



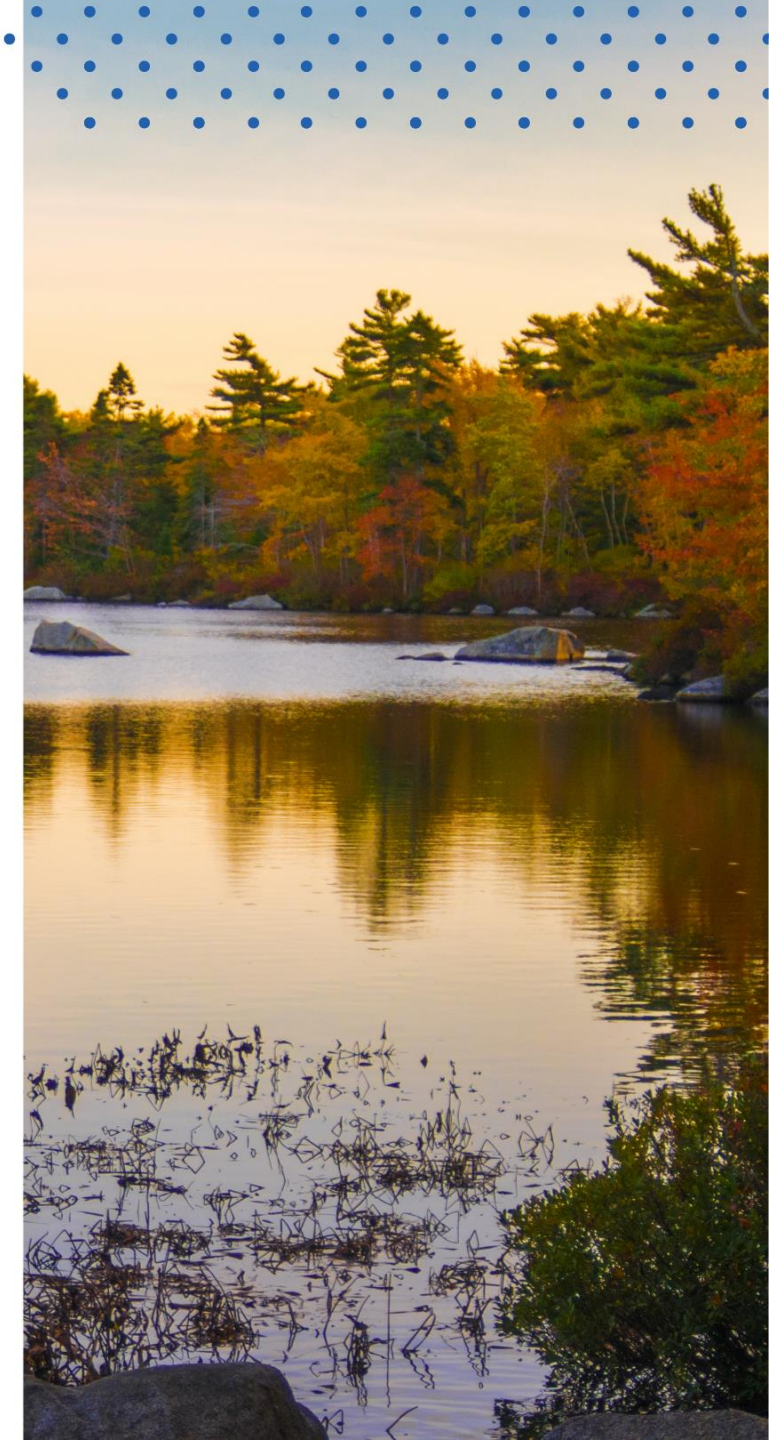
Item 10.3.1

HALIFAX ESCC – Wetlands, Halifax Water's Mandate

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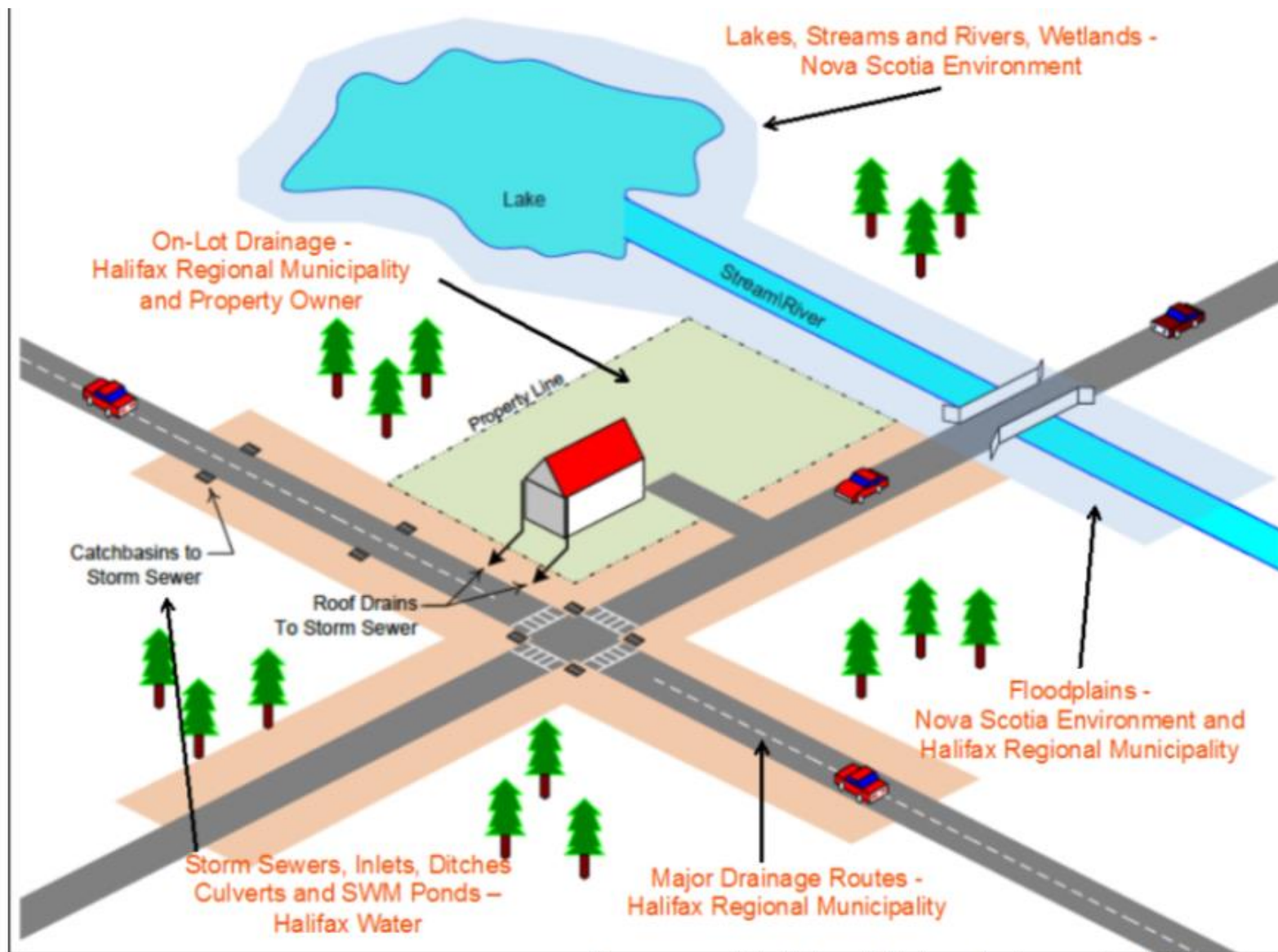
**STRAIGHT from
the SOURCE**



Stormwater Management – Key Points

- Nova Scotia – owner of watercourses and oversight on wetlands
- HALIFAX – oversight on land development, overland flows, Subdivision and Lot Grading Bylaws
- Halifax Water – owner of stormwater infrastructure (pipes, catch basins, manholes, ditches, swales, storage facilities); reviews designs of new infrastructure for adherence to specifications.
- Peak stormwater flows need to be managed, achieved through storage facilities
- Stormwater storage facilities:
 - Oversized pipes
 - Tanks
 - Engineered ponds





Source: Halifax Water Integrated Resource Plan



Challenges

- Need to know the storage capacity, so engineered storage solutions are ideal.
- Halifax Water requires ownership/easements of/over the infrastructure.
- Adjustments to volume of flow requires NSECC approvals.
- Maintenance/Cleaning may require NSECC approvals.
- Management of contaminants, NSECC looks to the owner.



Integrated Stormwater Policy ...

“...Wetlands are very effective at managing stormwater. However, natural Wetlands are considered private property if they are not abutting watercourses. This can be problematic in some situations, especially in mature urban or suburban environments where a wetland may extend across several properties. Coordinated public policy decisions must be made to ensure that wetlands, where they exist, can be used effectively for stormwater management in all situations...”

Through the policy, Halifax Water and HALIFAX will work with NSECC on possible solutions to address the challenges to consider the use of natural wetlands. These discussion are ongoing.

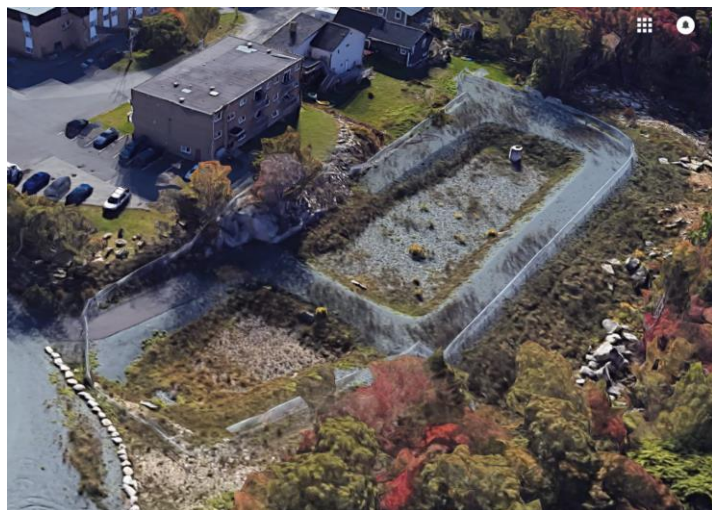


Engineered Options: Biofiltration Example – Bedford West Bioswale

- Pilot Project in park space



Engineered Options: Green Infrastructure – Naturalized Stormwater Ponds



Stormwater Detention pond with forebay in Long Lake Village, Halifax

Naturalized Stormwater Pond in Winnipeg



Questions