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# The Evolution of DFO Habitat Banking

KITCHENER

Stantec

# Agenda

1. Fish Habitat Banks
2. Benefits
3. City of Kitchener
4. Case Studies
5. Lessons Learned
6. Questions

# Fish Habitat Banks

# Fish Habitat Banks

- What they are
- Benefits to proponent
- Relatively new
- Evolving
- Formalized in the new draft Fisheries Act

# Benefits

# Benefits to DFO

- Compensation or offsetting done in advance of impacts
- Not chasing proponents after the fact

# Benefits to the Proponent

- Greater clarity – fewer surprises
- Speeds permitting under the Fisheries Act

City of Kitchener

# City of Kitchener

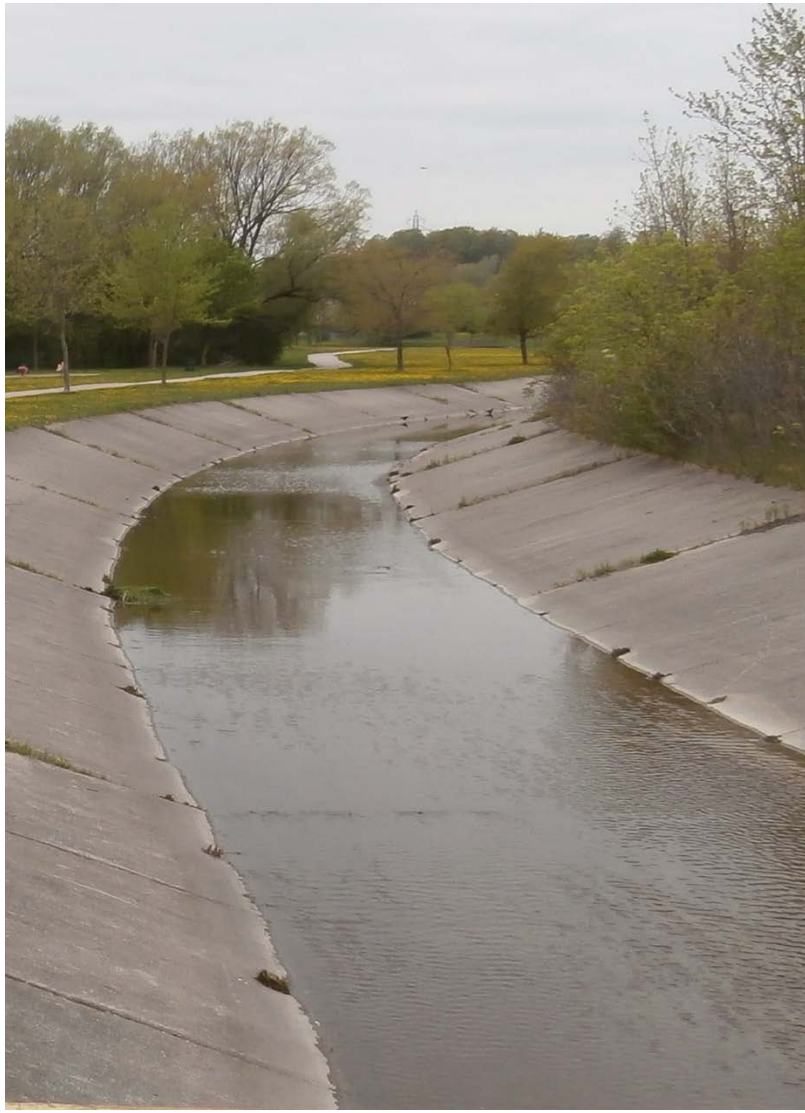
- Stream restoration is a big component of the City's Stormwater Master Plan
- Stormwater Utility has identified 20 stream projects
- Filsinger was the first and used to "open the bank"
- Working on 2 other projects (Balzer and Idlewood), that will be the new deposits into the bank
- Consider selling credits inside the City to recover cost of restoration

# Case Studies

Case Study

# Filsinger

- Most straightforward
- No existing habitat
- 3 years of post-construction monitoring:
  - Benthics
  - Fish
  - Water Quality
  - Vegetation
  - Channel Stability
- Credits based on the areas of ½ bankfull width of finished project



# Filsinger Status

- Currently in third year of monitoring
- On track to produce the maximum of 12,600 $m^2$ of fish habitat

Case Study

# Balzer

- Much more challenging since there was some fish habitat
- Had to develop a way of calculating the existing habitat
- ½ bankfull width – used Regional Curve
- Had to make the measurements more quantitative
- Changes to benthics, vegetation, fish, and dropped WQ monitoring

Case Study

# Balzer Status

- In first year of post-construction monitoring
- No results yet
- Could yield up to 1,438 habitat credits

Case Study

# Idlewood Creek

- Removal of two dams and restoration of portions of channel
- Channel restoration similar to Balzer Creek
- Dam removal had to develop a new methodology
- ¼ bankfull width

Case Study

# Idlewood Status

- Design is complete
- Pre-bid meeting held on Wednesday of this week
- Construction this summer/ fall
- Could yield up to 4,595 habitat credits

# Lessons Learned

Lessons Learned

# What We Have Learned

- DFO supports fish habitat banking
- Rules have not yet been written
- DFO is open to ideas (methodology, post-construction monitoring)
- Some design philosophies are better suited to fish habitat banking than others
- Some projects are better suited to fish habitat banking that others
- When monitoring for Filsinger, Balzer and Idlewood is complete, the City should have more than 18,000 $m^2$ of fish habitat credits

# Changes the City Would Like

- DFO to allow proponent to use habitat credits instead of a Letter of Credit
- DFO to allow third party banking
- Third party banking could be a major driving force behind aquatic habitat restoration

Questions?

# Questions?

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