

Tecumseh Council Meeting

28 June, 2022. Via Zoom teleconference



DRINKING WATER
SOURCE PROTECTION

Our Actions Matter

Essex Region
Conservation Authority
sustaining the place for life

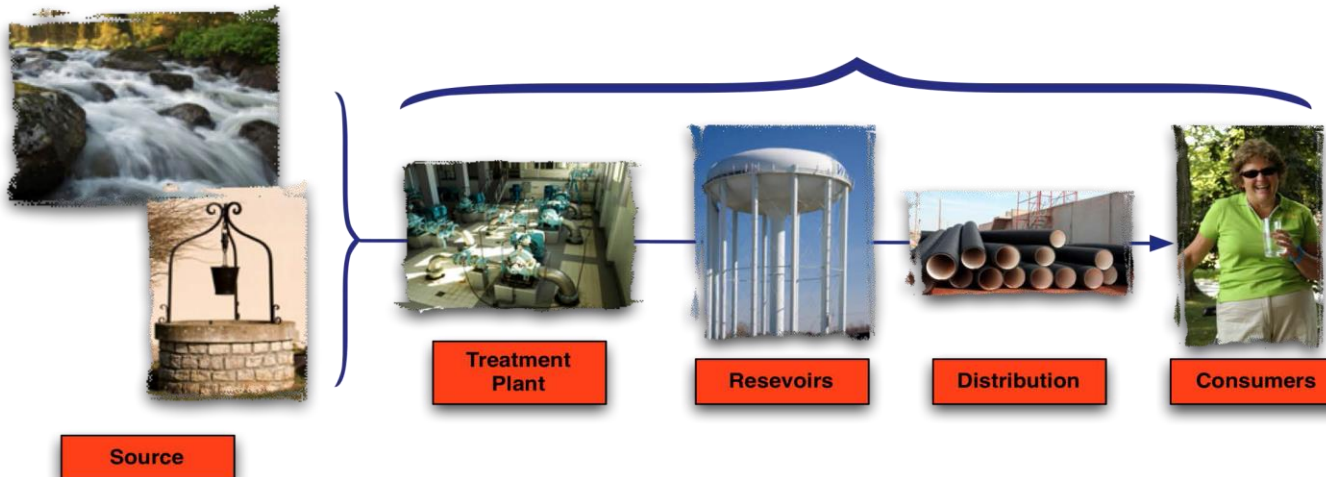


Source Water Protection

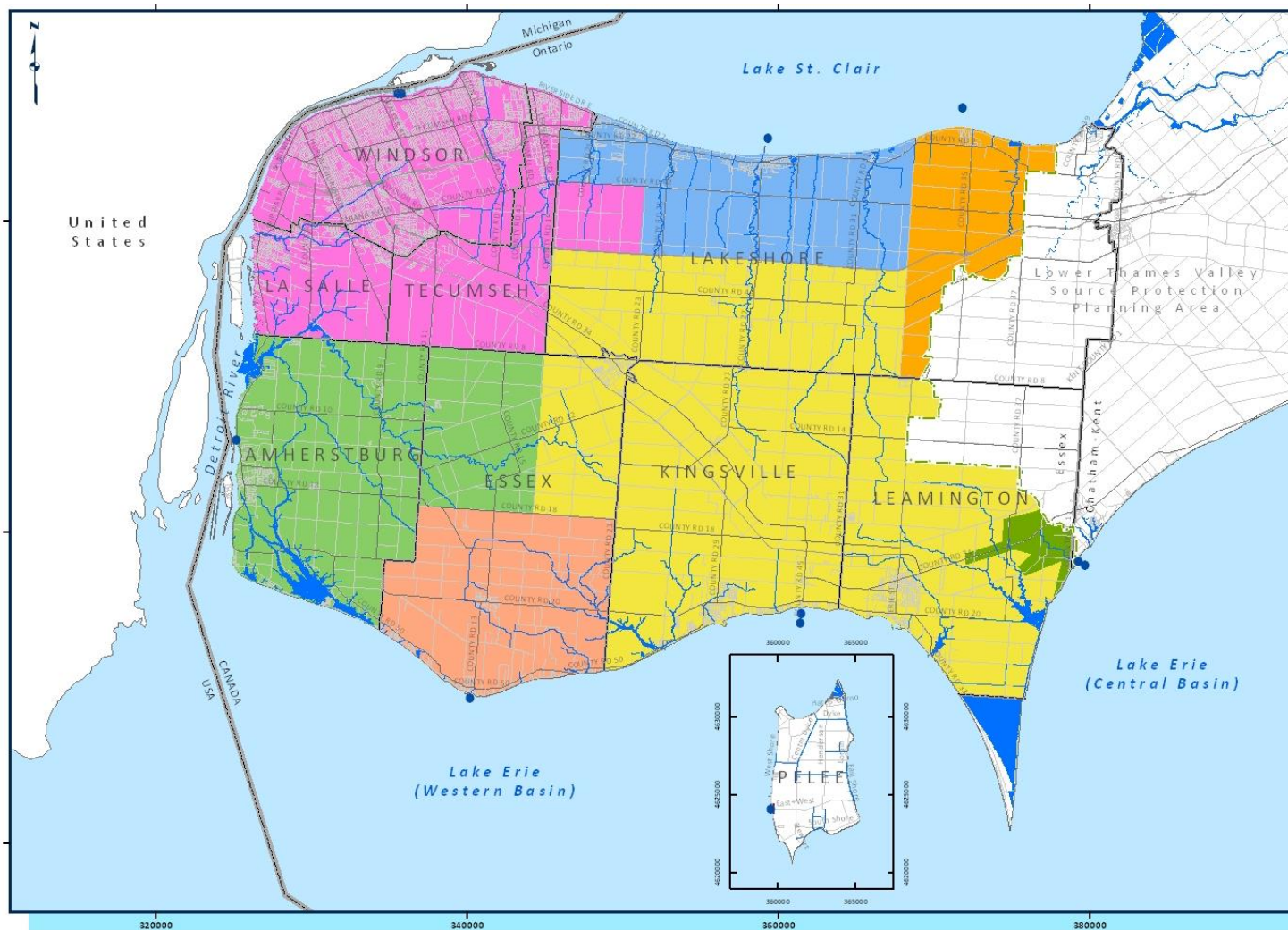
- Following the Walkerton tragedy in 2000, safeguards were put into place to protect municipal drinking water sources as part of the *Clean Water Act, 2006* (CWA)
- The CWA fulfills 12 of the 121 recommendations in the Walkerton Inquiry report and is part of a multi-barrier approach

Clean Water Act, 2006

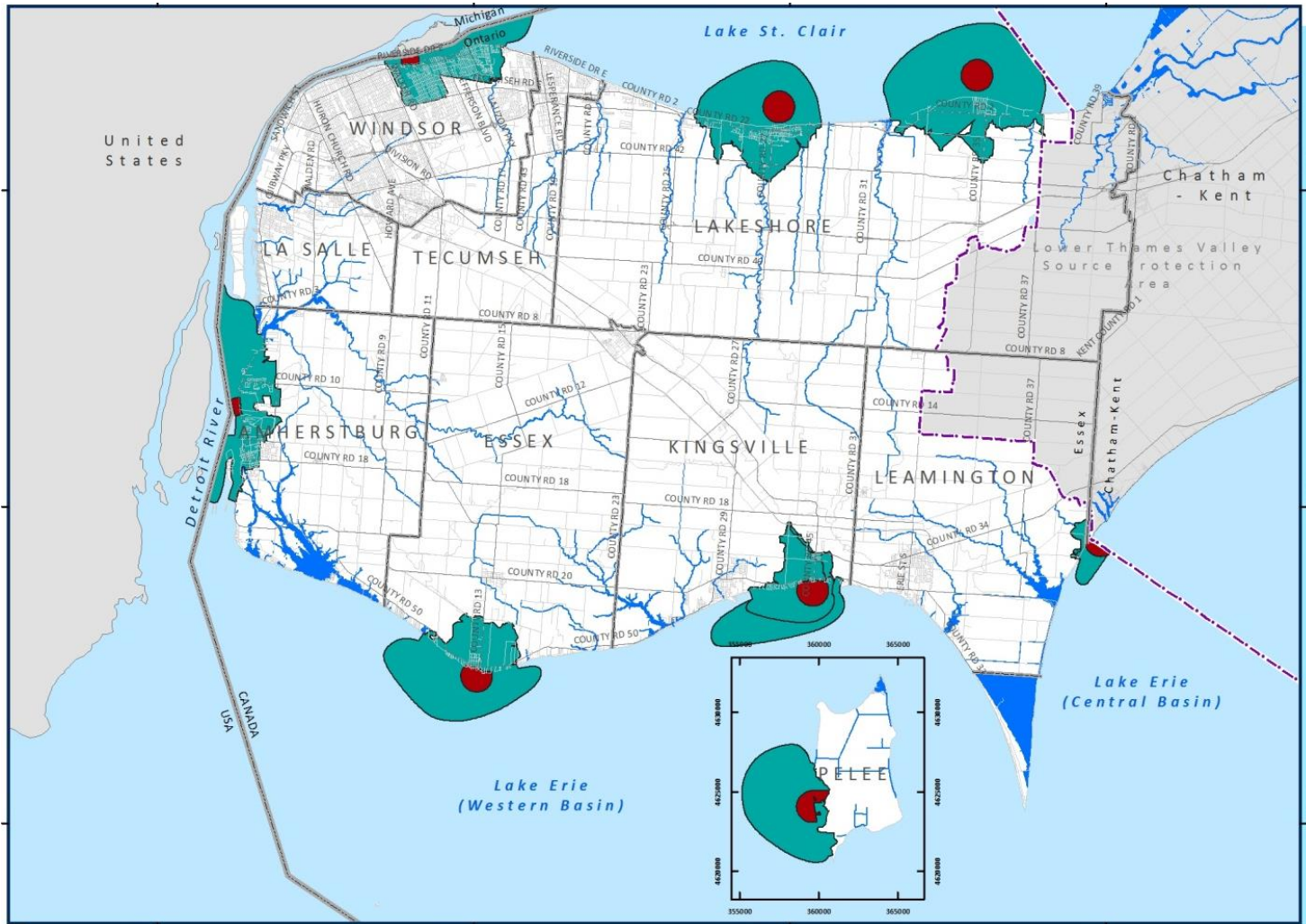
Safe Drinking Water Act, 2006



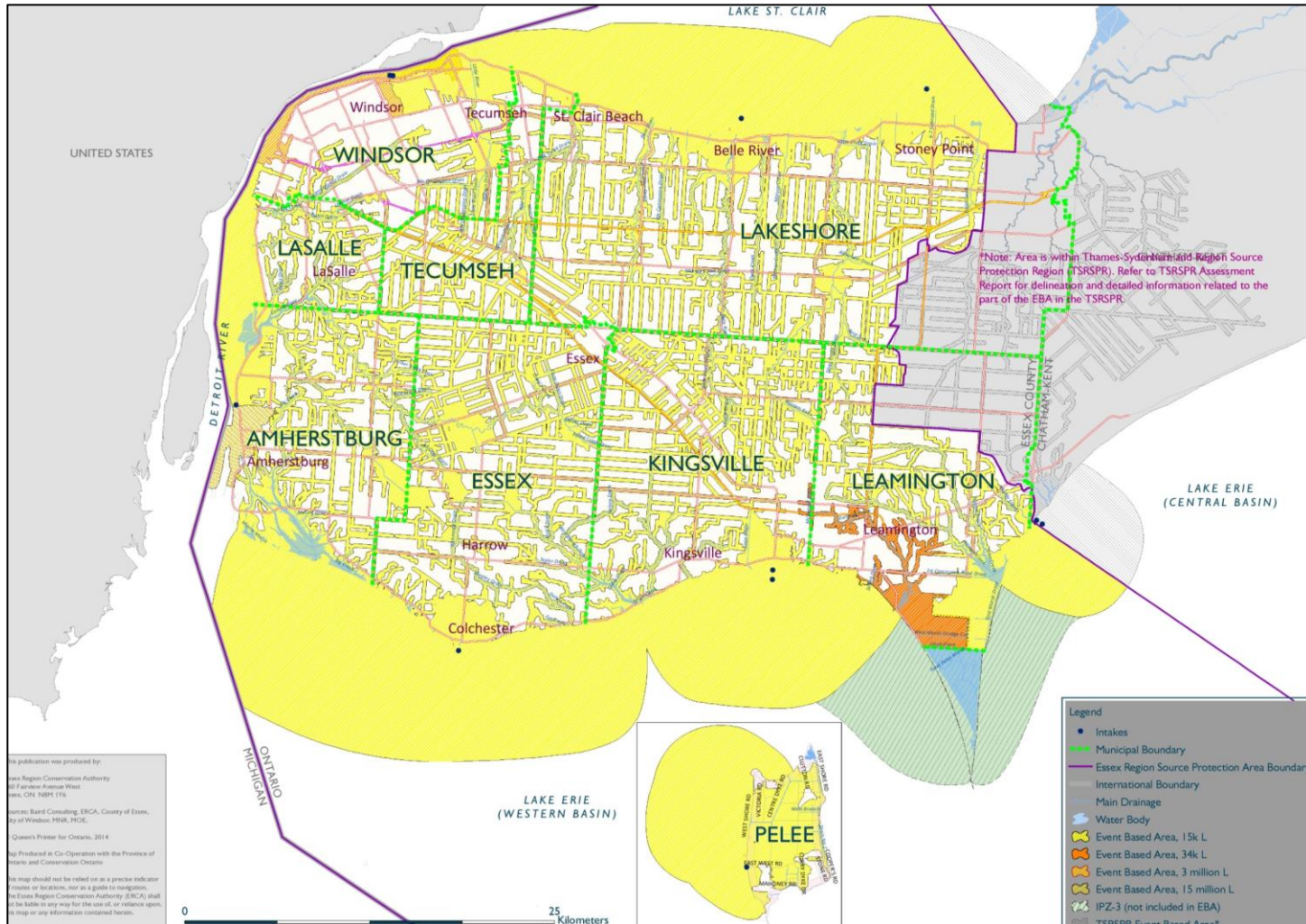
Essex Region Source Protection



Intake Protection Zones



Event Based Areas



Annual Progress Reports

- Annual Progress Reports are required by May 1st each year
- Reports are generated from data collected from Implementing Bodies, received by February 1
- The Report covers progress toward implementation cumulatively from October 1, 2015 (effective date) to December 31, 2021.
- Progress in 2021 is highlighted
- Reports are produced using a template provided by MECP
- This is the fourth Annual Progress Report produced by the ERSPA



Scoring in Annual Progress Report

P – Progressing Well

S – Satisfactory

L – Limited progress

- Overall Score - **P**
- Implementation Progress – **P**
- Provincial Progress - **P**
- Municipal Progress - **P**
- Risk Management Plans - **P**



Implementation Progress

Score since 2018 : **P – progressing well**

- The percentage of fully implemented policies for SDWTs has increased from 2018 (54%) to 2019 (57%) to 2020 (61%) to 2021 (66%)

Implementation Status	Significant Threat Policies	Low/Moderate Policies	Other Policies
Implemented	29	2	1
No further action required	2	1	0
In progress	13	1	1
No progress made	0	0	0
No response received	0	0	0
TOTAL	44	4	2



Change in Implementation Status

- Two (2) policies directed to the City of Windsor and are related to Combined Sewer Overflows
- One (1) policy to manage the threat of airplane de-icer chemicals in Lakeshore, Windsor and Amherstburg IPZ-1



In-progress policies (13) total

- Six (6) s.57 (Prohibit) policies affecting Windsor, Lakeshore and Amherstburg IPZ-1
 - Complete for Lakeshore and Amherstburg
- Five (5) s.58 (Risk Management Plans) policies affecting Windsor, Lakeshore and Amherstburg IPZ-1 and/or Windsor IPZ-2
 - Complete for Lakeshore and Amherstburg
- One (1) s.58 (Risk Management Plans) policies for existing handling and storage fuel (as described in the RMO report)
 - Two remaining existing threats
- One (1) policy requires Windsor, Lakeshore and Amherstburg to prohibit sewage treatment tanks in IPZ-1's
 - Implemented in Windsor and Lakeshore; will be included in Amherstburg's next Official Plan update.



Provincial Progress

Score since 2018: **P – progressing well**


- Provincial Ministries:
 - Screen new applications for all Provincial Instruments and have incorporated SWP into their processes
 - Reviewed PIs for all existing threats in 2018
 - Examined three (3) applications for wastewater/sewage works in vulnerable areas; 33 new applications have been reviewed since 2016
 - No new SDWTs were identified



Municipal Progress

Score since 2018: **P – progressing well**

- Municipalities have:
 - Delegated Part IV to ERCA – agreement extended to December 2024
 - Have screening mechanisms in place for s.59 policies
 - Completed or working on OP and ZBL updates
 - Completed or working on road sign installation
 - Tecumseh completed OP review in 2021; Lakeshore and Leamington have been reviewed

Progress	OP	ZBL
Complete	4 	1
In process	7	7
Not started	0	2
Not required	0	1



Risk Management Plans

Score since 2018: **P – progressing well**

Summary

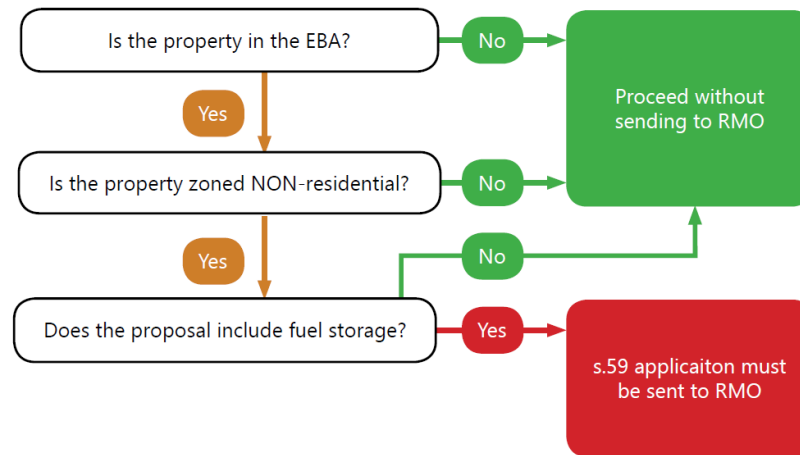
- **384** threats identified in the Assessment Report
 - **295** properties do not require a RMP
 - **8** additional threats (not identified in the Assessment Report) were identified through field verification
 - **7** RMPs for existing threats established in 2021
 - **4** of these were issued by Order for empty tanks stored on site
 - **8** RMPs for new threats established in 2021
 - **97** RMPs established overall
 - **2 sites remaining in Essex Region** (oil pumping)

>95% of existing threats are addressed with RMPs!



S.59 Future Threats – fuel tanks

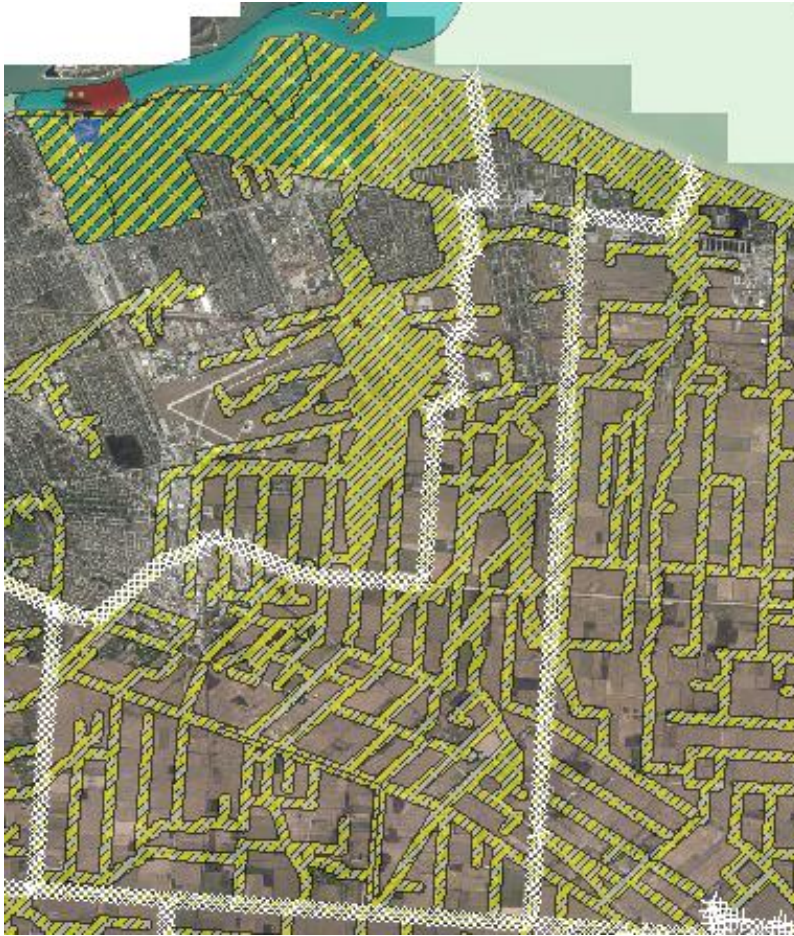
- Municipalities screen for new threats through s.59 policy following the Written Direction. Annual refresher training is provided, Tecumseh staff participated in Spring of 2021



- The RMO determines whether a RMP is required and establishes them immediately if needed
- The RMO established 8 RMPs for new fuel tanks in 2021, all of which were for greenhouses in Leamington/Kingsville
- 16 RMPs have been established for new threats since the Plan came into effect in 2015



Town of Tecumseh Event Based Area (EBA)



- Two (2) existing fuel tanks have RMPs established
- There have been no new fuel tanks installed that require RMPs since 2016

<http://gisweb.countyofessex.on.ca/svlerca25/Viewer.html?Viewer=Public>

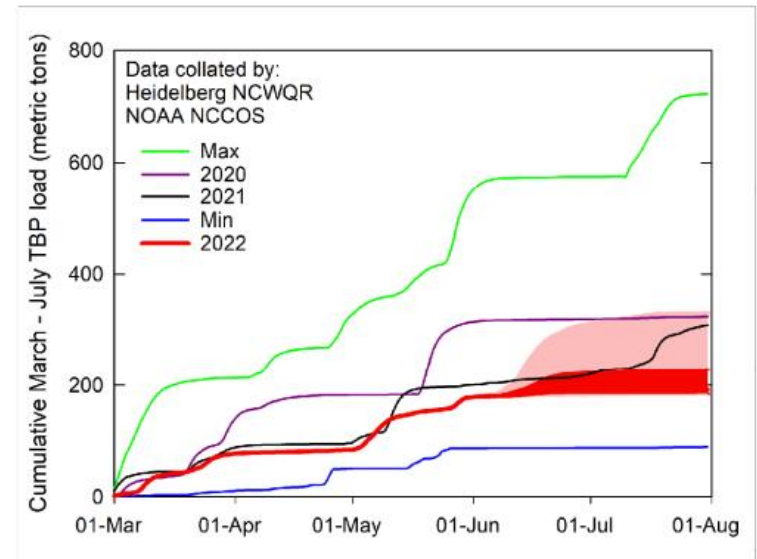
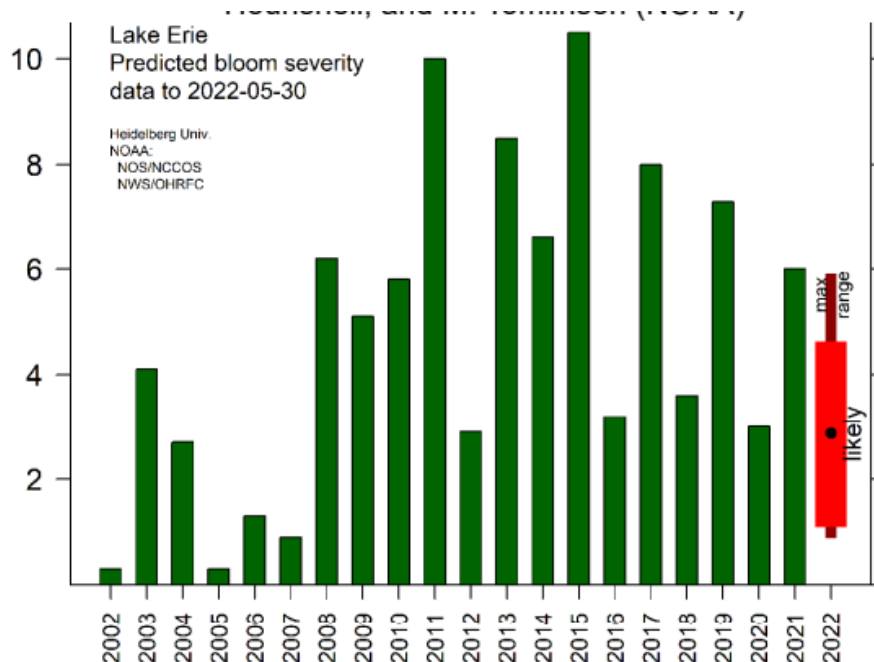
Risk Management in 2022

- Introduce formal compliance procedures with established risk management plans to ensure compliance with RMP
- Continue to review Section 59 Applications
- Deliver municipal training sessions on Section 59 processes
- Respond to requests from developers, consultants and municipal staff during pre-planning for sites identified through Section 59 processes
- Continue working with local businesses and landowners on negotiating and establishing Risk Management Plans; continue to assist and provide guidance to those affected by Part IV policies

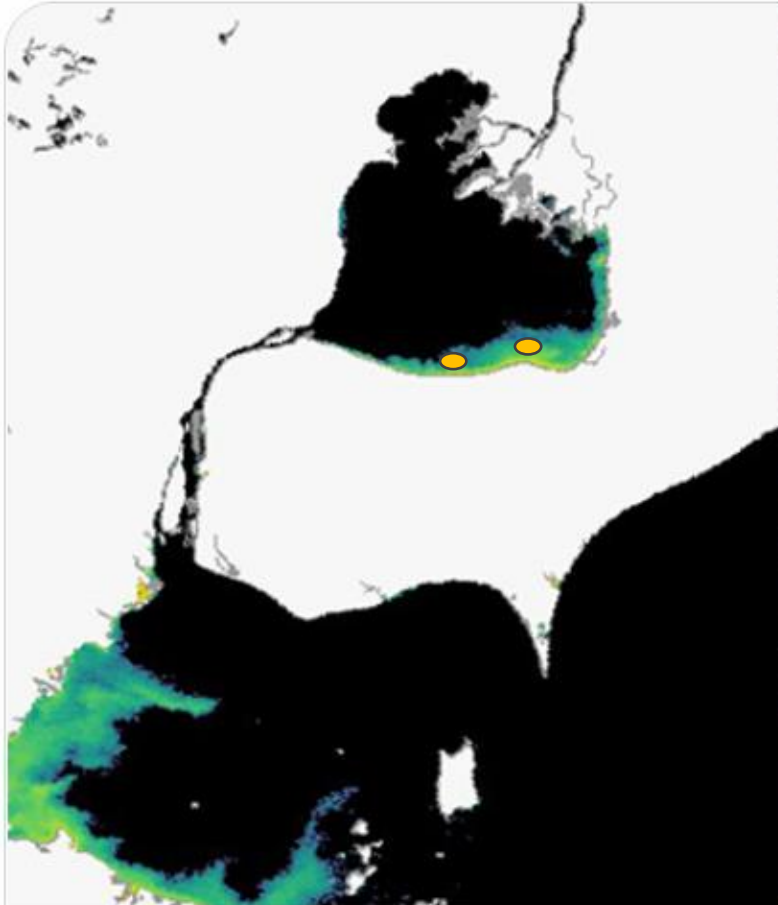


Harmful Algal Blooms

- Annual occurrence affect intakes in Lake St.Clair and Lake Erie, particularly on Pelee Island
- Water monitoring through DWSP has been transferred to municipalities
- No toxin ever found in treated drinking water
- International efforts to reduce HABS



Identification of Microcystin as an issue in Lake St. Clair



Rendered model image Aug 15, 2021



Satellite image Sept 27, 2021

Image credit: NOAA <https://coastwatch.glerl.noaa.gov/modis/modis.php?region=e&page=2>

Source Water in 2022

- Comprehensive review and update to Source Protection Plan and Assessment Report
 - Microcystin analysis
 - Vulnerable area delineation and scoring
 - Climate Risk Assessment
 - AODA compliance
- New and amended policies to align with 2021 Director Technical Rules
- Consultation on updated documents is expected in 2023



More from the SPC

- The SPC and ERCA staff created a new video to help explain signage in vulnerable areas:
<https://www.youtube.com/watch?v=MwO3V1zsUAs>
- To learn more about our source protection region/area:
<https://essexregionconservation.ca/source-water-protection/>

