Drain Maintenance in Lambton Shores

a partnership between Municipality of Lambton Shores and the ABCA

DART Training Sessions: January 14, 2012 (Florence)
January 30, 2012 (Guelph)

Al Little - Drainage Superintendent/Construction Inspector, Lambton Shores

Davin Heinbuck – Ausable Bayfield Conservation Authority





Outline

- Municipality of Lambton Shores
- Lambton Shores Drainage Maintenance Process
 - Initiative
 - Notification
- Ausable Bayfield Conservation Authority (ABCA)
- ABCA Drain Maintenance Review Process
- Why it works
- Case Study: Lake Smith # 2

Municipality of Lambton Shores

- Lambton County
- Population of 12,000 (higher during the summer months)
- 331 km²
- Grand Bend, Forest, Arkona Thedford, and Port Franks
- 365 kilometers of Municipal Drains



ABCA Jurisdiction

- areas under the jurisdiction of the Ausable Bayfield Conservation Authority.
- There are 107 municipal drains in this area
- lineal distance of approximately 195 kilometers.



SCRCA Jurisdiction

- Areas from Ipperwash Provincial Park and south lie within the watershed of the St Clair Region Conservation Authority.
- Total of 77 municipal drains
- Total length of 167 kilometers



Initiation of Drainage Works

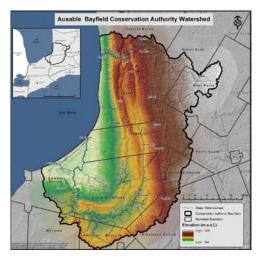
- •During the fall (October through to December), Lambton Shores Drainage Department advertises on its website and in the local paper for landowners to submit a request for maintenance on any drain in which they are assessed.
- •This period has been chosen due to the harvesting operations which are usually underway and farmers are more apt to observe their drains more closely during this period.
- •Drainage Dept. reviews the requests, goes through reports and ensures that the work requested is consistent with Engineers Report.

Notification Process

- A Drain Maintenance Notification Form is sent to the Conservation Authority (CA). CA staff will determine if they have any concerns which may need to be addressed during the maintenance operations. The CA also screens proposals for impacts to fish habitat on behalf of DFO.
- Review of the Endangered Species Act (ESA) is done to identify if the Ministry of Natural Resources (MNR) has any written concerns with respect to Species at Risk or its habitat.
- Under most circumstances the working window begins the first of July through to mid-March.
- Tenders will be advertised for the upcoming drain maintenance season.
- The working timeline is usually minimized by the crops which are planted up to the edge of drain.

Ausable Bayfield Conservation Authority

- Watershed area of 2428 km²
- Population of 45,100
- Over 2000 Municipal Drains



CA Review Process

- •CA receives Notification Form from Municipality
- •CA will contact the Drainage Superintendent as required (may require a site visit).
- •CA then reviews proposed works with regards to impacts to flooding, erosion, wetlands etc. CA comments where necessary in regards to Ont. Reg. 147/06.
- •Through Level 2 Agreement with Fisheries and Oceans Canada (DFO), CA reviews for impacts to fish habitat on behalf of DFO. Where impacts can not be mitigated or a Class Authorization issued, the proposal is referred to DFO.

CA Review Process (cont'd)

- In the vast majority of cases, CA signs off on Notification Form and forwards to DFO for sign off if Class Authorization is required.
- Conservation Authority issues Class Authorization or Letter of Advice to Drainage Superintendent.
- This may be part of or separate to a written letter of permission from the CA.

Lambton Shores and ABCA

Pre-planning provides several benefits

- Promotes co-operative approach
- Communication establishes rapport and builds trust
- •Clear expectations, timelines and scheduling between (Landowner/Municipality/CA)
- Workload (outside construction 'high' season)
- •Allows parties time to agree to conditions
- •Concerns can be addressed in a timely manner
- Avoids untimely requests

Case Study: Lake Smith Drain #2



 April 2012 - high winds caused soil erosion and localized dust storms

- Thedford/Klondyke Marsh
- Very fertile soils used in growing market garden vegetables
- Area is drained through a network of standard drains and pump drains



Impacts



- Drain drifted in completely in some areas
- Tile outlets and irrigation supplies cut off.
- Planting Season





Outcome

- Site visit between ABCA and Lambton Shores
- Emergency Works

Buffer Strips!

Are they effective?



Questions?



