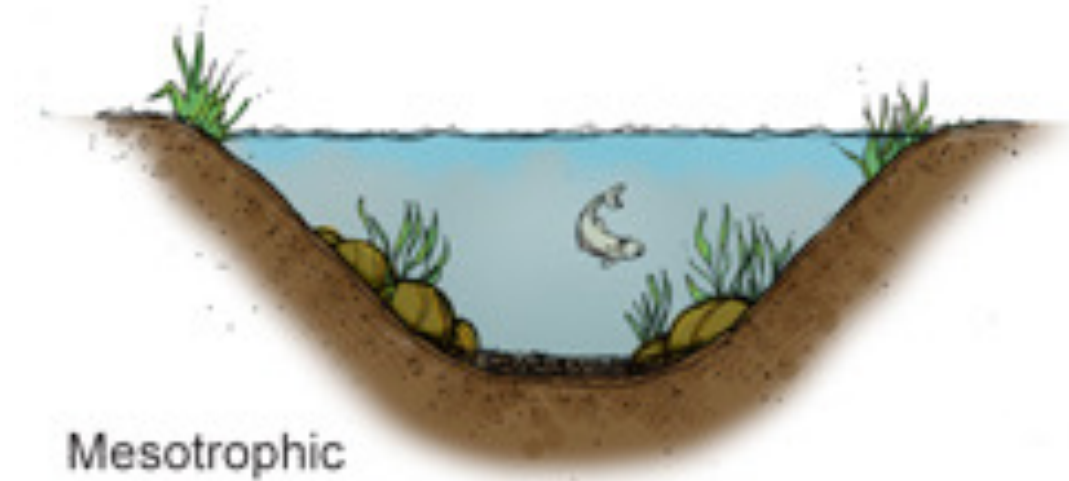
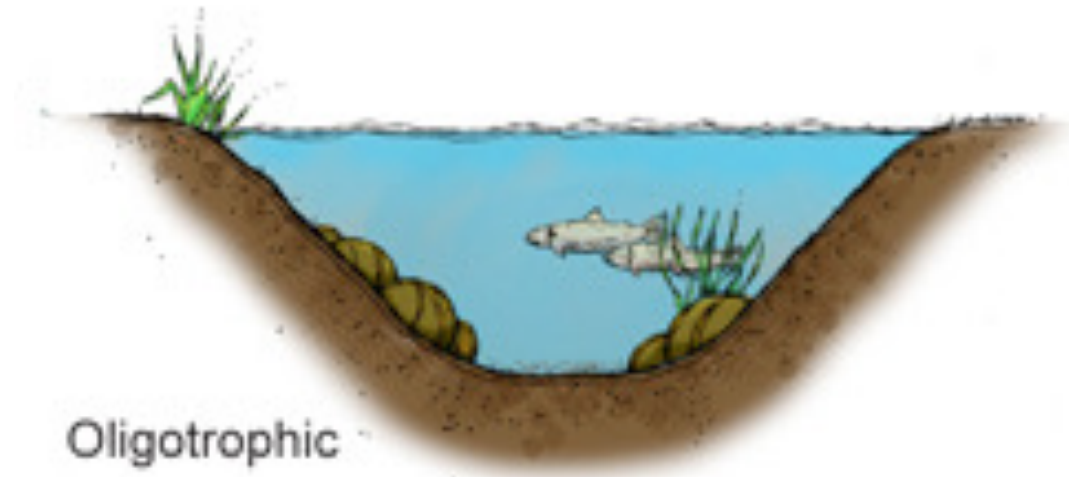
- **Trophic state index (TSI)** is a way to classify lakes using **Secchi disk** and **chlorophyll-a** measurements.
- TSI values range from **0 to 100**.
- The TSI is relative to productivity levels.
- An **increasing trend in TSI values** over a period of several years may indicate a **degradation** of the health of a lake.
- Chlorophyll-a and Secchi disk depth were monitored in 2022 and will be used in the following sections to determine overall lake quality.

Table 2. Comparison of Classification Schemes.

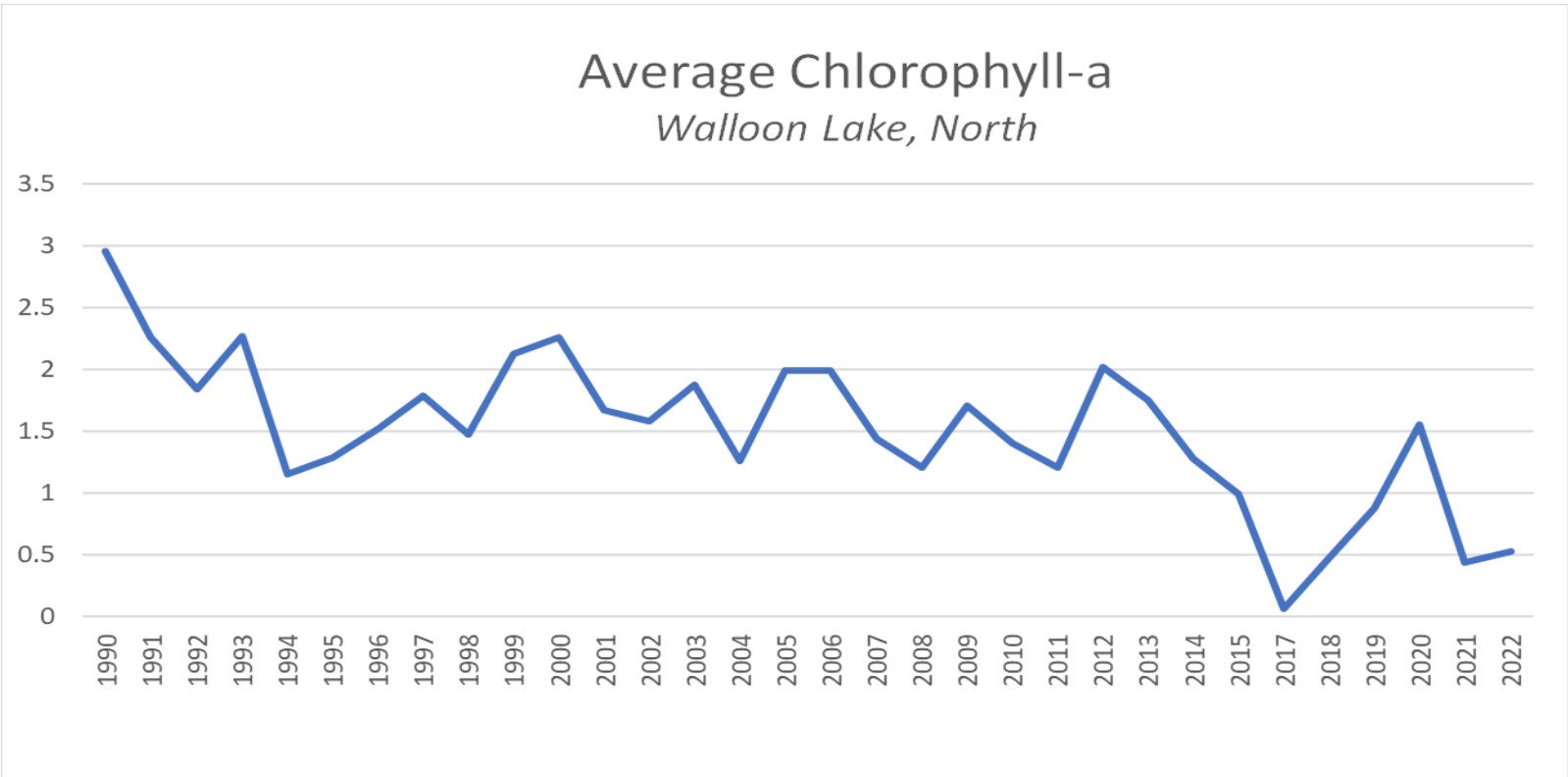
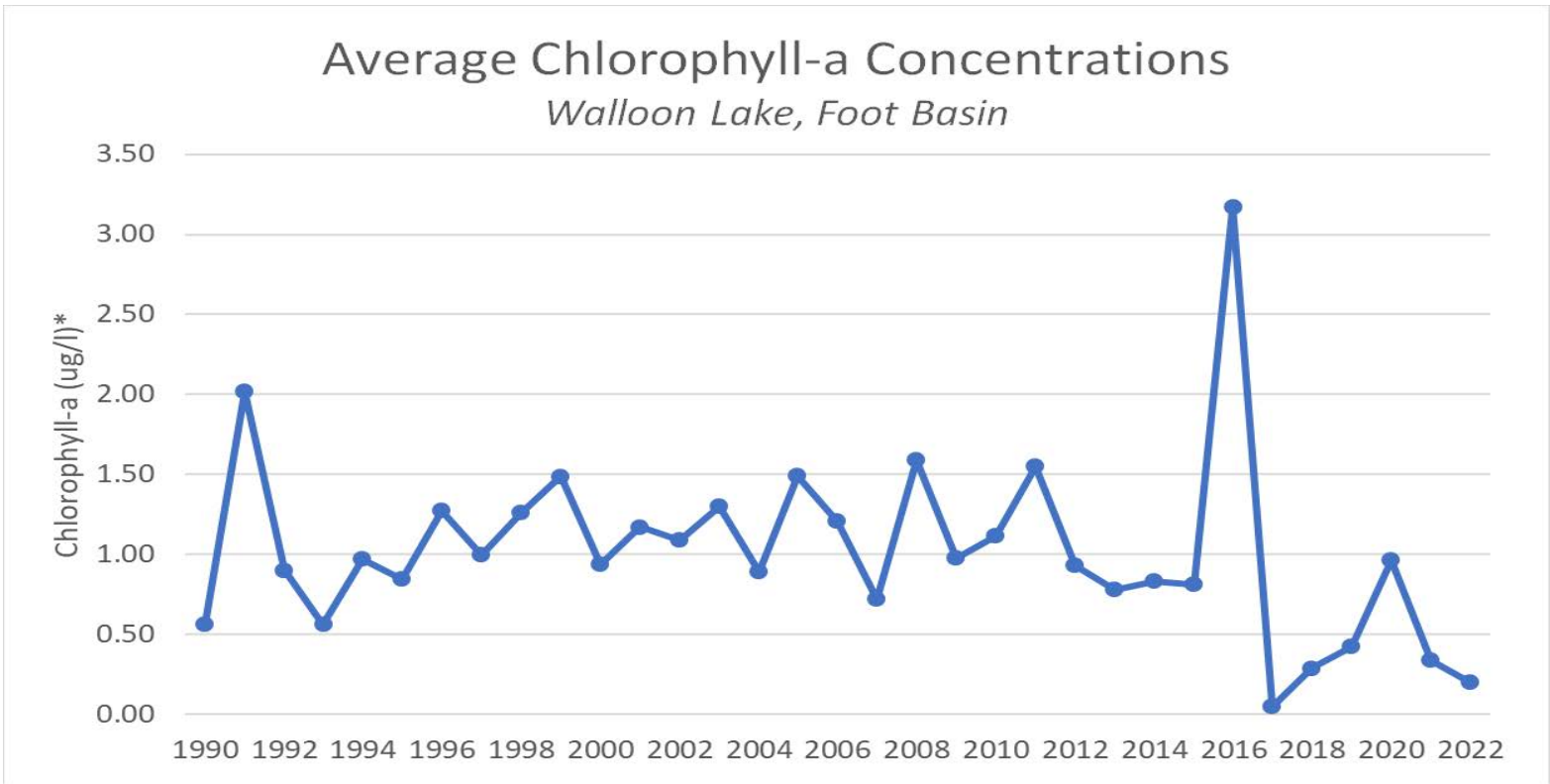
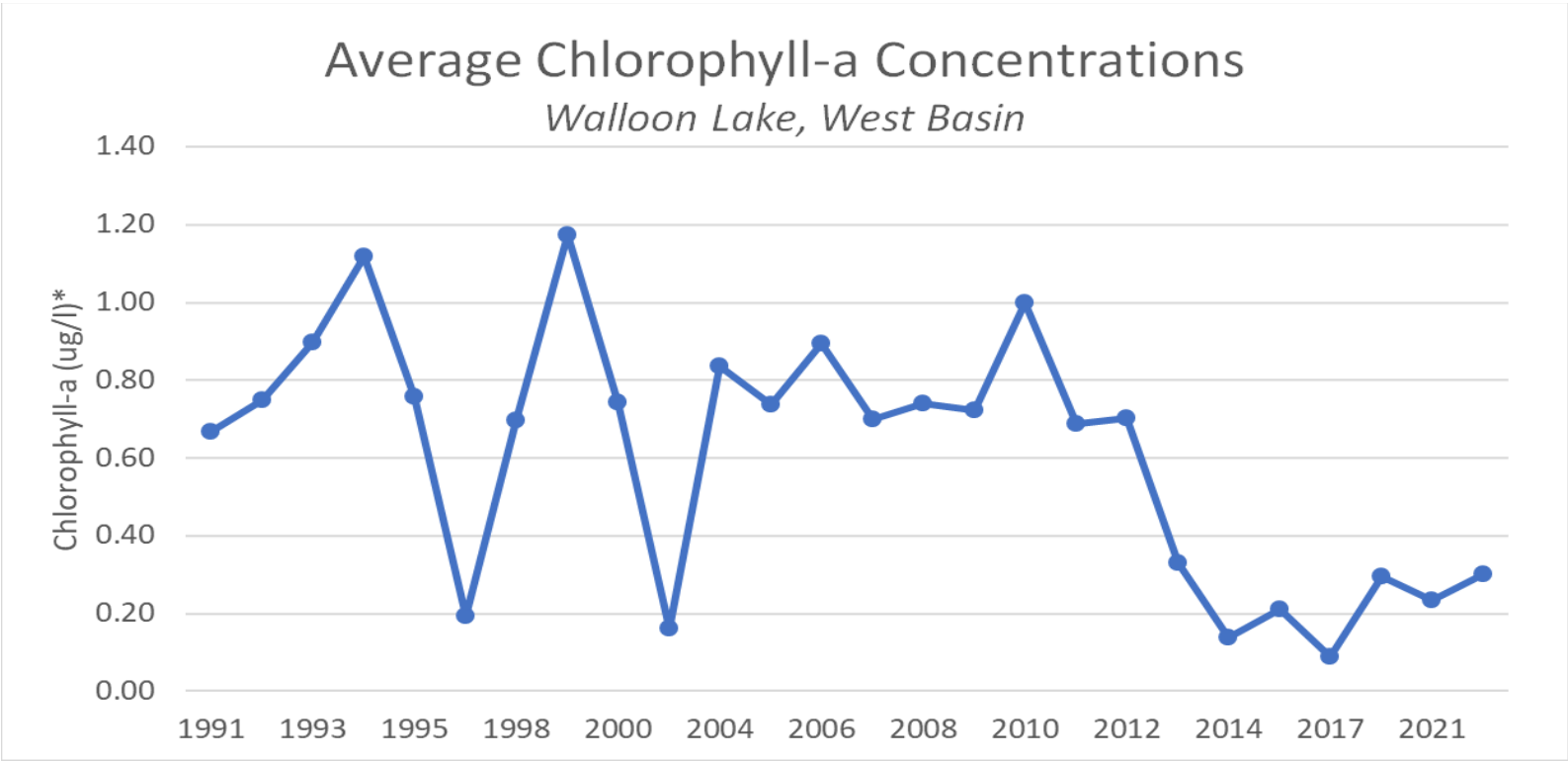
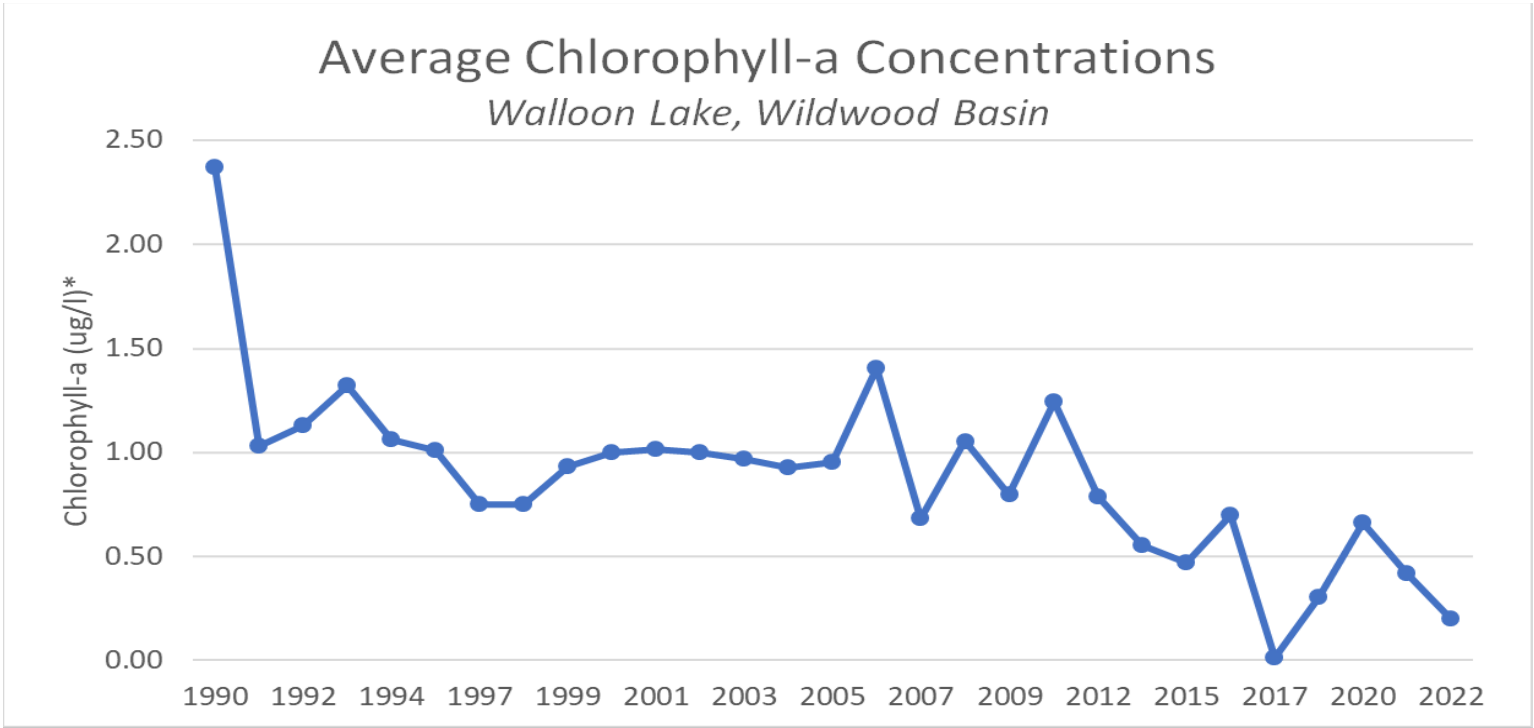
Trophic State Index	Trophic State Classification	Water Quality
0-59	Oligotrophic through Mid-Eutrophic	Good
60-69	Mid-Eutrophic through Eutrophic	Fair
70-100	Hypereutrophic	Poor

CHLOROPHYLL-A RESULTS

- Lakes with **chlorophyll-a results under 2.2 ug/l** are defined as **oligotrophic**.
- Chlorophyll-a readings for **Walloon Lake** show that it resides in the **oligotrophic category**.
- Oligotrophic lakes have **clear waters**, with low productivity levels.
- While other sites around the lake seem to be trending downward, the West Basin site had a slight upward trend since the past year. While this is not alarming, it is a trend to watch.

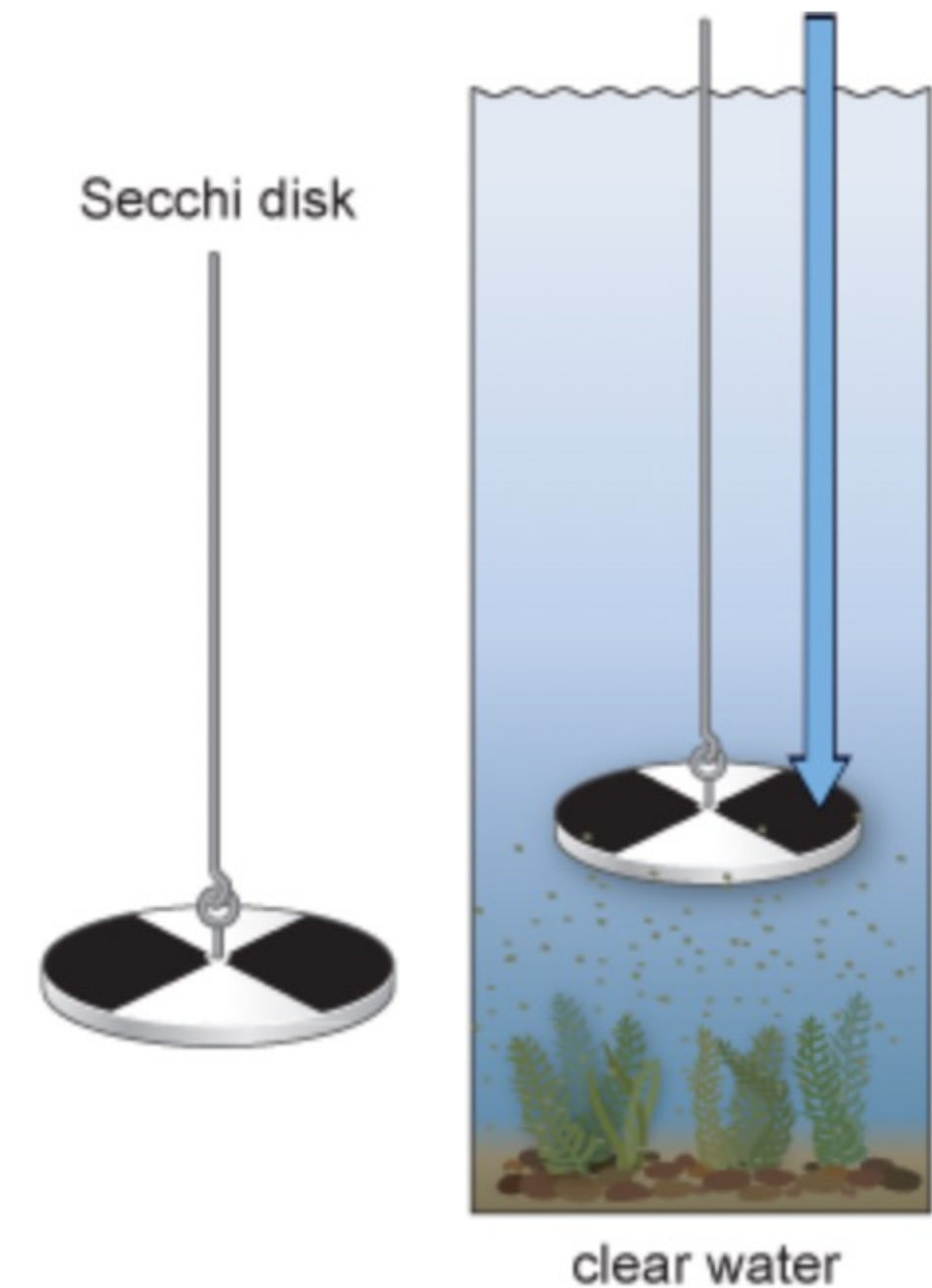


CHLOROPHYLL-A CONCENTRATIONS

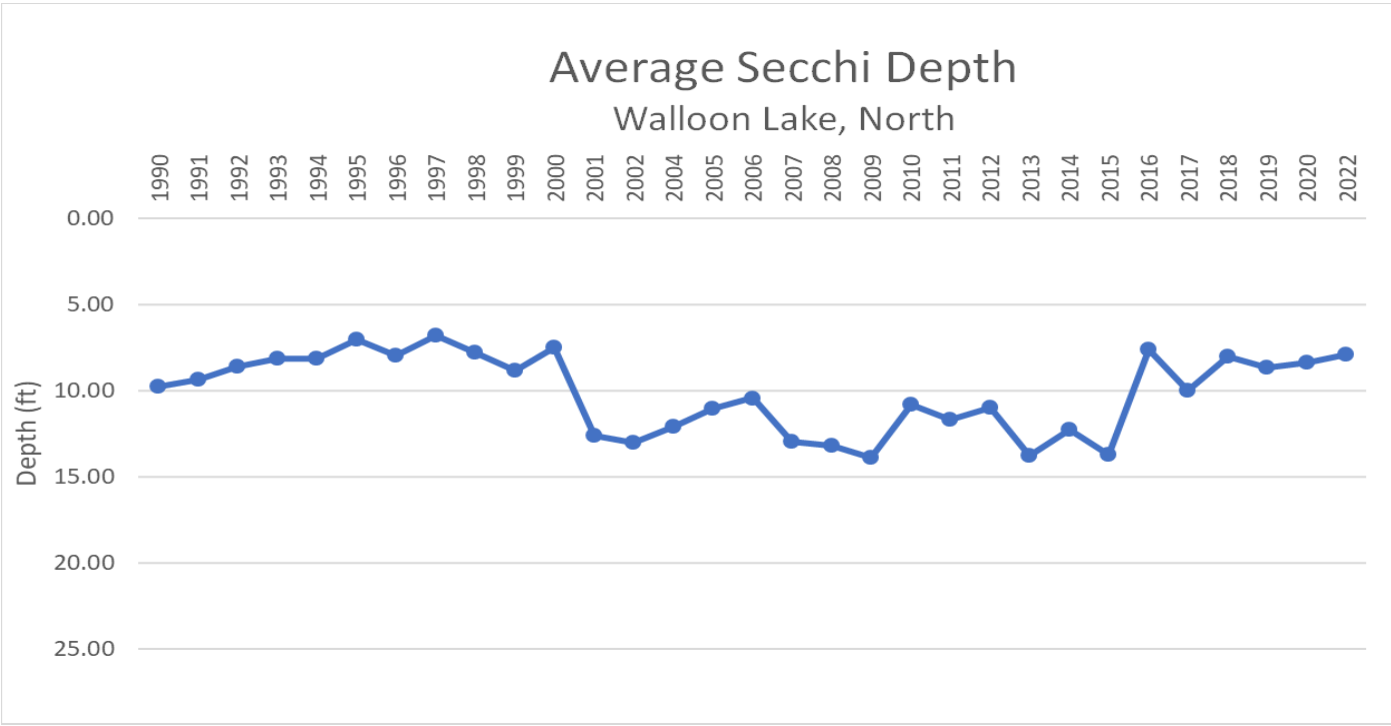
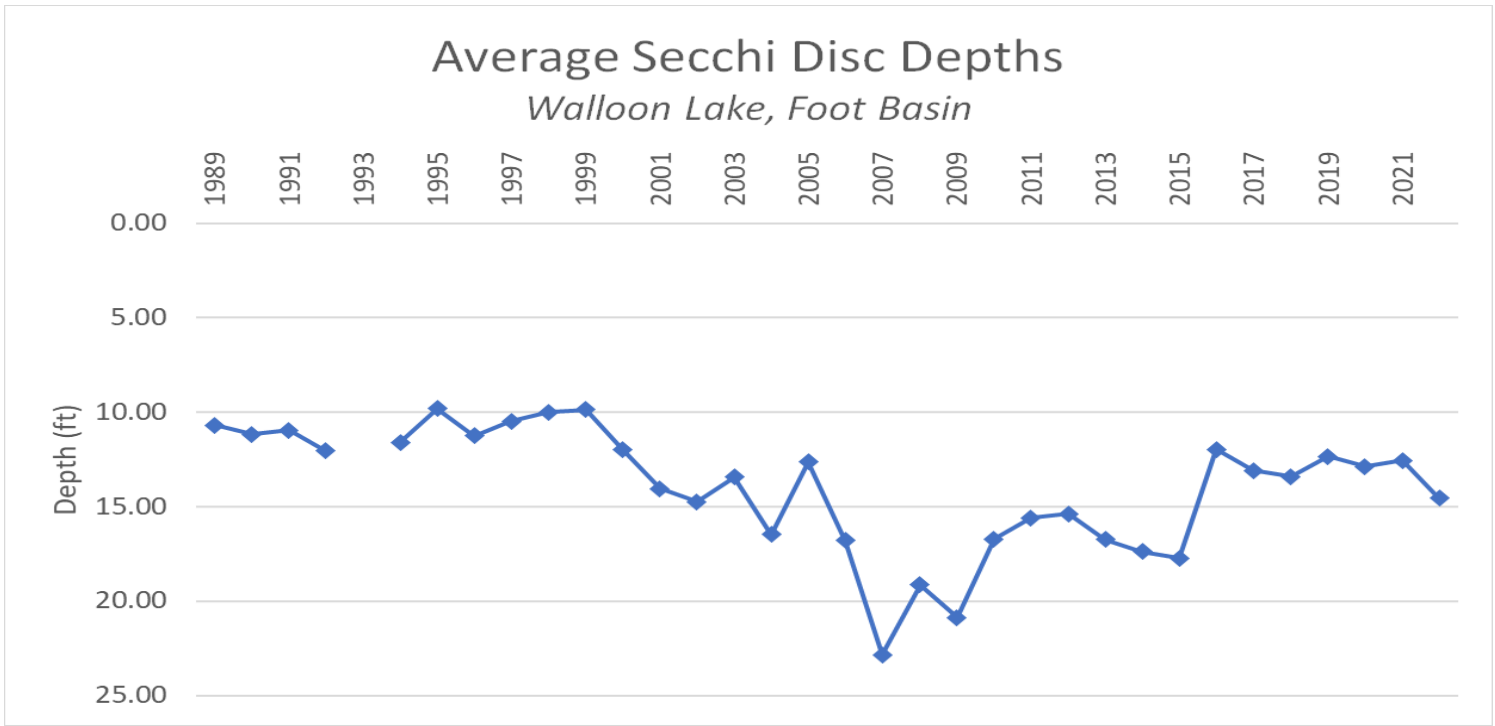
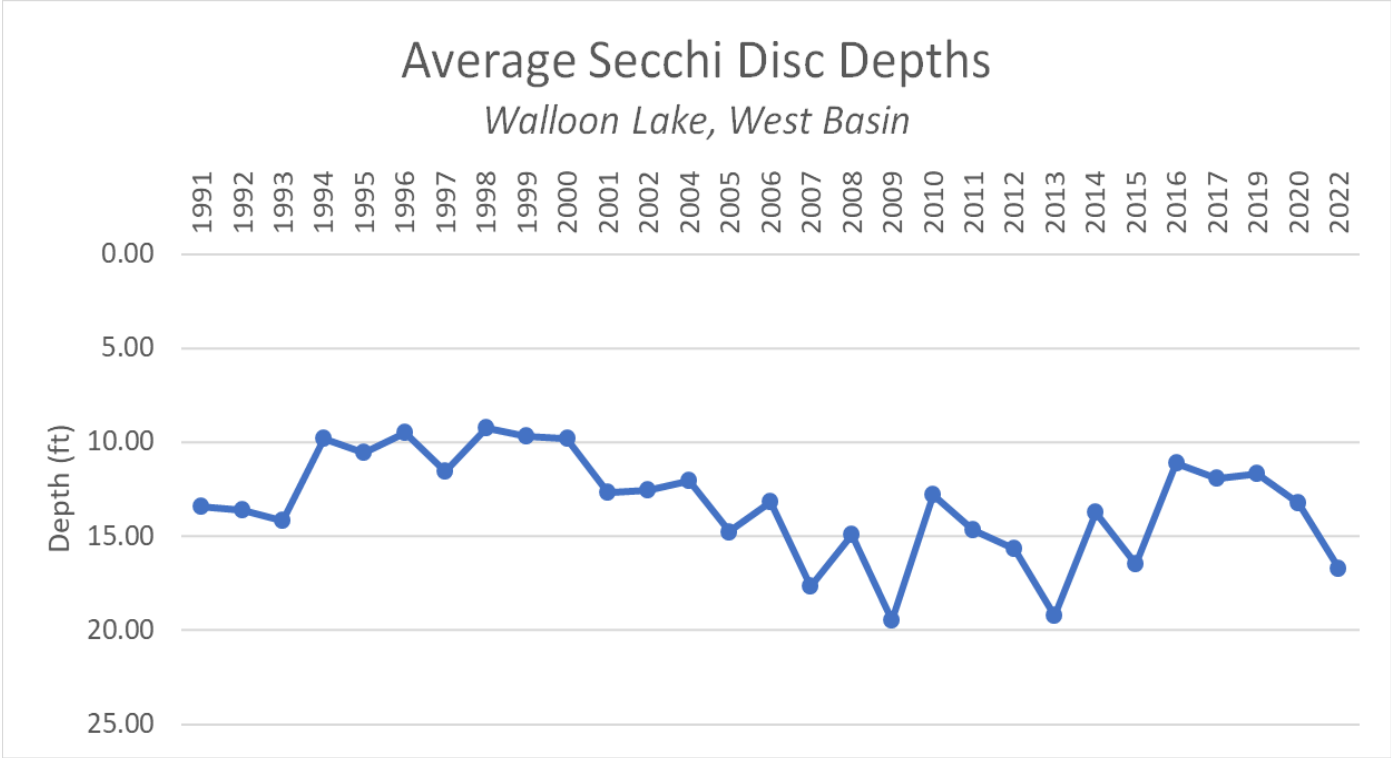
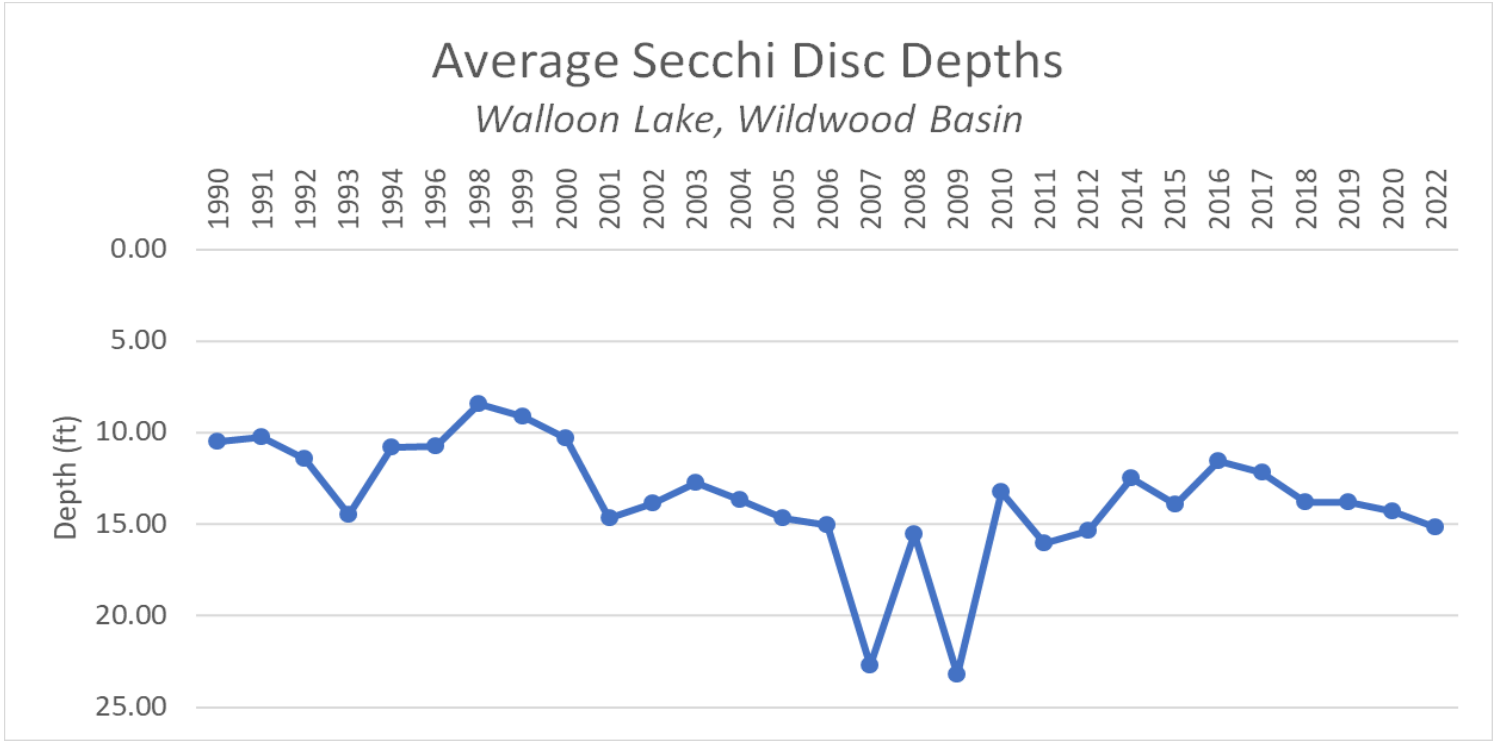


SECCHI DISK RESULTS

- **Secchi disk depths above 15 feet are considered oligotrophic** and depths between 7.5 and 15 are defined as mesotrophic results.
- **In 2022 the average Secchi depths at the monitoring sites in Walloon were 15 ft and over**, which means the lake was oligotrophic last year.
- The monitoring location in the **North Arm** of the lake has remained in the **mesotrophic** category historically.
- It is also recognizable that the average Secchi disc depths are trending upward, meaning the lake is becoming more oligotrophic and clearer.



SECCHI DISK RESULTS OVERTIME

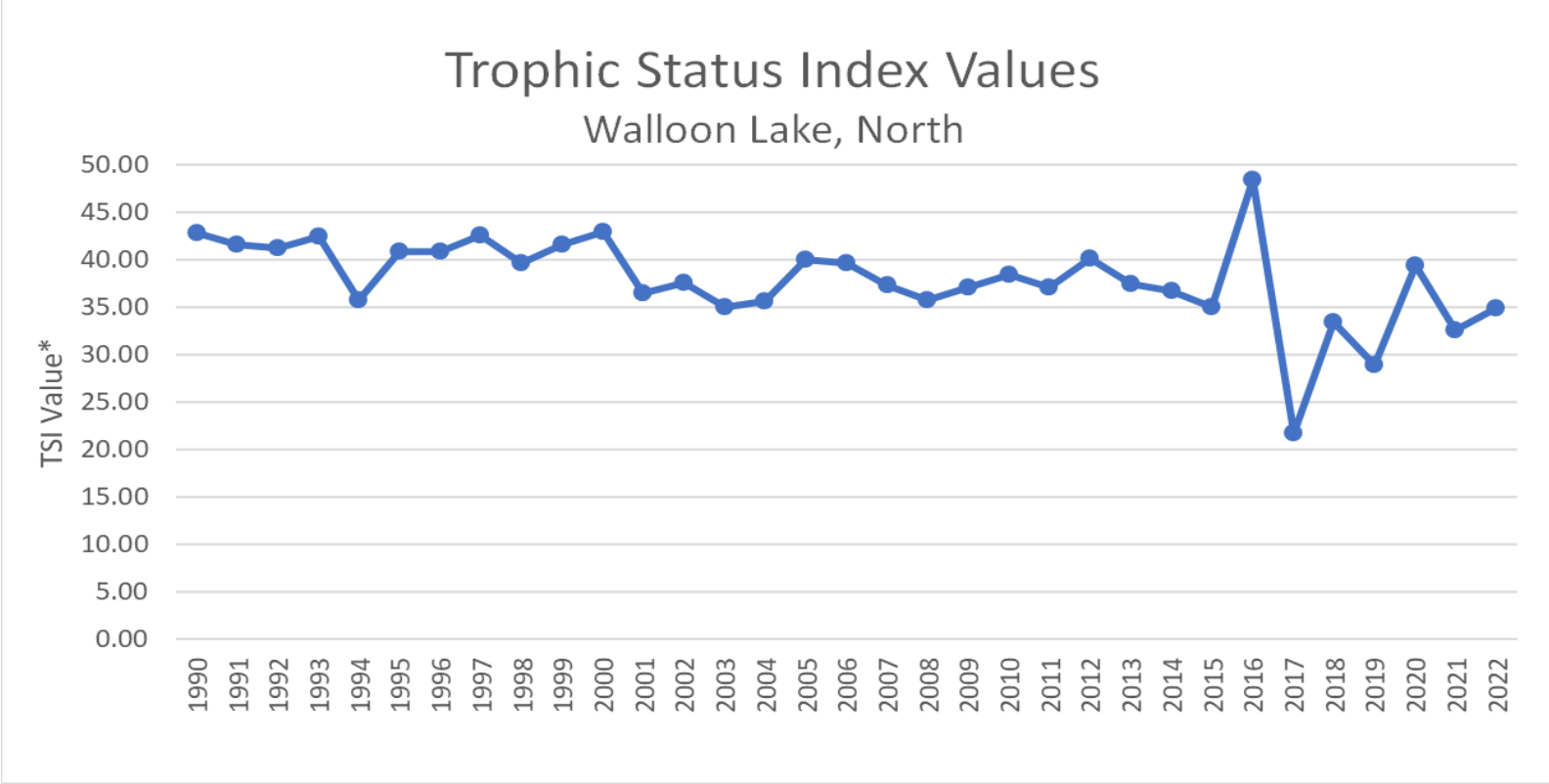
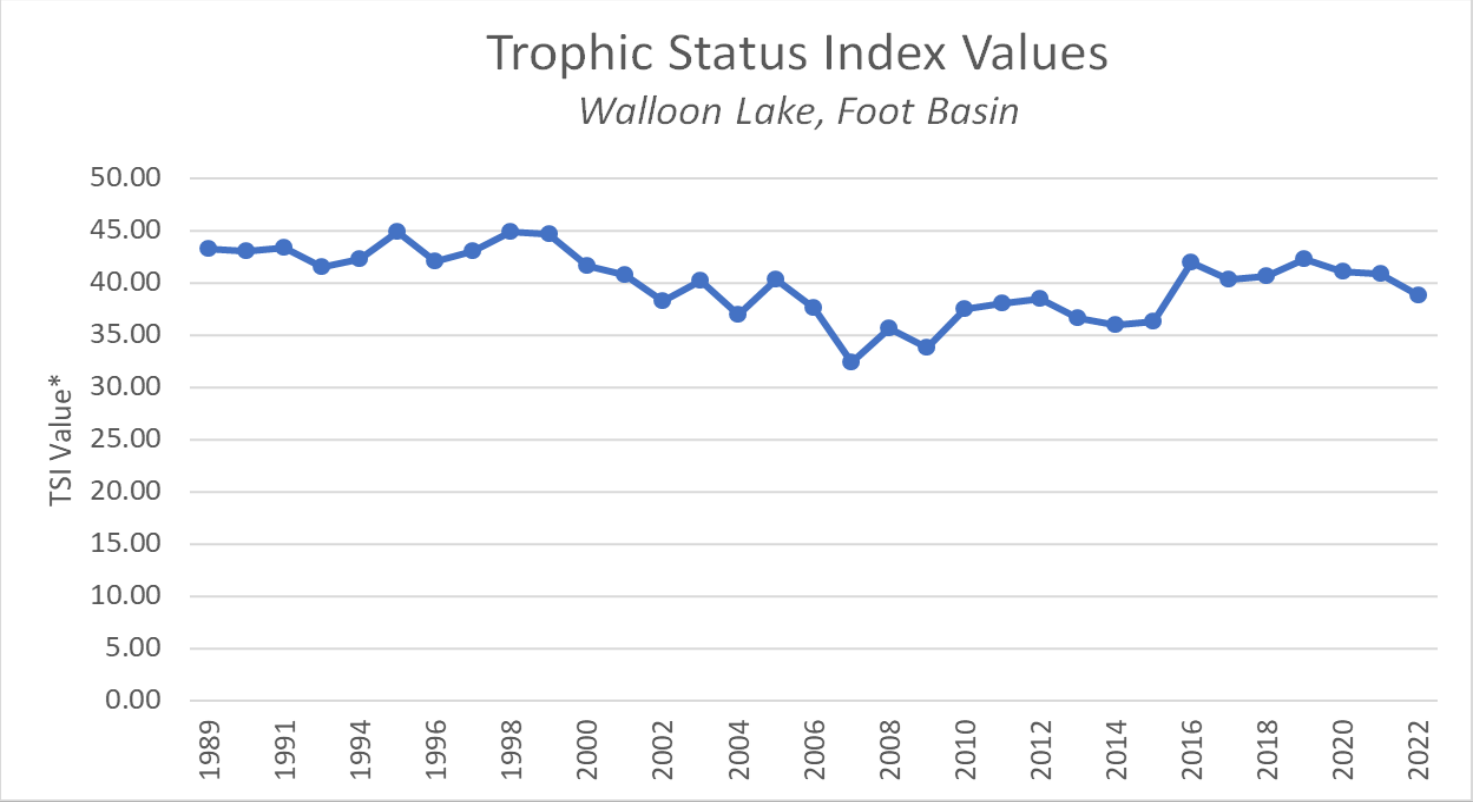
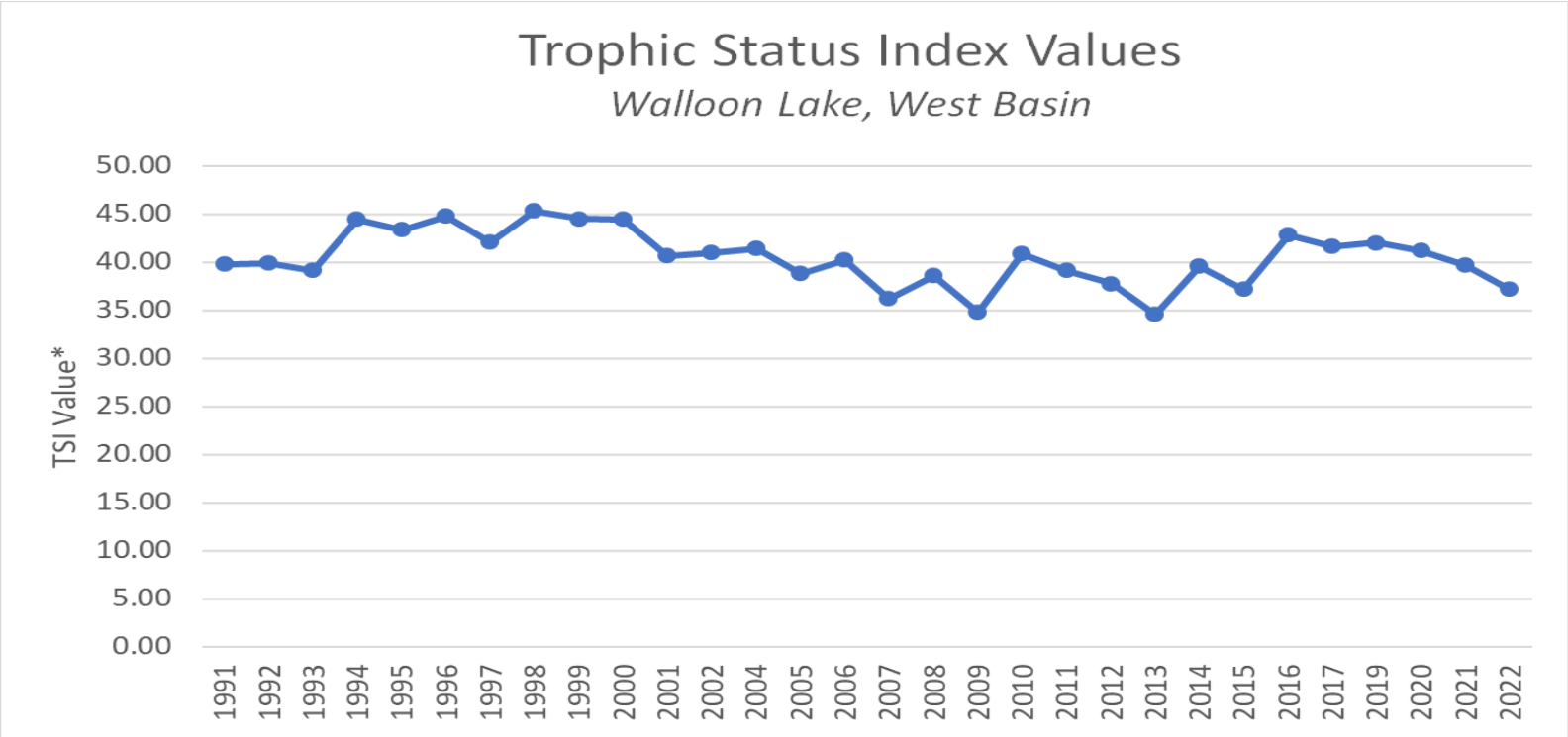
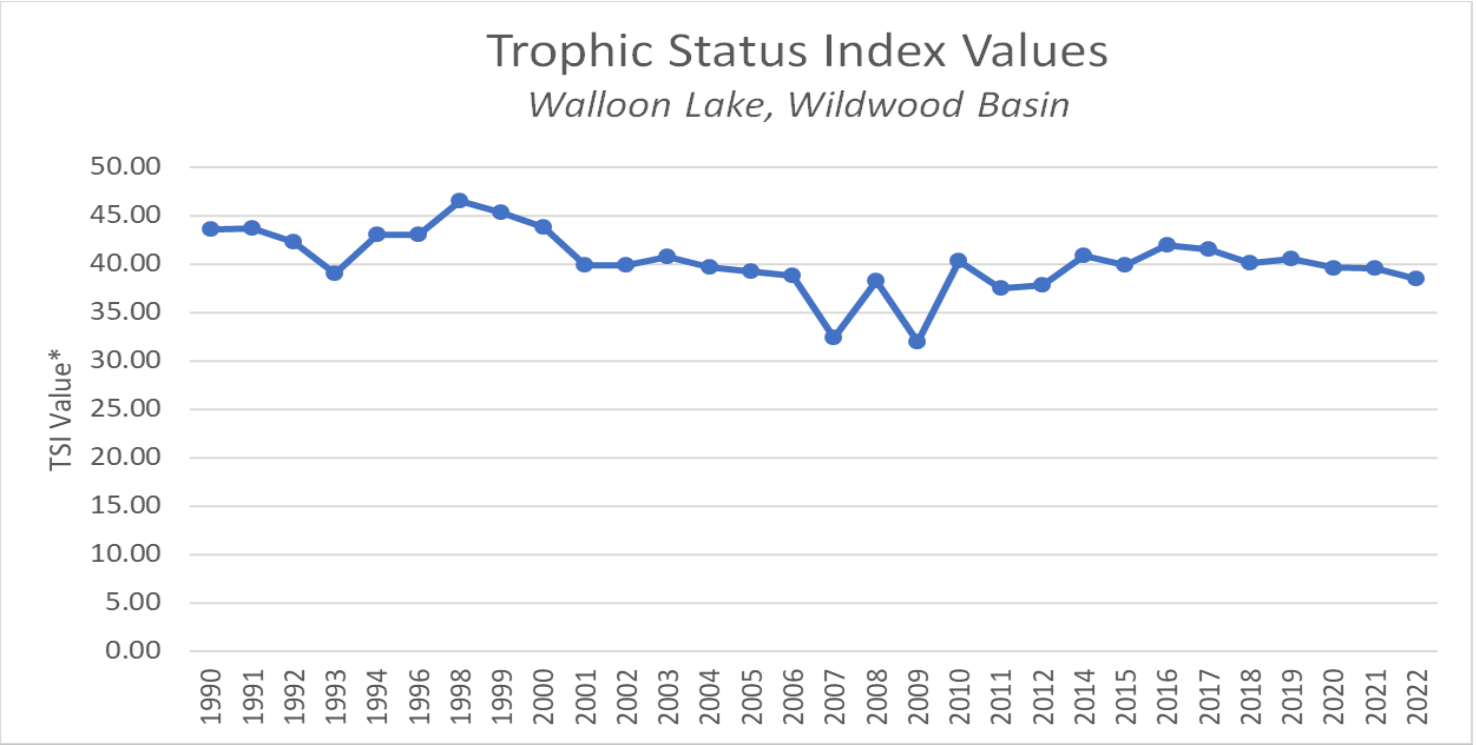


TSI RESULTS

- Trophic Status Index (TSI) is a classification system that is used to rate and compare biological productivity in water bodies.
- TSI scores are based on both Secchi depth and chlorophyll-a results.
- In 2022 the TSI averages around **Walloon Lake** were between **35 and 40**.
- All of these scores remain in the **oligotrophic category**.



TSI RESULTS OVERTIME



SUMMARY

Based on the results from 2022 monitoring, the water quality of Walloon Lake is high. Water quality trends in the lake do not currently raise any concern. Homeowners around the lake can ensure that they protect water quality by following the best practices below:

- Creating or maintaining a greenbelt, or a strip of diverse vegetation including trees, shrubs, grasses, and wildflowers that grow naturally or are planted along the shoreline. Please consider maintaining a greenbelt on your property to prevent pollutants from entering Walloon.
- Take care of your septic tank and make sure to get it pumped every 3-5 years.
- Avoid fertilizing within at least 30 feet of the shoreline and only use no-phosphorus fertilizer.
- Leave native aquatic plants as they provide habitat for fish and wildlife and help keep the lake healthy.



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TIPS + TRICKS: SHORELINE RESTORATION AND GREENBELTS

Jen Buchanan, *Red Twig Environmental*

3 Key Principles of Shorelines

Understand-Protect-Restore

Jen Buchanan, MLA
Red Twig Environmental
Consulting LLC



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Credit: WLAC



Understand-Protect-Restore

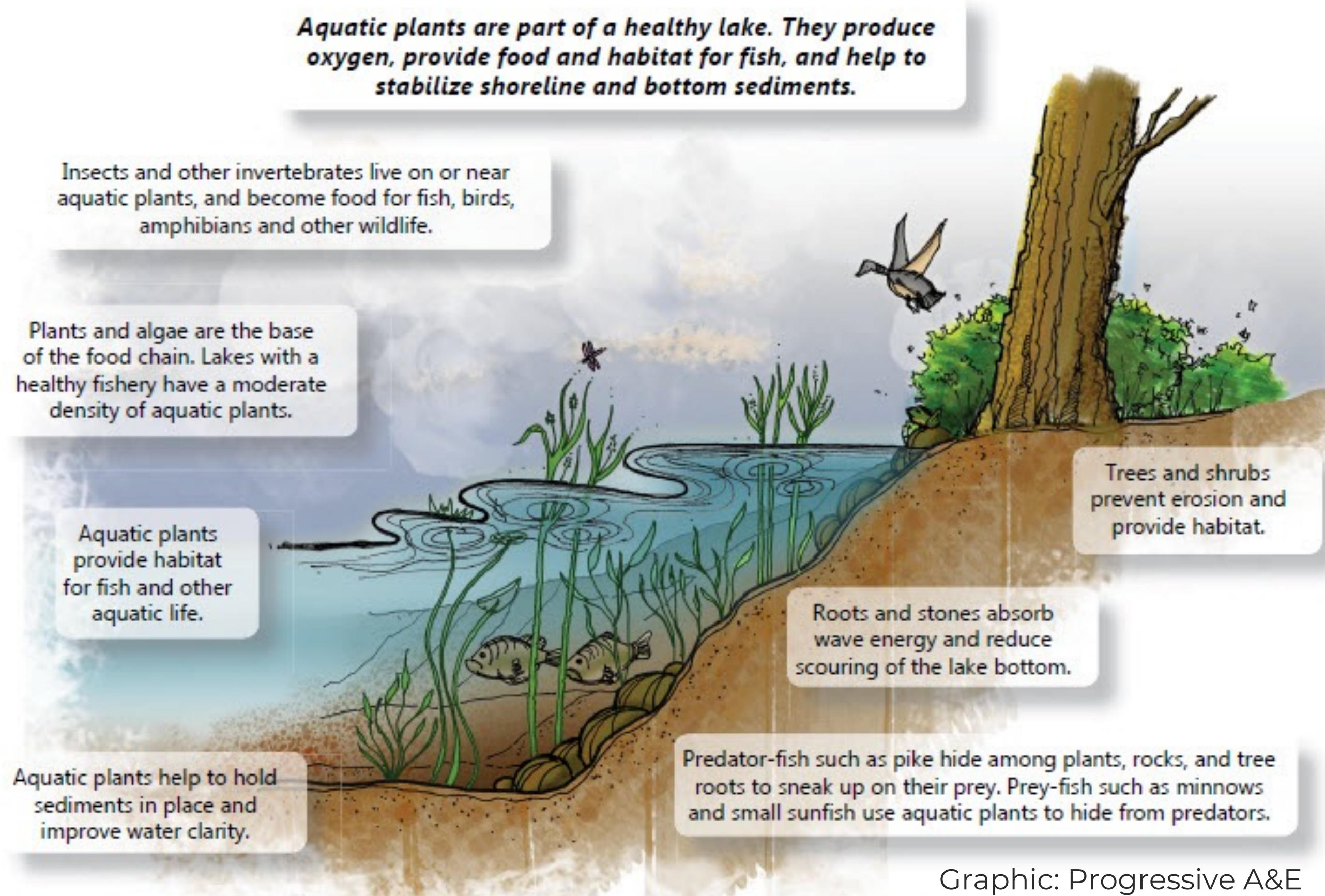
A Transition Between Land and Water

Essential for water quality
and critical habitat

Source: MNSP



Understand-Protect-Restore



Graphic: Progressive A&E



Understand-Protect-Restore

Shorelines are dynamic and subject to constant influences!

There are three different groups of factors that cause erosion:

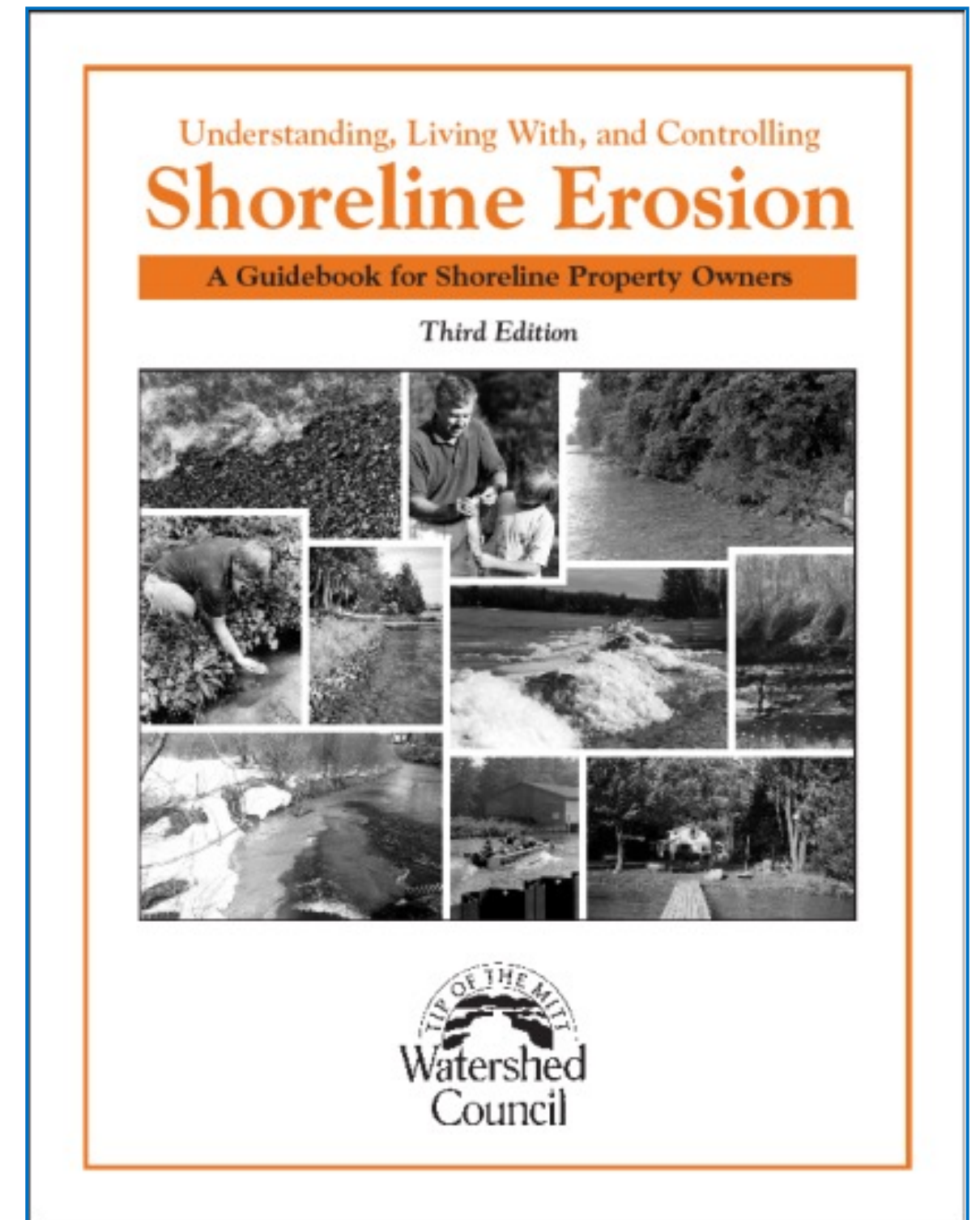
1. Terrestrial (Land based) forces

- Stormwater runoff, land use changes within the watershed, etc.

2. Aquatic (Water based) forces

- Wind, waves, ice, lake levels, artificial alterations, climate/weather

3. Human activities



Tip of the Mitt Watershed Council

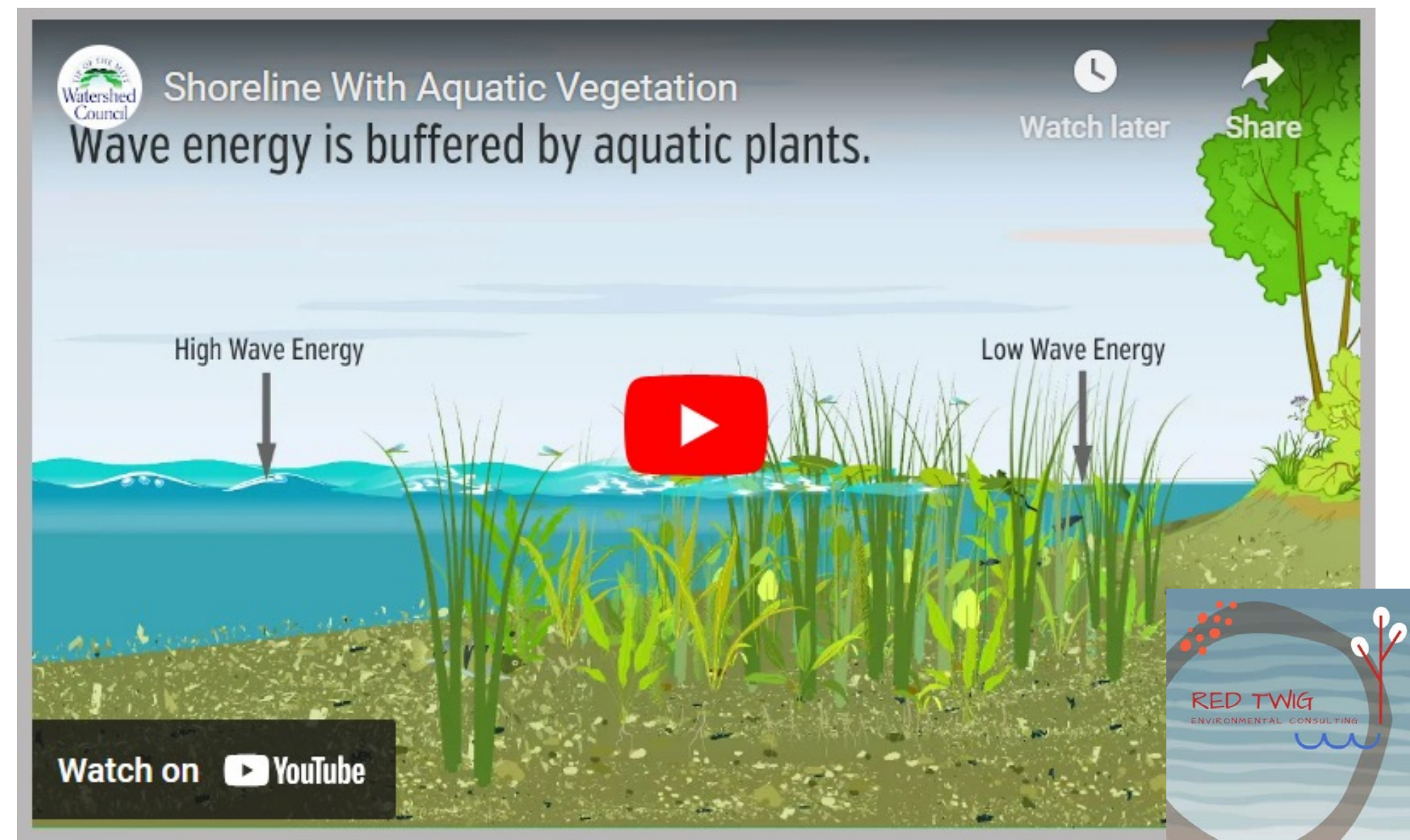
www.watershedcouncil.org





Understand-Protect- Restore

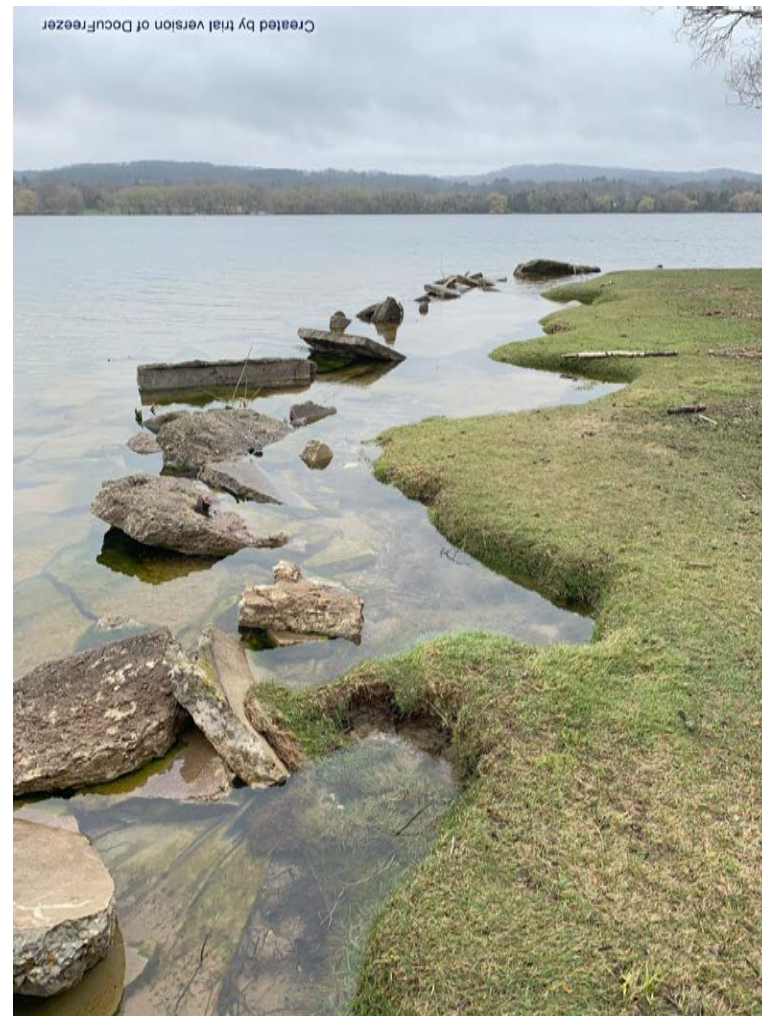
Michigan Natural Shoreline Partnership
www.mishorelinepartnership.org



Understand-Protect-Restore



Understand-Protect- Restore



Credit: EGLE

Understand-Protect-Restore



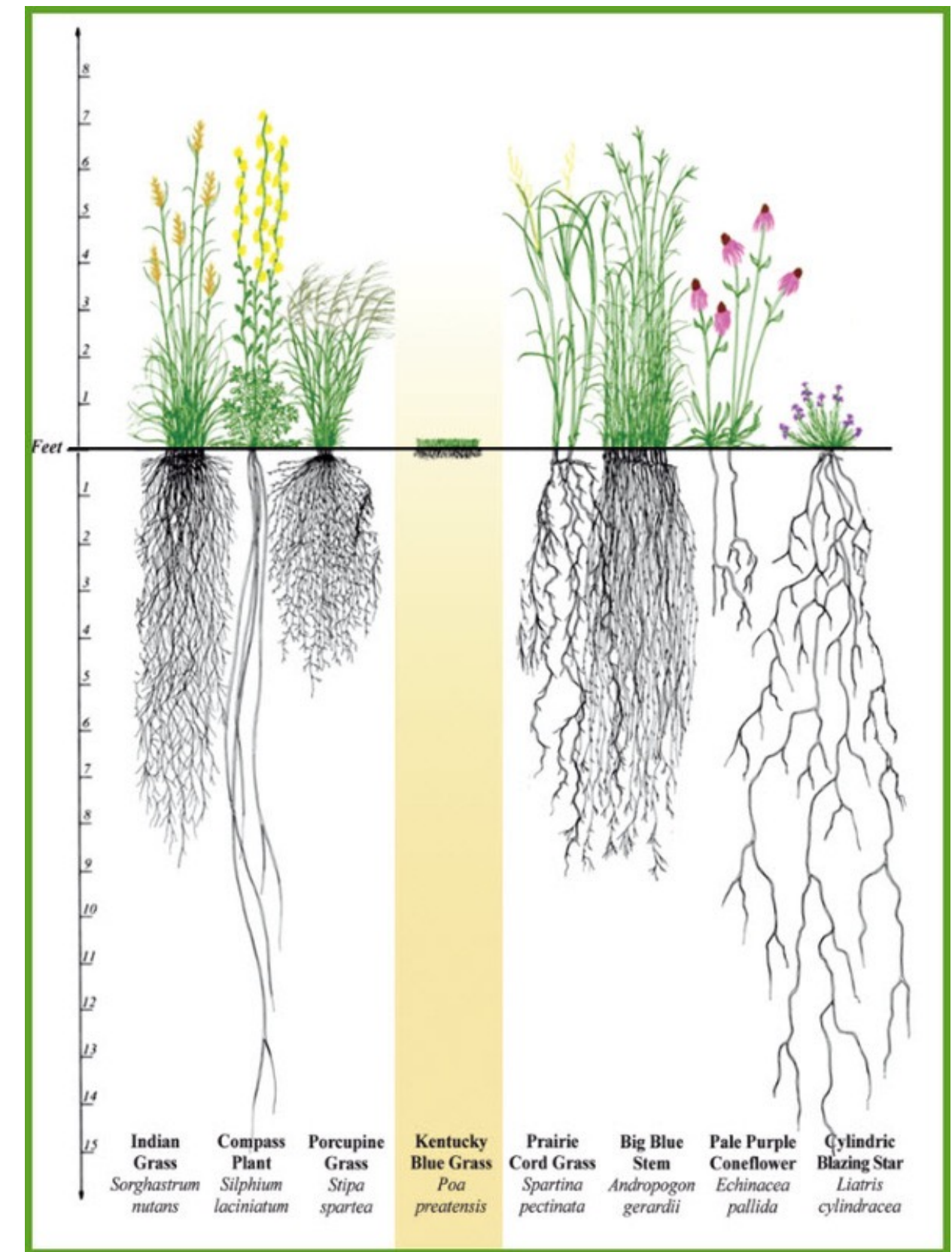
MICHIGAN SHORELAND STEWARDS PROGRAM

www.mishorelandstewards.org



Understand-Protect-Restore

- Limit shoreline alterations
- Minimize the footprint of impervious surfaces: buildings, driveways, parking areas, etc.
- Preserve aquatic vegetation in the nearshore areas, along the shoreline and buffer areas, and the upland zone, too!
- Limit wetland impacts (filling/draining)
- Maintain a robust, healthy greenbelt of native shrubs, grasses, and perennials both in nearshore areas and on land (the buffer zone)



Graphic: Conservation Research Institute adapted by
Tip of the Mitt Watershed Council

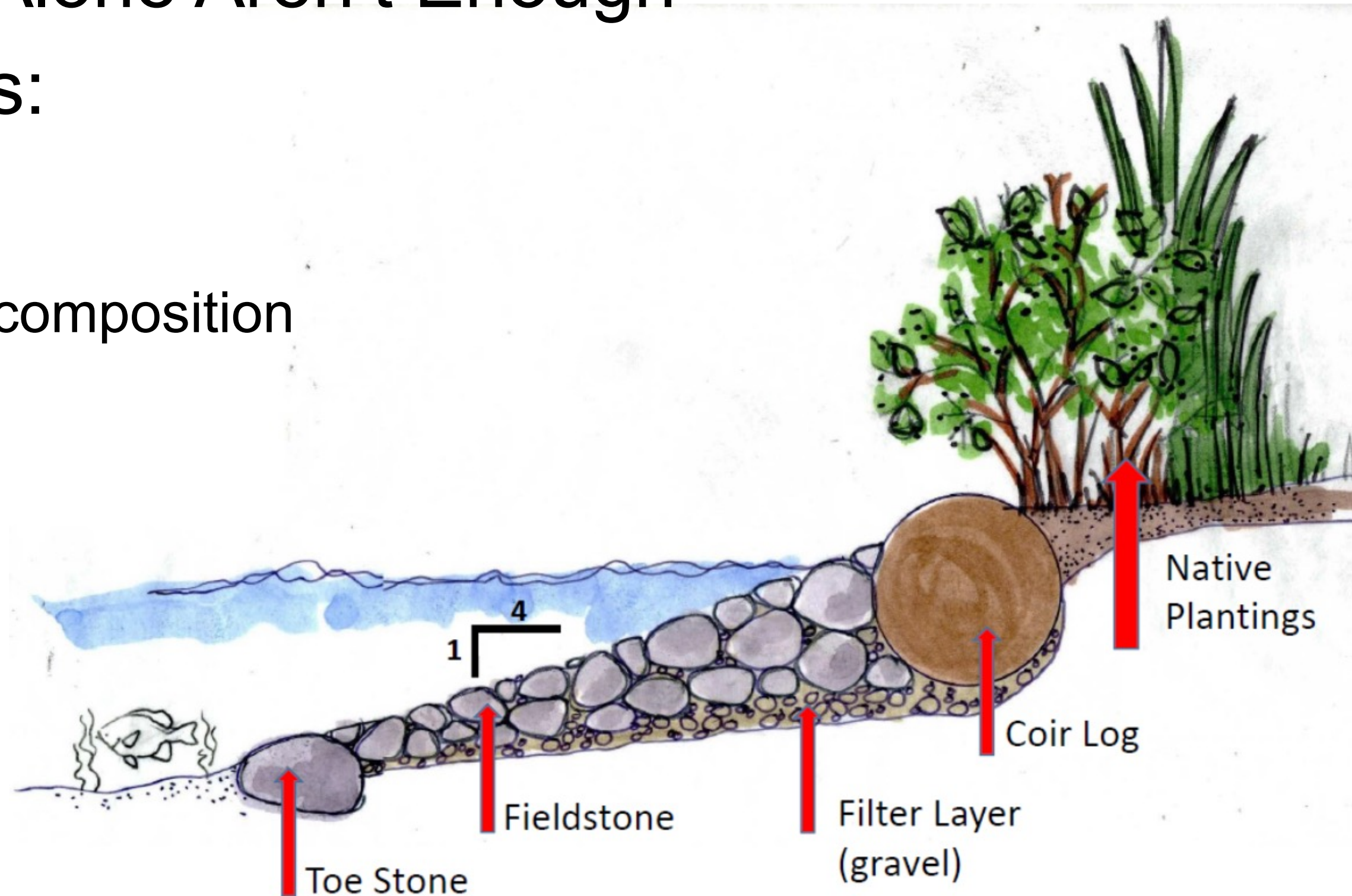


Understand-Protect-Restore

When Coir Logs Alone Aren't Enough

Key Components:

- Slope
- Toe stone
- Fieldstone size and composition
- Coir elevation
- Filter layer
- Native plants!



Understand-Protect-Restore

Certified Natural Shoreline Professionals Listing

www.mishorelinepartnership.org

Firm Name	County	Last Name	First Name	Address	City, State, Zip
360 Landscaping and Property Services	AA-Statewide	Knickerbocker	Kyle	13369 Caulkins Lake Rd	Johannesburg, MI 49751
A1 Seawall Specialists	AA-Statewide	Beaudry	Michael	108 Kirkshire Avenue	Roscommon, MI 48653
A1 Seawall Specialists	AA-Statewide	Smith	Ryan	11362 Snowbowl Rd	Houghton LK, MI 48629
Abonmarche Consultants, Inc.	AA-Statewide	Morphey	Mike	95 W. Main Street	Benton Harbor, MI 49022
Abonmarche Consultants, Inc.	AA-Statewide	Thies	Jason	95 W. Main Street	Benton Harbor, MI 49022
Alluring Landscape Design	Livingston	Rowley	Beth	45222 Glengarry Rd.	Canton, MI 48188
Alluring Landscape Design	Monroe	Rowley	Beth	45222 Glengarry Rd.	Canton, MI 48188
Alluring Landscape Design	Oakland	Rowley	Beth	45222 Glengarry Rd.	Canton, MI 48188
Alluring Landscape Design	Washtenaw	Rowley	Beth	45222 Glengarry Rd.	Canton, MI 48188
Alluring Landscape Design	Wayne	Rowley	Beth	45222 Glengarry Rd.	Canton, MI 48188
Arbor Hill Landscaping	Cass	Freer	Alex	107 E Bitely	Lawton, MI 49065
Arbor Hill Landscaping	Kalamazoo	Freer	Alex	107 E Bitely	Lawton, MI 49065
Arbor Hill Landscaping	St. Joseph	Freer	Alex	107 E Bitely	Lawton, MI 49065
Arbor Hill Landscaping	Van Buren	Freer	Alex	107 E Bitely	Lawton, MI 49065
Armstrong Environmental	AA-Statewide	Armstrong	Wendy	1060 W. Gruler Rd.	Petoskey, MI 49770
Back to Nature	AA-Statewide	Reese	Charlene	29315 Grandview	Harrison Twp, MI 48045

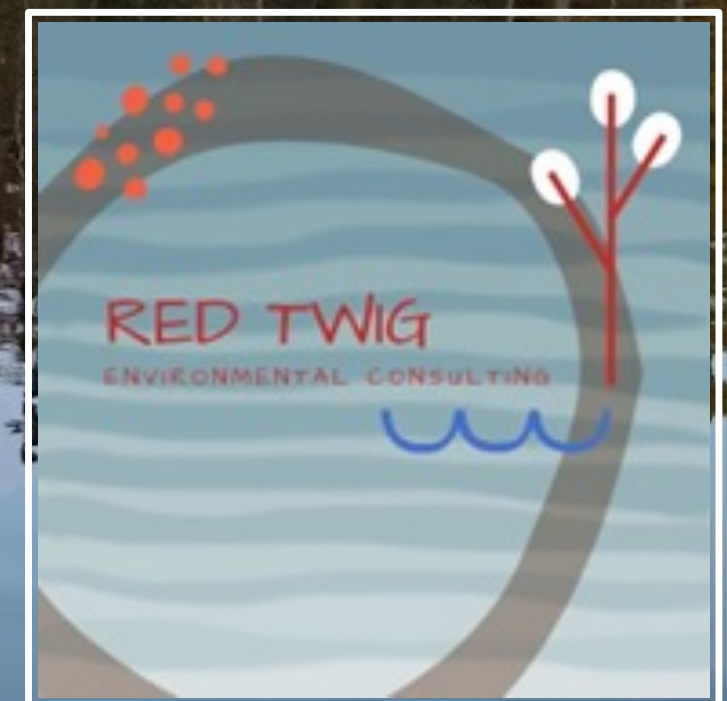


Understand-Protect- Restore



Jen Buchanan
redtwigenvironmental@gmail.com

Thank you!



PROXY RESULTS

RESOLVED, the WLAC Membership approves the Board candidates as presented:

- Mary Ann Smith
- John Fettig
- Marty Makinen (Incumbent)



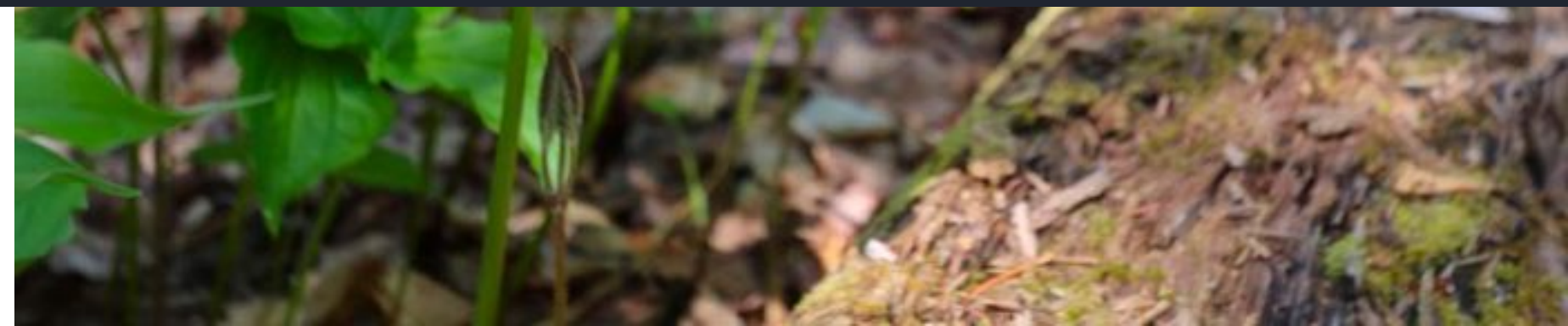
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INCOMING WLAC PRESIDENT



RUSS KITTLESON

- Current WLAC Vice President
- WLAC Water Quality Committee Chair





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THANK YOU!