

ADOPTED by Council at its meeting held February 21, 2012 [M102-2012]

/AA

Windsor, Ontario February 21, 2012

REPORT NO. 53 of the
ENVIRONMENT & TRANSPORTATION STANDING COMMITTEE
of its meeting held January 25, 2012

Present:
Councillor Hatfield, Chair
Councillor Payne
Councillor Sleiman
Councillor Halberstadt
Councillor Valentinis

That the following recommendations of the Environment and Transportation Standing Committee **BE APPROVED:**

Moved by Councillor Sleiman, seconded by Councillor Payne,

THAT the presentation entitled "Source Protection Plan Process" **BE RECEIVED** for information, and

THAT Council **ENDORSE** and comment on draft policies; and

THAT the City of Windsor support ERCA's role in assisting with implementation of Source Protection Plan, including Risk Management Official services; and further

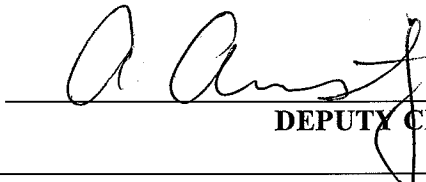
THAT Provincial funding **BE ENCOURAGED** to support ERCA's role in assisting with implementation of the Source Protection Plan.

Carried.

Councillor Valentinis was absent when the vote was taken on this matter.

Clerk's Note: The presentation by Stan Taylor, Project Manager, Source Water Protection, Essex Region Conservation Authority entitled "Source Protection Plan Process" is attached as background information.


CHAIRPERSON


DEPUTY CLERK

NOTIFICATION:				
Name	Address	Email Address	Telephone	FAX

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for a systematic approach to data collection and the importance of using reliable and valid measurement instruments.

3. The third part of the document discusses the ethical considerations that must be taken into account when conducting research. It stresses the importance of obtaining informed consent from participants and ensuring that their privacy and confidentiality are protected throughout the study.

4. The fourth part of the document describes the various types of data that can be collected and analyzed. It distinguishes between qualitative and quantitative data and discusses the strengths and limitations of each type of data.

5. The fifth part of the document discusses the various methods used to analyze data. It describes both statistical and non-statistical methods and discusses the appropriate use of each method based on the type of data and the research objectives.

6. The sixth part of the document discusses the importance of reporting research findings in a clear and concise manner. It emphasizes the need to provide a detailed and accurate account of the research process and the results obtained.

7. The seventh part of the document discusses the various ways in which research findings can be used to inform decision-making and improve organizational performance. It highlights the importance of communicating research results to the relevant stakeholders and ensuring that they are understood and acted upon.

8. The eighth part of the document discusses the various challenges that researchers may face when conducting research. It identifies common pitfalls and provides strategies for avoiding them and ensuring the quality and integrity of the research.

9. The ninth part of the document discusses the various ways in which research can be used to advance knowledge and understanding in a particular field. It highlights the importance of conducting research that is both rigorous and innovative and that contributes to the advancement of the field.

10. The tenth part of the document discusses the various ways in which research can be used to address social and environmental issues. It highlights the importance of conducting research that is both relevant and impactful and that addresses the needs and concerns of the community.

11. The eleventh part of the document discusses the various ways in which research can be used to improve the quality of life for individuals and communities. It highlights the importance of conducting research that is both practical and effective and that addresses the needs and concerns of the community.

SOURCE WATER PROTECTION



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Source Protection Plan Process

City of Windsor Standing Committee Meetings –
Planning; Environment & Transportation

January 2012

SOURCE WATER PROTECTION



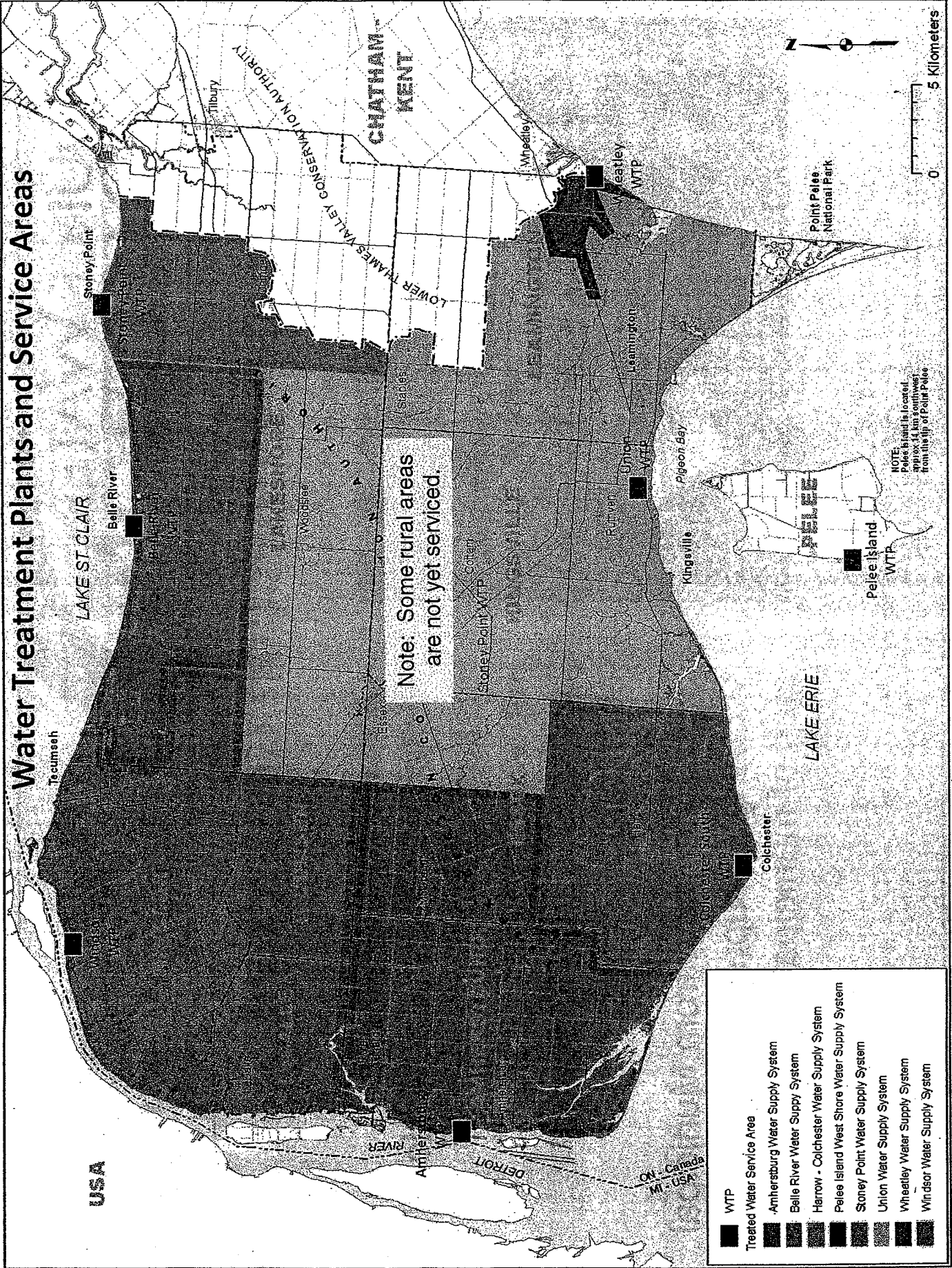
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What is Source Water Protection?

- Protecting the water in local watersheds and the near-shore waters of the Great Lakes as sources of drinking water.
- Clean Water Act – Source Water Protection program is required by, and funded by, the Provincial Ministry of the Environment
- Studies and Plans to address threats to drinking water sources



Water Treatment Plants and Service Areas

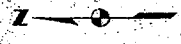


Note: Some rural areas are not yet serviced.

- WTP
- Treated Water Service Area
- Amhersburg Water Supply System
- Belle River Water Supply System
- Harrow - Colchester Water Supply System
- Pelee Island West Shore Water Supply System
- Stoney Point Water Supply System
- Union Water Supply System
- Wheelley Water Supply System
- Windsor Water Supply System

NOTE: Pelee Island is located approx. 14 km southwest from the tip of Point Pelee

0 5 Kilometers



USA

ON - Canada
MI - USA

CHATHAM
KENT

LAKE ST. CLAIR

LAKE ERIE

Stoney Point

Belle River

Stoney Point WTP

Union WTP

Wheatley WTP

Pelee Island WTP

Colchester

Point Pelee National Park

Tecumseh

Belle River

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Source Water Protection Committee



- Directed by the Source Protection Committee - a local stakeholder committee representing municipal, business, agriculture, and community sectors.
- Significant input from Municipal Working Group(s) – primarily staff of municipalities

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Source Protection Timeline

	2008	2009	2010	2011	2012
Terms of Reference					
Technical Studies First Assessment Report					
Technical Studies Second Assessment Report					
Source Protection Plans					

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Intake Protection Zones

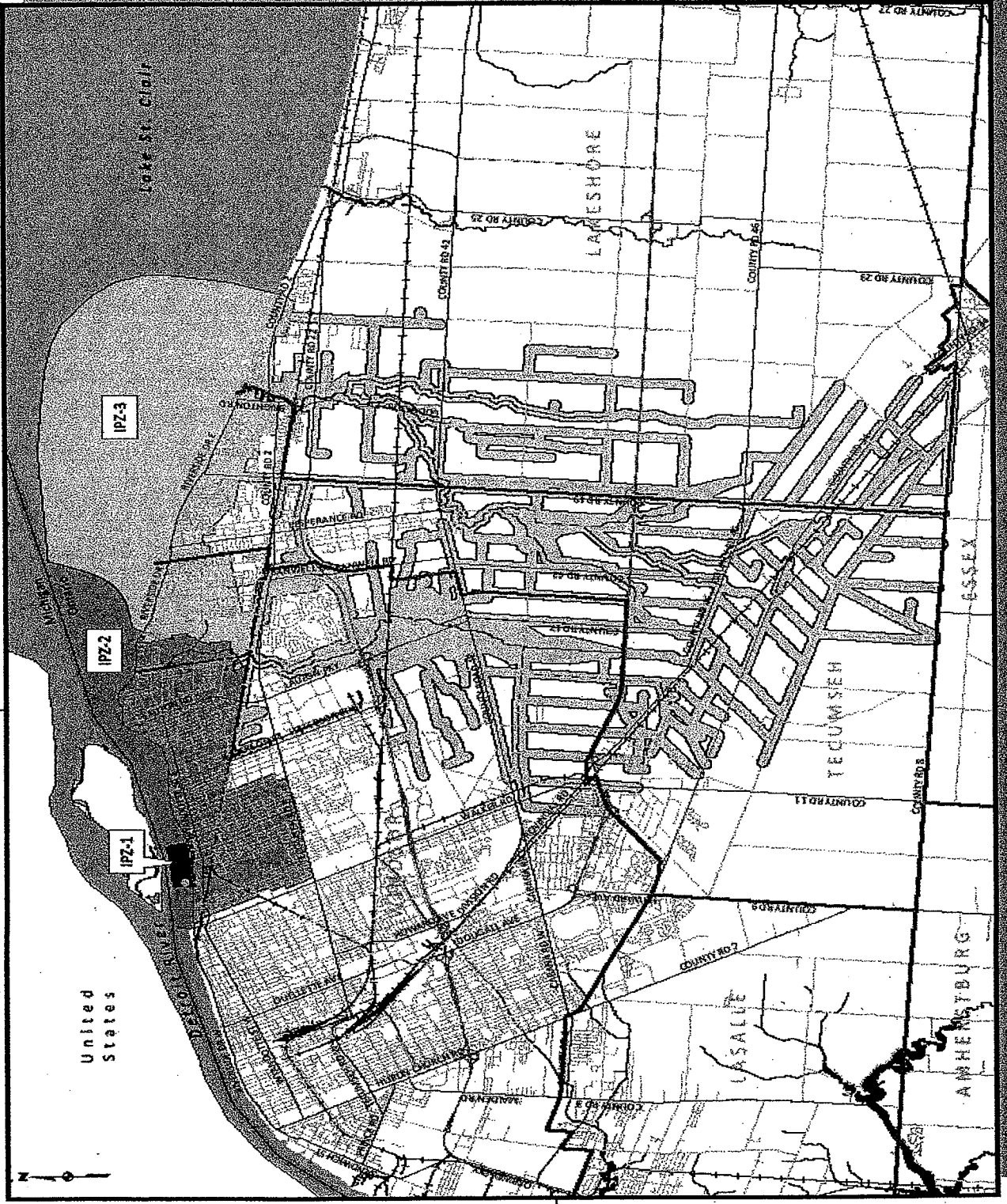
- IPZ-1 = 1 km radius in water, plus setback from shore
- IPZ-2 = flow can reach intake within 2 hours
- IPZ-3 = areas along waterways where studies demonstrate a substantial spill of a contaminant could reach a municipal water intake during runoff event
- IPZ-3s include **all** tributary waterways draining to the Detroit River and Lake St. Clair in Essex Region
- Windsor IPZs extend into other municipalities, and Amherstburg IPZ-3s extend into Windsor, etc.

A. H. Weeks (Windsor) Water Treatment Plant West Intake IPZ 1, 2 and 3



1:90,000
0 3 Kilometers

Made possible by the Government of Ontario



Essex Region Source Protection Area Assessment Report Map 4.25b

Legend

- Intake - Type B
- Drinking Water System
- Municipal, Lower Tier
- International Boundary
- Road
- Railway
- Water and Drainage
- Water Body
- Intake Protection Zones
- IPZ-1
- IPZ-2
- IPZ-3

This publication was produced by:

Essex Region Conservation Authority
 160 Fairview Avenue West
 Essex, ON N8M 2Y6

Sources: ERCA, County of Essex,
 City of Windsor, MNR, MOE,
 Statistic Canada, Statistics Canada

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Map Produced in Co-Operation with the
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 indicator of routes or locations, nor as a guide to
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Map Projection & Datum: UTM NAD83 Zone 17N

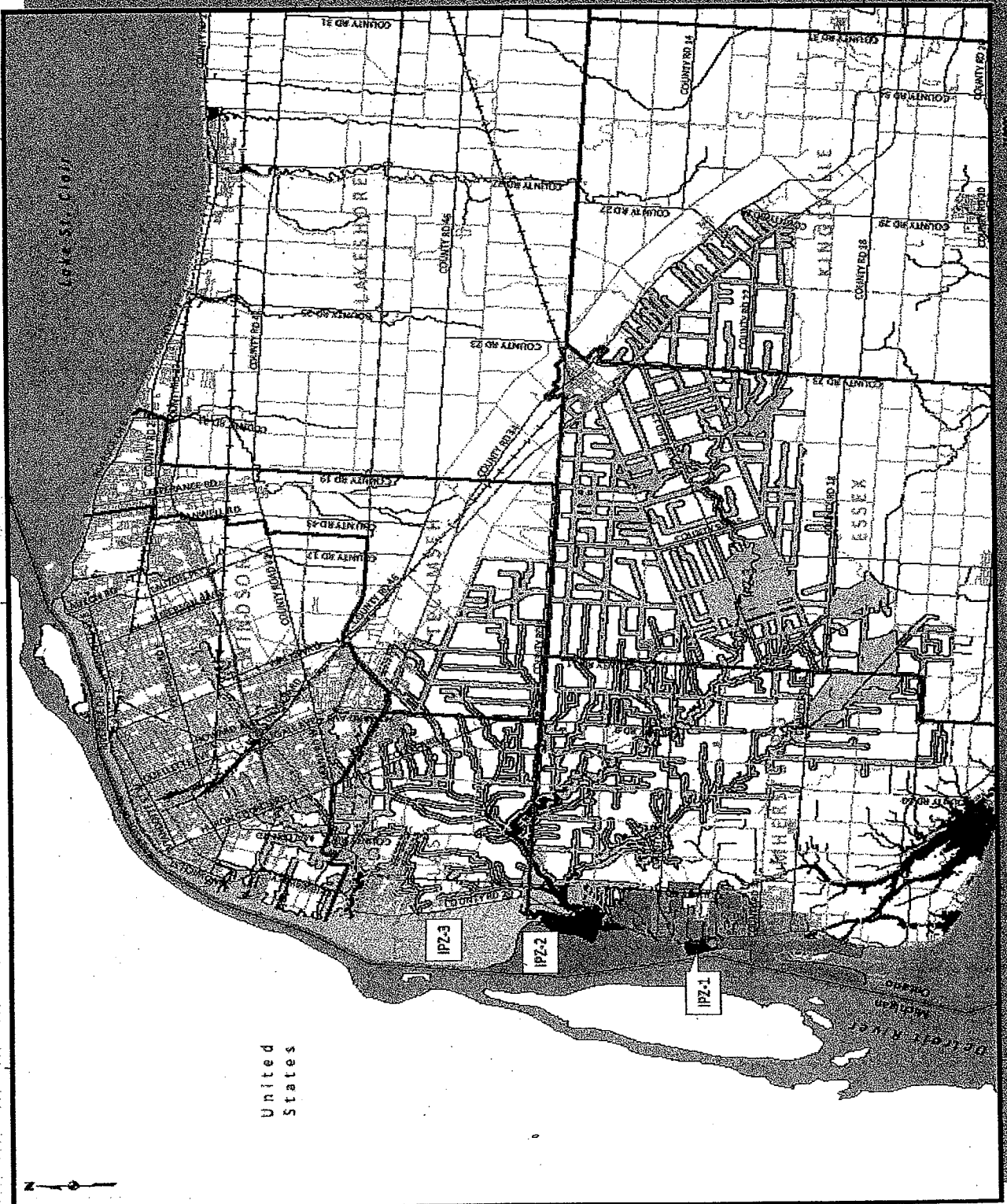


Amherstburg Water Treatment Plant Intake Protection Zones 1, 2 and 3

1:150,000



Map made possible by the Government of Ontario



Essex Region Source Protection Area Assessment Report Map 4.38b

Legend

- Intake - Type 6
- Drinking Water System
- Municipal, Lower Tier
- International Boundary
- Road
- Railway
- Water and Drainage
- Water Body
- Intake Protection Zones
 - IPZ-1
 - IPZ-2
 - IPZ-3

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Essex, ON N8M 3Y6

Sources: ERCA, County of Essex,
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Source Water Threats – City of Windsor

- Existing 'significant threats' associated with **sewage discharges in Windsor IPZ -1 and IPZ-2** – several other types of potential 'significant threats', although less likely to occur – some precluded by existing/permitted land uses
- Studies have shown that **large above grade fuel tanks** may be 'significant threats' in all IPZs for Windsor, Amherstburg Lakeshore, and Stoney Point water intakes (several existing fuel facilities, also potential future)
- **Transportation corridor threats** – fuel, solvents, pesticides, fertilizers (only fuel is 'Significant' based on studies to date)

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Source Water Protection Plan Policies

- The SP Plan is **required to have policies for significant threats** and *may* include policies for moderate and low threats
- Includes policies for spills on transportation corridors
- Very important to SPC/MWG that local costs be reasonable
- Policy approaches – where possible, use existing ‘Provincial Instruments’ (most common approach)
- For some threats (e.g. Fuel, Storage of Pesticides, others) the CW Act does not allow Policies which place requirements on Provincial organizations – need special CW Act Policies



Policies Involving City of Windsor

- Several policies which rely on existing Land Use Planning measures (where significant threats currently precluded) and one policy regarding Planning Department's intent to include information in Official Plan - no changes to OP Policies, ZBL
- Several policies for existing sewage threats – reflecting City's intent to complete sewer management plan in next few years; continue with sewer separation programs, education/outreach
- Continue MOE's existing requirements in the C of A, for Little River Pollution Control Plant – very minor additional sampling
- Monitoring policies and annual reporting on implementation

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Policies - City of Windsor – Cont'd

- Update emergency plans, etc. (encouraged - ERCA working with County Emergency Mgmt. Coordinator for 'template')
- Assist Essex Region Conservation Authority in developing a regional inventory of large fuel storage sites
- Installation of signage in IPZs - if provided by MTO (may involve main Roads, Provincial Highways – TBC)
- Approximately 5 person weeks/year for all of above, including monitoring policies on previous slide (excludes OP update)

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Policies - City of Windsor – Cont'd

- Municipalities to designate 'Risk Management Official' (RMO)
- Clean Water Act Policy – for Significant Threat - Storage and handling of **fuel** (large quantities above ground). Applies to extensive IPZs of all intakes in Detroit River and Lake St. Clair
- Several other CW Act policies – either 'manage' threat activities or 'prohibit' where very unlikely to occur in Windsor IPZs
- RMO mainly to obtain documentation demonstrating compliance with requirements of TSSA, Pesticides Act, etc.
- Approximately 3 person weeks/yr. (plus 3-4 weeks training)

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Policies to be Implemented by ERCA

- Regional inventory of large fuel storage sites
- Encourage/assist with updating emergency/spills response plans – municipalities, others (e.g. fuel suppliers, dispatchers)
- Education & Outreach – broad based Regional initiatives regarding potential threats, etc., as well as contacting and informing affected owners and others regarding specific significant threat policies
- Stewardship programs – seek Provincial funding to assist landowners, municipalities (e.g. downspout disconnections)

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Risk Management Official Services

- ERCA Board Resolution – offer of ERCA to provide this service for municipalities, and request Provincial funding
- Cost-effectiveness, economies of scale, consistency
- ERCA staff will already be contacting affected owners, fuel suppliers, TSSA, Ministries; compiling inventories of sites, etc.
- At the same time, can readily ask for documentation of compliance with existing requirements – TSSA, Pesticides Act, etc. (familiarity with SP Plan requirements)
- Annual reporting required to SPC, SPA (ERCA Board)
- 3-4 weeks of special training required

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Consultation Process – Draft Policies and Source Protection Plan

- Current 'Pre-consultation' on draft policies through end January
- Public meetings – March
- Formal Consultation on Draft SP Plan in May
- Formal Consultation on final proposed Plan in July
- Deadline for submission of Plan to MOE - August



Requested Council Response

- Endorse and comment on draft policies as described in December 23 Notice
- Municipality's support for ERCA's role in assisting with implementation of Source Protection Plan, including RMO services
- Encourage Provincial funding to support ERCA's role in assisting with implementation of the SP Plan

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Questions?

