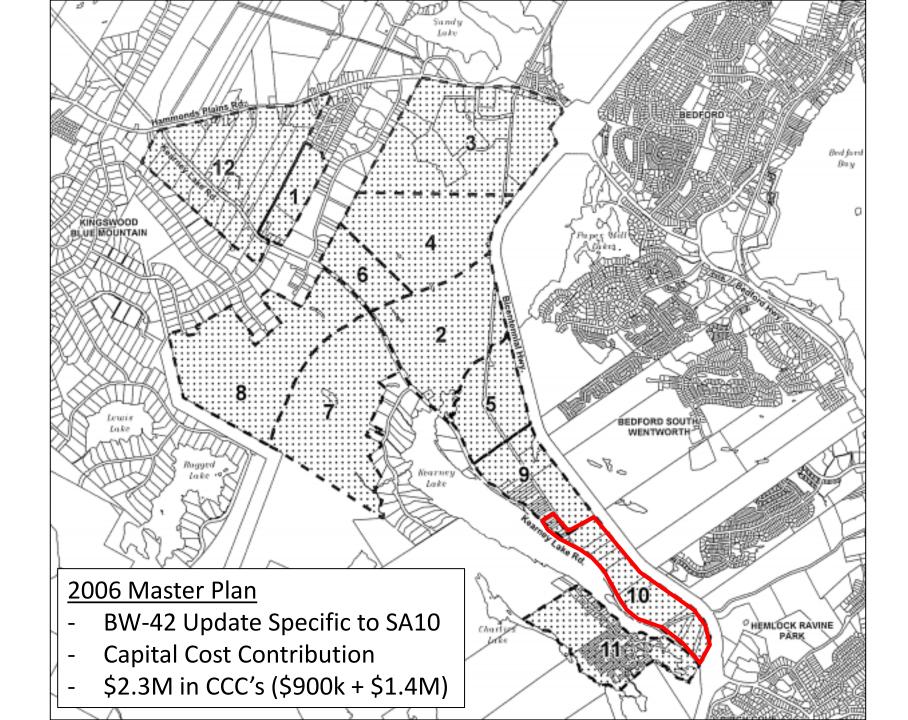
#### Sub-area 10 – Rationale

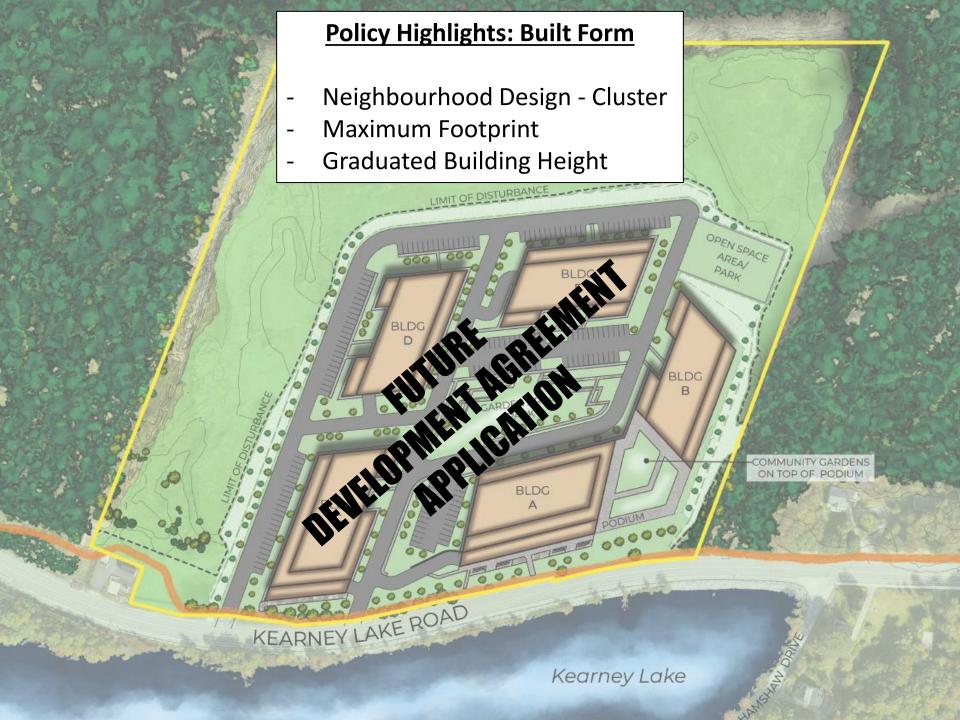
- 2006 Policy
- Walkability
- Transit
- Traffic Improvements
- Stormwater Management
- HalifACT 2050

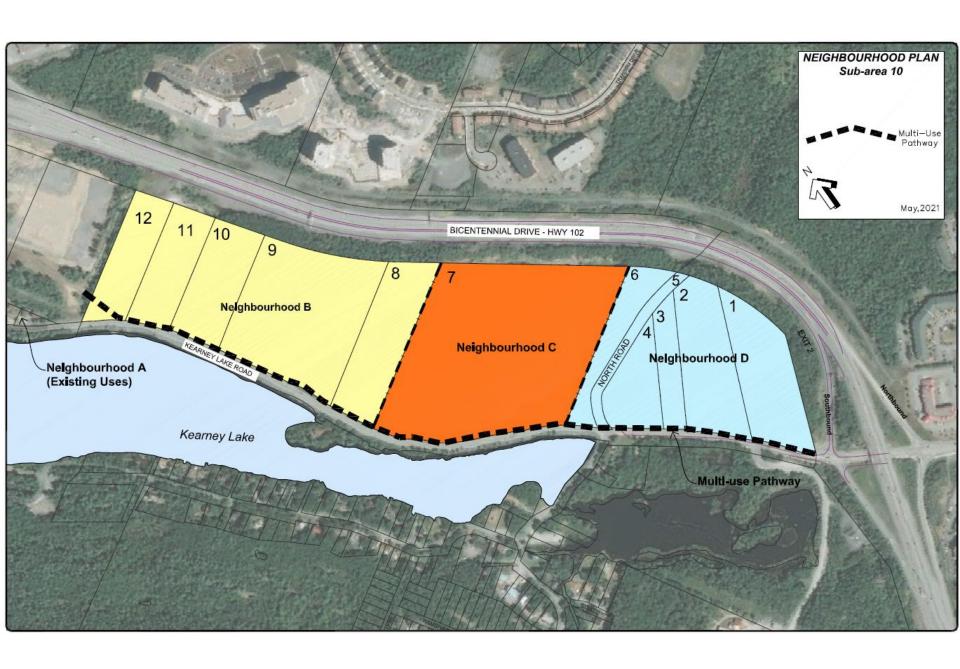


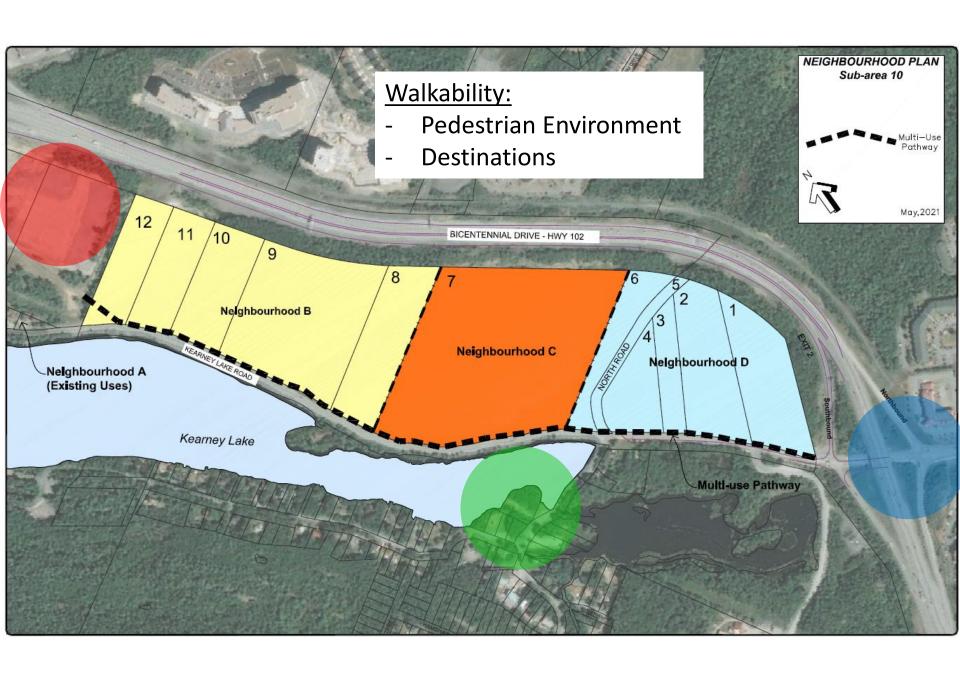


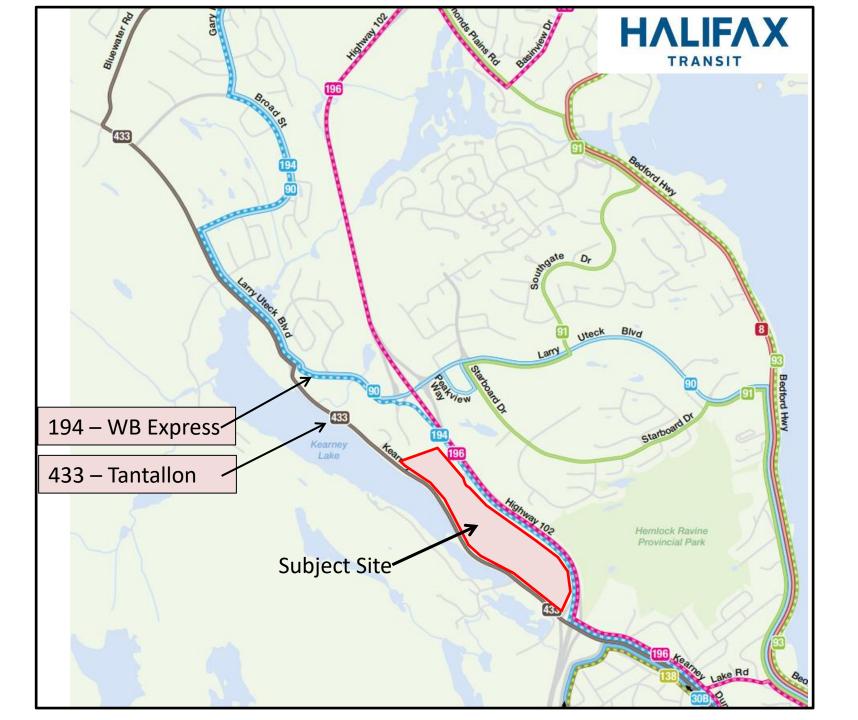


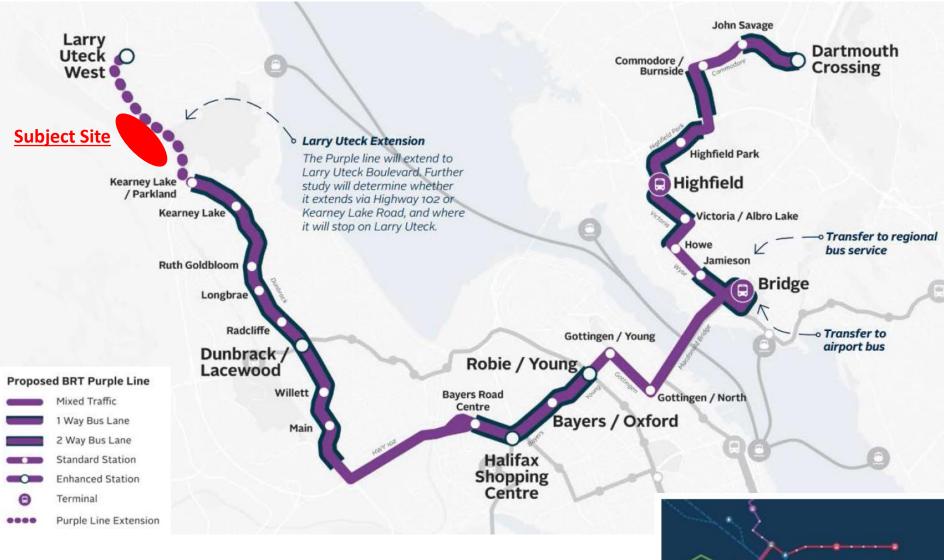














#### **Transportation:**

- Walkability / Transit
- Located between Two Interchanges
- ...Next Steps Transportation Improvements



**Transportation Improvements / Design Study** 



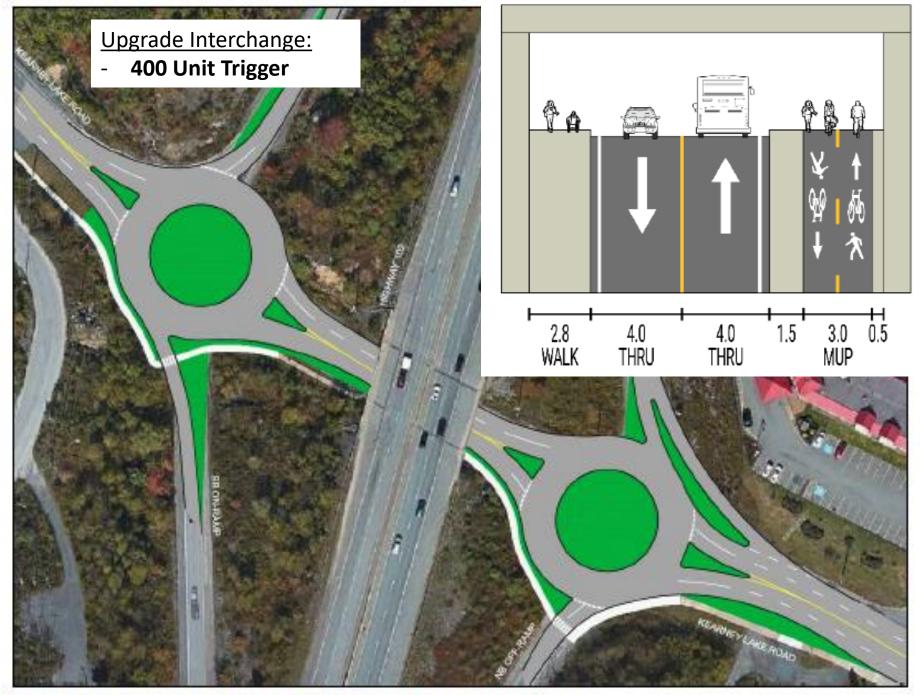
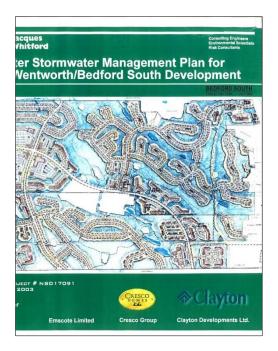
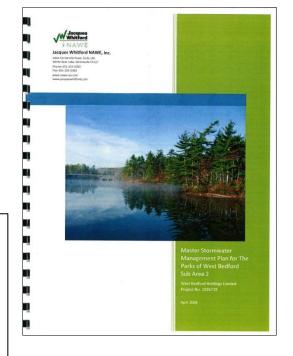


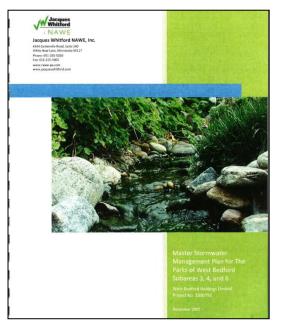
Figure 5: Kearney Lake Road and Highway 102 interchange improvements



# Stormwater Management Morris Lake Russell Lake Bissett Lake Papermill Lake Kearney Lake



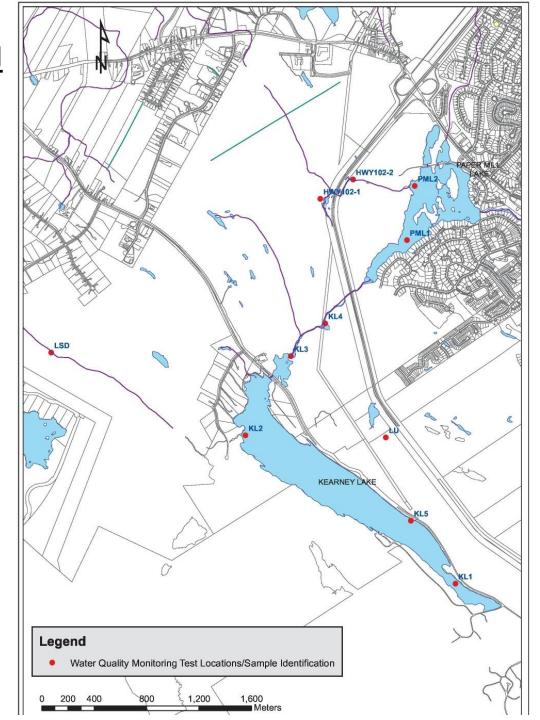








## **Water Quality Testing**



#### **Education & Community Engagement**

## The Parks of West Bedford Lawn Care Best Management Practices



Home Owners' Guide



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West Bedford Holdings Limited

#### Go-Toxic Free

#### Lawn Fertilizer

There are many natural ways to fertilize a lawn before reaching for a store-bought fertilizer. Compost and grass clippings are a cost-effective and environmentally friendly way to provide your lawn with nutrients. If you feel the need to purchase a fertilizer to care for your lawn, use organic fertilizers or slow release fertilizers.

- ► Clean Nova Scotia indicates that generally a 4:1:2 (the ratio of nitrogen to phosphorous to potassium) fertilizer applied at rate of 1 kilogram nitrogen per 100 square metres (2 pounds per 1000 square feet) provides the proper balance of nutrients.
- ► Combine the fertilizer with organic material (a mixture of good-quality soil, sand and a source of humus) and add this to your lawn's surface.
- ► Use a slow release or organic fertilizer before a rain (follow labels). If rain is not expected, water the lawn prior to fertilizing.
- ► Know your nutrient needs by understanding your soil and lawn conditions (most people apply too much fertilizer and this impacts water quality as well as lawn health).
- ► Go natural! Forget chemical fertilizers and replace your lawn with native plantings. There are over 1,500 to choose from for our region!



Organic fertilizers are often overlooked as an effective method for lawn care and maintenance

#### Pet Clean-Up

Pet waste is a health hazard and a pollutant as it contains excess phosphorus and harmful bacteria which can harm lake water quality. The following guidelines will provide for the proper cleanup of pet waste and the elimination of any health concerns due to contact concerns.

- ►Clean up all animal waste whether on your lot or on trails or other places in the community.
- ► During walks, bring a bag and dispose of the waste in the toilet, garbage, or a designated pet compost area.
- ► In your yard, encourage pets to use one location. This will make clean-up easier and this area can be isolated from the rest of yard, which can prevent accidental contact with the pet waste.
- ► Do not feed geese It encourages them to frequent your yard and generate waste in your yard, driveway, or sidewalks.
- ► Pick up after pets before cleaning patios, sidewalks or driveways. Do not spray waste onto streets or into gutters.

#### Pesticide Use

Pesticides should be applied only as a last resort, or not at all. The major source of pesticides in urban streams is home applications to kill insects and weeds in the lawn and garden. If you need pesticides, certain pesticides may be permitted. Call Clean Nova Scotia (902) 420-6593 or visit the HRM website http://www.halifax.ca/pesticides/rules.html for more information.



#### **Naturalize**

#### **Use Native Species**

Many native species are suited to growing in a wide range of ecological conditions and they are usually best suited to the Nova Scotia climate. Because of this, once they are established they usually require less care and are a key element in creating a low maintenance and sustainable landscape. The species listed below are considered to be the types of species that would most usually be found in the Parks of West Bedford area, however, use of other native species may also be appropriate. Final planting decisions should be made based on specific site conditions, species availability, and advice from landscape specialists.

Native Trees best suited for certain site conditions -

- ►Dry/Poor Sites: Black Spruce, Balsam Fir, White Pine, Red Pine, White Birch, Grey Birch, Red Oak, Trembling Aspen, and Largetooth Aspen.
- ► Moist/Poor Sites: Black Spruce, Red Maple, Eastern Larch, and Balsam Fir.
- ► Average Sites: Red Spruce, White Spruce, Eastern Hemlock, White Pine, White Birch, Yellow Birch, Red Oak, Red Maple, and Sugar Maple.
- ► Moist/Rich Sites: Red Spruce, White Spruce, Eastern Hemlock, Yellow Birch, Red Maple, Sugar Maple, White Ash, and Ironwood.
- ► Native Shrubs: Wild Raisin, Serviceberry, False Holly, Canada Holly, Velvet-Leaf Blueberry, Lowbush Blueberry, Lambkill, Bush Honey Suckle, Huckleberry, Witch Hazel, Speckled Alder, Labrador Tea, Rhodora, Mountain Ash, Teaberry, Spirea, Striped Maple, Mountain Maple, and Beaked Hazelnut.



#### Create Rain Gardens

A rain garden is a landscaping feature you can build to manage runoff. A rain garden will collect rain water and slowly filter water into the ground. They are usually a constructed depression (10-20 cm deep) that are designed to look like a natural area, but it will accept, infiltrate and clean stormwater. The rain garden will typically fill up with a few inches of water after a storm and within 1-2 days, the water will slowly filter into the ground. It is planted with wet and dry tolerant plants to absorb rain water. This technique encourages the recharge of the groundwater aquifer and uses the soil to filter out any pollutants before the infiltrating water reaches the local groundwater table. When combined with a disconnected roof leader (downspout), the stormwater can be conveyed into the rain garden via a vegetated swale creating a high value natural landscape.



Rain gardens serve both a practical and aesthetic purpose; to clean and manage water run off, while creating a more beautiful landscape

## PROTECTION MEASURES DURING SITE DEVELOPMENT

## Temporary Stormwater Management Controls:

- Silt fencing
- Diversion dikes and ditches
- Check dams
- Sediment barriers
- Soil stabilization
- Construction entrances
- Sediment traps and basins

#### **Additional Considerations:**

- Clay cut off trenches for below grade services
- Controlled access points
- Limited on-site/offsite trucking
- Reuse of material
- Reuse of grubbing for landscape berms







## PROTECTION MEASURES DURING & AFTER SITE DEVELOPMENT

#### **Ongoing Protection Measures:**

- Public education
- Water Quality Monitoring
- Animal waste control
- Spill response plans
- Identification and prohibition of illegal discharging
- > Street sweeping
- Road salt management
- Pollution prevention lawn care











#### **Stormwater Review Process:**

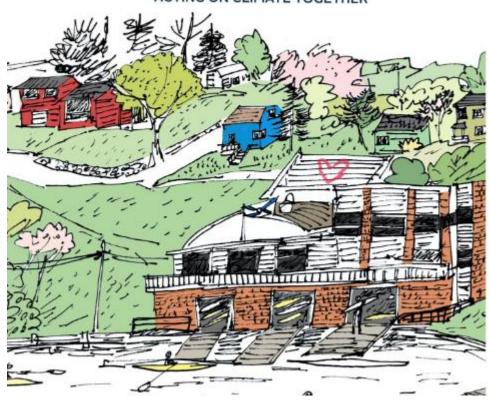
- Birch Cove Lakes Watershed Study A=COM
- MPS Policies BW-1 through BW-13
- Development Agreement
  - Master Stormwater Management design
  - Environmental Site "clean bill of health"
- Subdivision Application and Review
  - Detailed Site Design & Drainage Plans
- 1. HRM Staff
- 2. Halifax Water
- 3. NS Environment

- Building Permit Application
  - Site Specific stormwater management plan per HRM By-law
  - Site Specific Erosion and Sediment Control Plan
  - Landscape plan
- Occupancy Permit
  - Grading Certification
- Ongoing Lake Monitoring

## How does this plan align with HalifACT 2050?

- New Active Transportation Connections (pg.38)
- Density in the right place express transit route (pg.38)
- EV Charging Stations in each neighbourhood (pg.38)
- Cluster Neighbourhood Supports
   District Energy Systems (pg.37)and solar orientation (pg.36)
- Robust Planting Schemes
- LID Stormwater Management (pg.42)
- Partnerships with Carbon Cure Products (pg.28)
- Brownfield Development (pg.20)







## Thank you

