# Building from the Ground Up: A Collaborative Approach to Municipal Source Protection Implementation

Kyle Davis, Risk Management Official Wellington Source Water Protection November 2016











# **Location of Wellington County**















# Wellington County Source Protection

- 8 municipalities Upper and lower tier structure (County & 7 local municipalities) – 2011 population: 90,900
- 14 water systems (local municipal responsibility)
- Wellhead protection areas and wells from 4 adjacent municipalities
- There are 5 Source Protection Plans applicable to Wellington County with up to 3 plans applicable to some local municipalities
- Wellington Source Water Protection is a partnership of the 8 municipalities, including Wellington County, for the purposes of implementing the Clean Water Act.

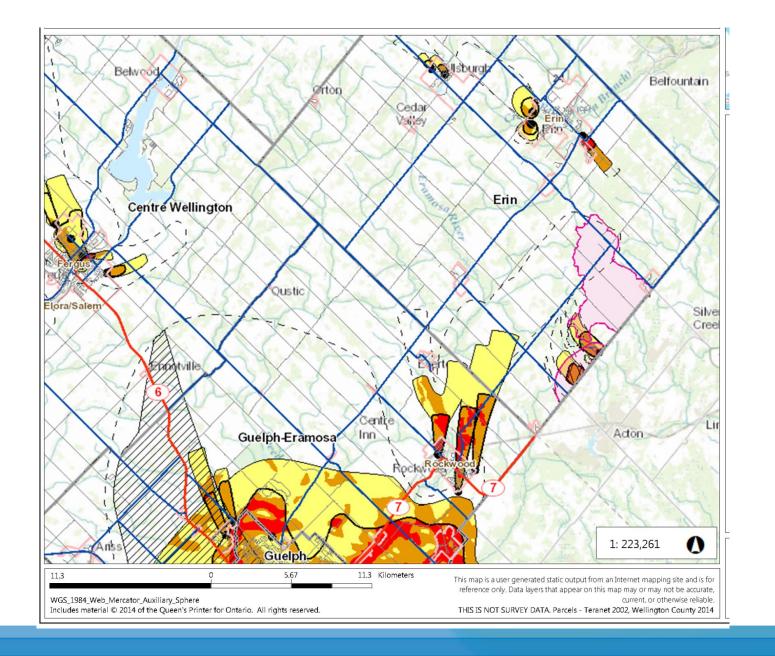
































**Typical Well Head Protection Area** 

# **Priority Setting for Implementation**

- Communications Plan
- Business Process
- Staffing and Appointments
- Source Protection Effective Dates
- Septic Inspections
- Threat Verification Industrial, Commercial and Agricultural
- Development Review (Section 59)
- Differences in Source Protection Plan Policies
- Database (LSWIMS collaboration with Oxford, UTRCA, Guelph, GRCA)
- Prohibitions
- Risk Management Plans
- Inspections



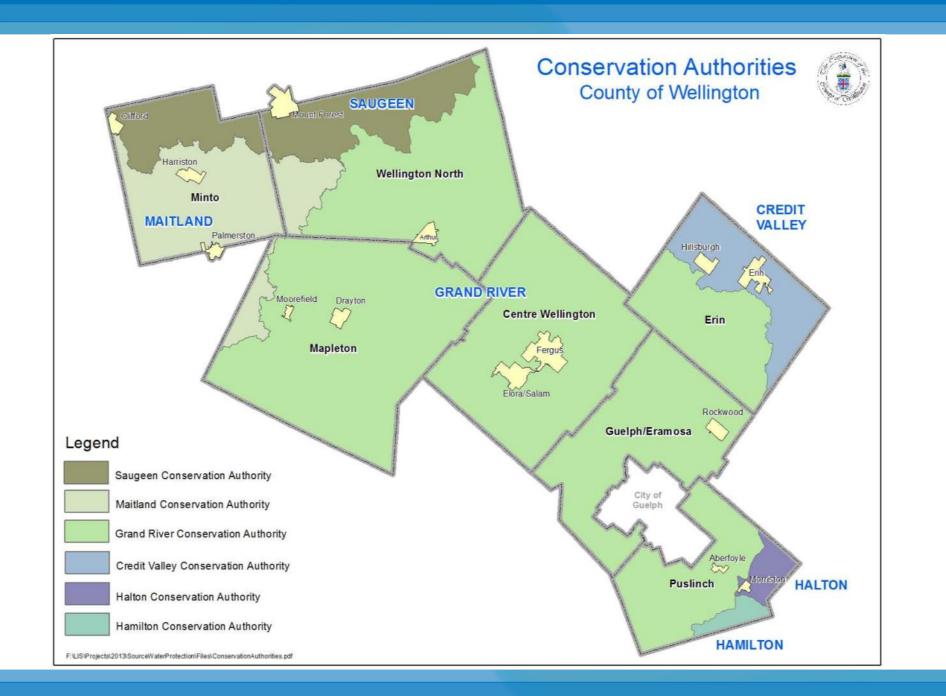






















## Wellington County Municipal Partnership



Wellington
Working Group
Water,
Planning,
Building, RMI
staff

Shared
Risk Management
Official
- Wellington County
municipalities

All 7 local municipalities (dark blue arrows) are **retaining Part IV authorities**, however, have or are planning to appoint the shared RMO who is funded by the County (light blue arrows). RMIs are locally funded.



Funding



## Wellington County Municipal Partnership – Working Group

"Many heads are better than one and many hands make light work."

- Collaborative approach provides opportunity to tap into resources, experience and knowledge County wide. Participants are from all 8 municipalities.
- Engaged and trained staff in all eight municipalities (i.e. greater than 25 staff either participate in the working group or have taken the MOECC training).
- Collaborative approach leading to improved performance and cost sharing
- Consistent messaging across all 8 municipalities
- Ability to develop and utilize internal resources within our eight municipalities that wouldn't normally be available or accessible (i.e. use of one municipality's IT resources, another's communications department etc.)
- Five SPPs results in exposure to a variety of approaches / ideas













#### **Communications**

- One of the initial decisions our working group made was to hire a consultant to implement a consistent education and outreach program and communications brand for source protection in Wellington County.
- 5 Source Protection Plans and 8 municipalities!
- The consulting team of MHBC Planning Limited, Pearl Street Communications and Knowledge to Action Group was hired in 2014 using SPMIF funding.





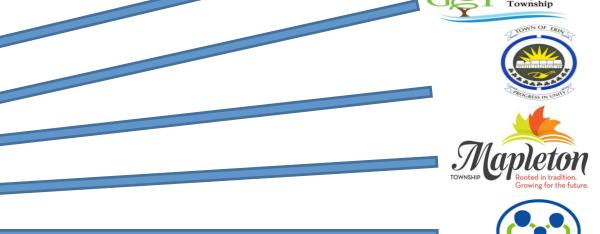






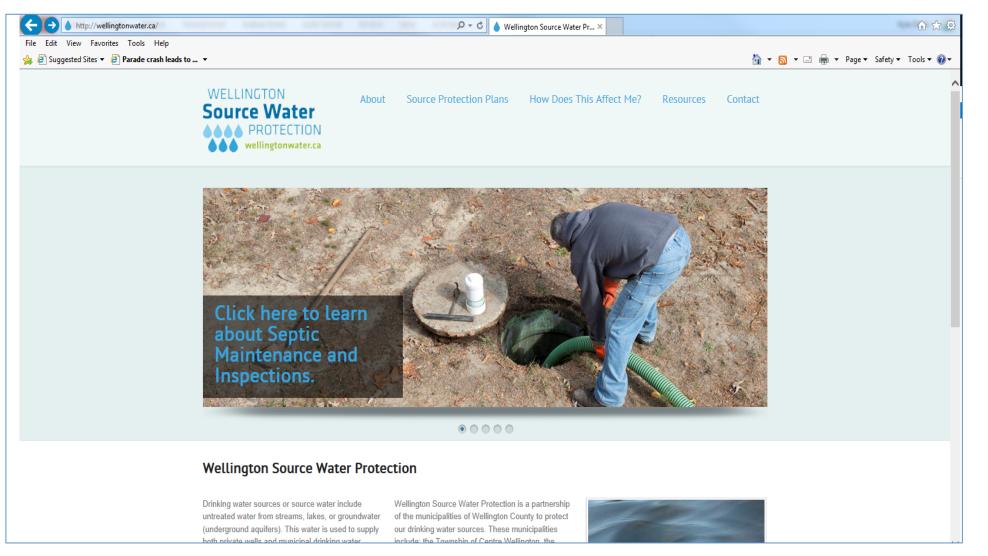


From a "brand" perspective we use a common source protection logo, specific to Wellington County but is different from the Provincial Source Water logo









One common place for County residents to go online instead of 5 Source Protection Plan and 8 municipal websites <a href="https://www.wellingtonwater.ca">www.wellingtonwater.ca</a>









## Wellington Source Water Protection



FACT SHEET 1
.....

ABOUT WELLINGTON
SOURCE WATER
PROTECTION

#### The source of your water

Drinking water sources or source water includes untreated water from ground water, streams or lakes. This water is used to supply both private wells and municipal drinking water systems.

To ensure that drinking water is as clean and as safe as possible, it is important to prevent contamination at the source. Pollutants in source water put stress on the natural environment and require expensive treatment to remove. It is less expensive to prevent pollutants from entering our drinking water than treating them, also some pollutants cannot be removed from the water. Without source water protection, a new source may have to be found, adding to the cost of the water system in our communities. It is also important to make sure there is enough water for private and municipal drinking water systems.

In order to prevent similar tragedies to that of the E-coli breakout in Walkerton, Ontario, the Clean Water Act was passed in 2006. As a result of the Clean Water Act, all communities in Ontario are required to develop Source Water Protection Plans to protect their municipal sources of drinking water. The Source Water Protection Plans have been developed on a watershed basis by Source Protection Committees. These committees have been appointed



by the provincial government to guide the development of the Source Water Protection Plans and are comprised of municipalities, farmers, businesses, industry, residents and members of the public.

#### OUR GOAL: SAFE WATER

The goal of Wellington Source Water Protection is to work together with residents, business owners and farmers within vulnerable source water areas to protect our drinking water sources and ensure our drinking water remains safe for everyone to consume.

#### Your Wellington County source water team

Wellington County falls within 5 Source Protection Plans; Grand River, Maitland Valley, Saugeen Valley, Credit-Toronto Region and Area - Central Lake Ontario and Halton-Hamilton, each with a unique approach to Source Water Protection

Wellington Source Water Protection is a partnership between the municipalities of Wellington County to protect our drinking water sources. These municipalities include: the County of Wellington, Township of Centre Wellington, Town of Erin, Guelph-Eramosa Township, Township of Mapleton, Town of Minto, Township of

- Development of County wide fact sheets
- Series of 5 fact sheets
  - About Wellington Source Water Protection
  - Septic System Owners
  - Commercial / Industrial
  - Agricultural
  - Residential
- Available in print (at municipal offices) or online at <u>www.wellingtonwater.ca</u>
- Fact sheet #6 is under development focused on Development Applications













# **Priority Setting**

Septic Inspections





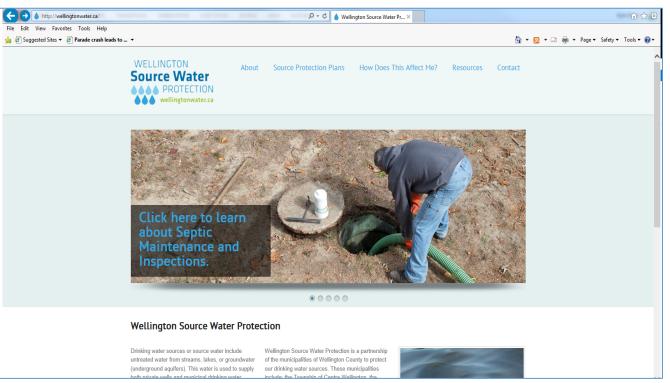




#### Education – Septic Systems

- 11 events (10 Septic Socials and 1 Open Well) were held in 2015 and 2016 with approximately 150 to 175 people attending.
- University expert and Consultant presenting





 Education also included delivery of information packages to properties requiring RMPs (Maitland), letters to properties requiring septic inspections, information packages available online















#### **Septic System Inspections**

- There are 641 properties requiring septic inspections in Wellington County
- Staff or a consultant (WSP Canada) completed septic inspections in 2015 and 2016
- Inspection is under Ontario Building Code
- 614 inspections have been completed just over 1 year
- 86 remedial actions were identified in 2015.
- 44 remedial actions to date in 2016.
- Majority of remedial actions are maintenance related
- Deadline varies by Source Protection Plan but range from January to September 2017













# **Priority Setting**

Activity Verification (ie what is the actual work load?)













#### IMPORTANT - ACTION REQUIRED

Protecting municipal drinking water is everyone's responsibility. The Clean Water Act (2006) requires that municipal water supply sources be protected from activities that may contaminate drinking water.

The following property is located in a vulnerable area for a municipal well.

| ARN:          |  |
|---------------|--|
| Address:      |  |
| Municipality: |  |

The Township of Centre Wellington through Wellington Source Water Protection has retained R.J. Burnside & Associates Limited to complete a process for the verification of what activities may be occurring on your property. R.J. Burnside & Associates Limited would like to meet with a representative for this property to discuss activities on the property and your obligations under the Clean Water Act (2006). In order to complete verification it is important for a representative from R.J. Burnside & Associates Limited to meet with you and complete a questionnaire on your site activities. Meetings can be scheduled online and are aimed at gathering information to verify activities on your property. A copy of the meeting questionnaire can be obtained at www.wellingtonwater.ca

In order to schedule a meeting please visit https://rjburnside.youcanbook.me/ or call 1-800-265-9662 ext. 1564.

In order to receive more information on the verification program, please visit www.wellingtonwater.ca or call 1-844-383-9800.





Commercial / Industrial Site Visits and Risk Management Plans

Approximately 400 site visits to verify activities (approximately 75 Mappel remaining) – consultant or staff

Since summer 2016, started establishing risk management plans



Centre Wellington

Guelph/Eramosa Township



## **Challenges**

- Retail stores (hardware, auto parts) may carry dense non-aqueous phase liquid (DNAPL) products. Manufacturers may use DNPAL products.
- MOECC Table of Drinking Water Threats lists chemicals while store inventories list products.
   The store owners are not likely to know if they carry DNAPLs (at least by chemical name)
- Store inventories also change seasonally. Lots of products, lots of MSDS. Therefore, it can be difficult to determine whether a DNAPL product is actually present.
- Differences in our plans regarding prohibition of DNAPLs, therefore, want to be certain prior to stating a DNAPL is not present.

#### What is a DNAPL?

- Chemicals that are denser than water
- Trichloroethylene metal degreasers, brake cleaners, paint removers
- Tetrachloroethylene dry cleaning, metal cleaning
- Poly aromatic hydrocarbons wood preservatives, driveway sealant, asphalt
- Vinyl chloride break down product of trichloroethylene, used in PVC pipes, wire coatings





























## **Agricultural Activities**

- Result of air photo / GIS analysis and windshield survey
- Identified 142 parcels within County potentially with agricultural activities subject to Source Protection Plan (each parcel may have multiple activities)
- Work beginning in 2016 to confirm actual activities on parcels by contacting owners and tenants











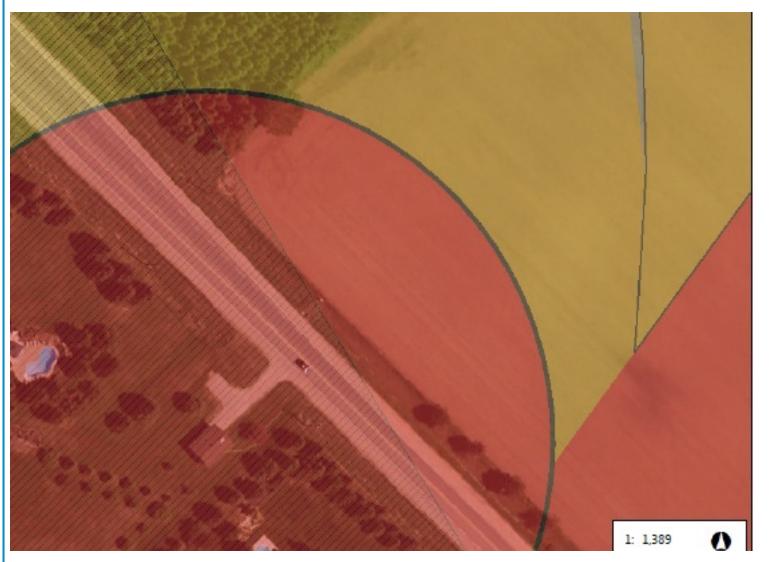






Example Agricultural Properties in a Mapleton WHPA – Risk Management Plan





Example
Agricultural
Properties
in a WHPA Prohibition









# **Priority Setting**

• Development Review (Section 59)









## So what does this mean?

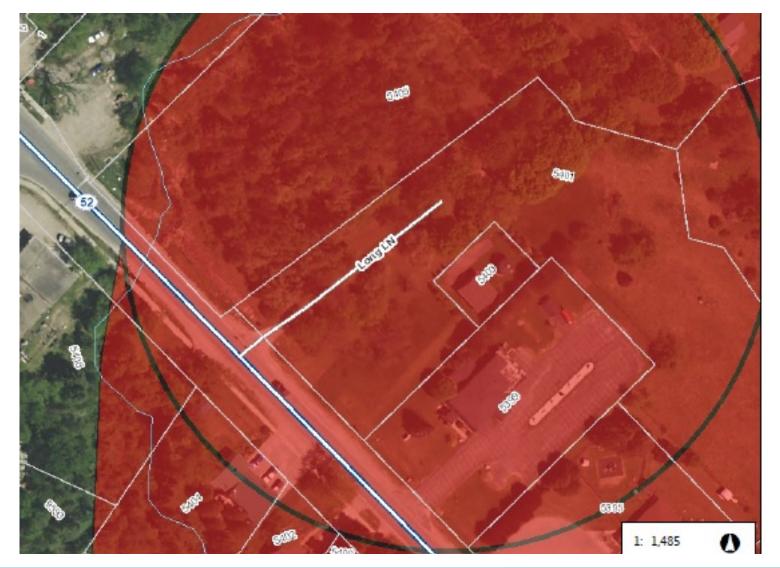
• As of the effective date, Section 59 notices are required as part of the planning and building review process.

 Prior to a building application proceeding or a planning application being deemed complete, a Section 59 notice (if required) must be issued by the Risk Management Official.
 Clean Water Act is applicable law.

 In addition to notices, often applicants or other staff require comments on source protection plan requirements.



# **Development Review**



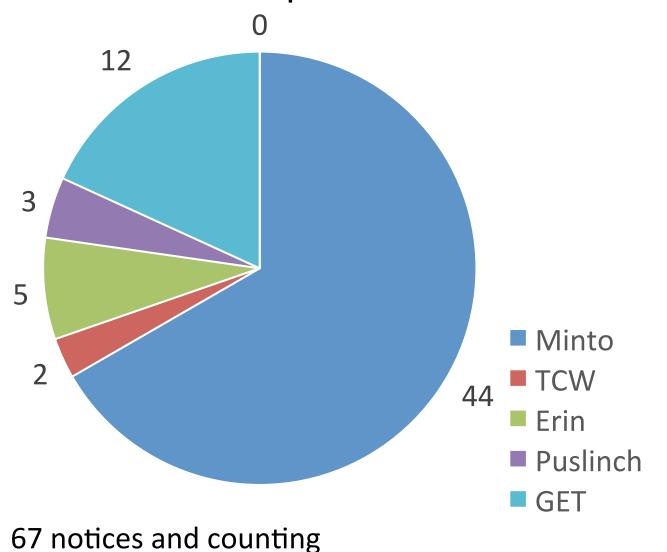








## Development Reviews – 2016



Note:
112 properties with
either review,
consultations or notices
to date









# Summary

 Establishment of cost effective working group structures and shared positions enables many participating organizations to benefit but keeps implementation costs down



 Development of a multi-year communications plan for the group of organizations assists in focusing the communications



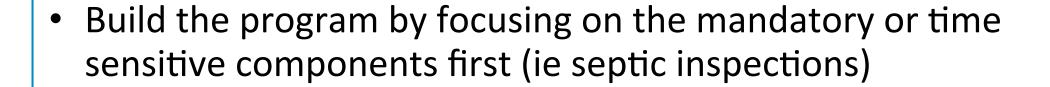






# Summary

 Use events to kick off inspection programs and use third party subject matter experts to deliver event presentations. Have staff / elected officials on hand at events for questions. This builds credibility (ie third party experts) while ensuring accessibility to staff / elected officials



Take note of differences in Source Protection Plan requirements









# Questions?

Kyle Davis
Wellington Source Water Protection
kdavis@centrewellington.ca
519-846-9691 x362













