CITY OF Welland

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Public Information Center

Coyle Creek Stormwater Management Facility

2025 SWMFs – Retrofit & Cleaning Project

- Stormwater Management Facilities (SWMFs) are essential to protecting water quality, mitigating flooding and safeguarding downstream ecosystems.
- Yet despite being critical assets SWMFs have traditionally been underprioritized.
- Recent regulatory changes, specifically the issuance of the City's Consolidated Linear Infrastructure Environmental Compliance Approval (issued June 2023) has increased municipal accountability bringing a Ministry focus on SWMF performance, maintenance and inspection requirements.
    - Municipalities are now required to report annual on SWMF operations.
- In response, three poorly functioning SWMFs were assessed and prioritized for retrofit and cleaning specifically Coyle Creek Estates, Towpath Village North and Michael Estates.
- Council approved this project during the 2025 budget deliberations for $2,394,000.00.

Coyle Creek SWMF Retrofit

WHY?

The Coyle Creek Stormwater Management Facility is not functioning as intended, and the current level of treatment does not meet Ministry performance requirements.

- The existing facility was not designed to accommodate the experienced rate of stormwater runoff (neighbourhoods have less green space than they used to).
- The forebay is too small and the forebay berm has been washed away over time.
- Fish and wildlife have inundated the facility which prevents effective settlement of sediments.
- The main cell is too shallow.
- All of the above contributes to higher algae growth and insufficient treatment of stormwater prior to discharge.

Coyle Creek SWMF Proposed Works

The following key changes will be implemented to improve operation of this important facility:

- Expansion of the Sedimentation Forebay.
    - This will provide a ratio (forebay : main cell) more consistent with applicable design standards.
- Forebay berm will be reconstructed.
- Main Cell will be deepened.
    - A deeper main cell provides the permanent pool volume needed for effective sediment settling while also reducing sunlight penetration, water temperature, and nutrient cycling — all of which help control algae growth and improve long-term pond performance.
- Aerator to be removed to limit sediment stirring and reduce heating of the water during warm weather .
- Banks to be re-vegetated to address erosion issues and support overall health.
- The 5.5m buffer strip will be reinstated using appropriate plantings.
- Black vinyl chain link fencing will be installed.

Coyle Creek SWMF Fish and Wildlife

- The Ministry of Natural Resources and Forestry (MNRF) controls, through the issuance of permits, the fisheries and wildlife requirements for each facility being cleaned or rehabilitated.
- Fisheries and Wildlife abatement was carried out by licensed ecologists in accordance with the issued MNRF permit prior to the commencement of construction.
- MNRF requires the euthanizing of all fish from SWMFs due to diseases such as Viral Hemorrhagic Septicemia (VHS).
- An unprecedented 15,000 fish were collected and humanely euthanized (with clove oil) from the Coyle Creek SWMF.
- 3 snapping turtles were removed from the facility and relocated to Coyle Creek.
- Temporary wildlife exclusion fencing has been placed to prevent wildlife from reentering the facility during the upcoming cleaning and rehabilitation efforts.

Coyle Creek SWMF Landscaping

- The 5.5-meter naturalized buffer zone will be comprised of selected plantings and grass mix, appropriate for SWMFs.
- The buffer zone will be maintained in a naturalized state and in accordance with the City's operational Consolidated Linear Infrastructure (CLI), Environmental Compliance Approval (ECA).
- Buffer zones are an important feature of a SWMF as it:
    - Traps sediments, leaves, cut grass, and pollutants before they enter the pond.
    - Provides erosion control of the banks – provides stabilization.
    - Regulated facility temperatures by shading parts of the facility (reducing algae).
    - Moderates overland flows into the facility which reduces sediment stirring.

Coyle Creek SWMF Plantings


Red-osier Dogwood


Meadowsweet


Buttonbush


Highbush Cranberry

Coyle Creek SWMF Fencing

- As with all residential wet ponds within the City, a permanent fence will be installed adjacent to the 5.5-meter buffer zone for the Coyle Creek Stormwater Management Facility.
- The fence, a 1.8m black vinyl coated chain-link, will protect this licensed infrastructure, ensure the safety of residents and deter wildlife from entering the facility.
- The City maintains and operates 9 residential Stormwater Management Facilities. Upon completion of the 2025 Stormwater Management Facility Rehabilitation & Cleaning program, all these facilities will be fenced with gated access.
- The approximate location of fencing can be found on the draft restoration works drawing presented.

Coyle Creek SWMF
Next Steps

- The pre-construction work to date on the facility has been completed to satisfy the MNRF timing windows for wildlife and fish abatement.
- Construction is anticipated to start in November 2025, with the Michael Estates SWMF scheduled first.
- Weather permitting, construction on the Coyle Creek SWMF will occur through the winter and into the spring with planting and restoration in Spring 2026.
- As with all Capital construction projects, affected residents will be notified of what to expect and provided the Project Manager contact information.
- Additionally, an Engage Welland webpage (available October 27, 2025) will present project information (incl. these PIC boards), project progress as well as contact information.