

## Gonder's Flats Restoration Program

**Public Information Session** 

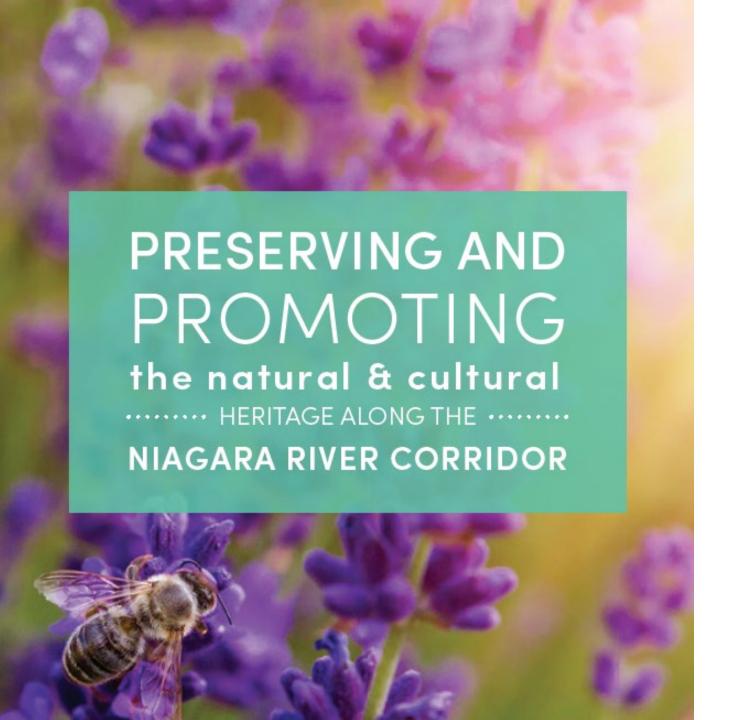
December 1, 2021



We gratefully acknowledge that we are on lands that have been inhabited by Indigenous peoples for millennia.

As Canadians, we're thankful for the opportunity to live, work and play here on lands that are protected by The Dish with One Spoon Wampum agreement. We thank all those who have served and continue to serve as stewards of this special place.

Recognizing the important contributions of Indigenous peoples is consistent with our commitment to making the promise of Truth and Reconciliation real in our communities.





### Mandate and Vision

- An innovative example of sustainability as the environmental and cultural stewards of the Niagara River corridor
- A welcoming, accessible and inspiring place offering world-class natural, historical, and authentic experiences
- A source of national pride and identity
- One of the most spectacular Parks in the world



NPC stewards 1,325 hectares of land along the entire Niagara River corridor.





## **Expectations for Niagara Parks Stewardship**

- Promote the stewardship excellence, showcasing stewardship efforts (past and present), increasing opportunities for engagement
- Increase the outreach of NPC's educational programming to showcase our cultural and environmental expertise
- Advance understanding of Niagara Parks as a social-ecological system by becoming a leader in demonstrating and communicating the diversity of ecology, geology, and vegetation of NPC
- Develop strategic partnerships and secure resources for environmental stewardship.



## **Urban Forestry Management Strategy Goals**

#### Maintain and Increase Canopy Cover



- 35% canopy cover
- 75% shoreline vegetation

Increase Species & Habitat Diversity



 Utilize 5-10-20 rule when developing planting plans

Mitigate Impacts



- Invasive species monitoring
- Climate change
- Recreational use

Increase Awareness & Promote Stewardship



- Engage partners
- Develop seed sources
- Build relationships with nurseries

Improve Data Collection & Monitoring



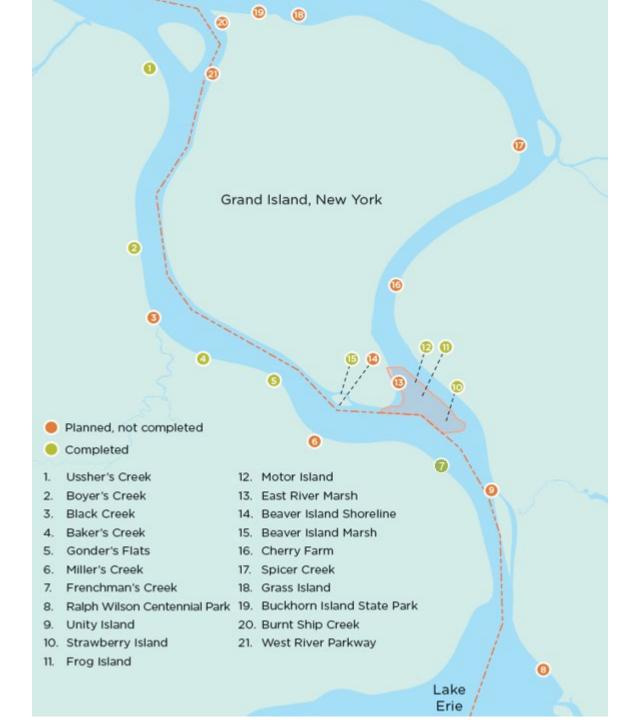
- Tree mapping
- Plant inventories
- Tree health assessments



# Working together to Improve the Niagara River









## Niagara River Coastal Wetland Restoration Project

- Seven sites selected at creek mouths in the upper Niagara River
- Work is completed during the winter
- Partners:
  - MNRF (COA)
  - Environment Canada
  - Niagara River RAP
  - New York Department
     Environmental Conservation

## Gonder's Flats Restoration Project Support to Date















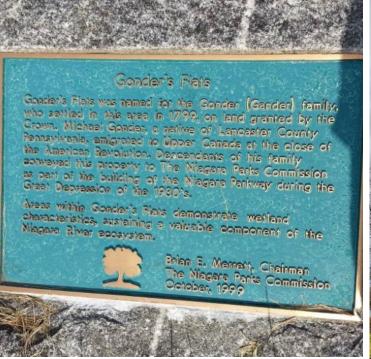




Department of Environmental Conservation













### History of Gonder's Flats

- Property belonged to the Gonder Family who transferred the property to NPC for the building of the Niagara Parkway
- Majority of lands left to naturalize due to wet soil conditions
- In 1998, was identified as a suitable fish habitat restoration site to offset the twining of the Peace Bridge.
- 2014 NPC began to actively restore the site.



### **Current Uses**

- Walking
- Fishing
- Birding
- Picnicking
- Cycling staging area (parking)





## **Ecological Significance**

- Species at risk habitat
- One of the only wetland areas along the Canadian Side of the Niagara River
- Presence of wetland indicator species
- Previously identified as high potential for fish habitat
- Ability to filter run-off and mitigate flooding impacts







### **Current Site Conditions**

- Approximately 6.5 ha (16 acres)
- Low lying area with hydric soils
- Standing water nearly year round
- Establishment of Invasive species Phragmites
- Presence of wetland indicator and tolerant species.





## Management Challenges

- Perpetually wet soil conditions ground no longer freezes during winter months.
- Small window of opportunity for maintenance
- Turf too wet to mow without causing further damage
- Invasive Species
  - Emerald Ash Borer
  - Phragmites
- Species at risk habitat



# Gonder's Flats Restoration – Phase 1 – 2014/15

- Removal of degraded asphalt service road eroding into Niagara River
- Removal of parking lot adjacent to river
- Installation of trail









# Gonder's Flats Restoration - Phase 1 - 2014/15

- Shoreline restoration
- Tree and shrub planting





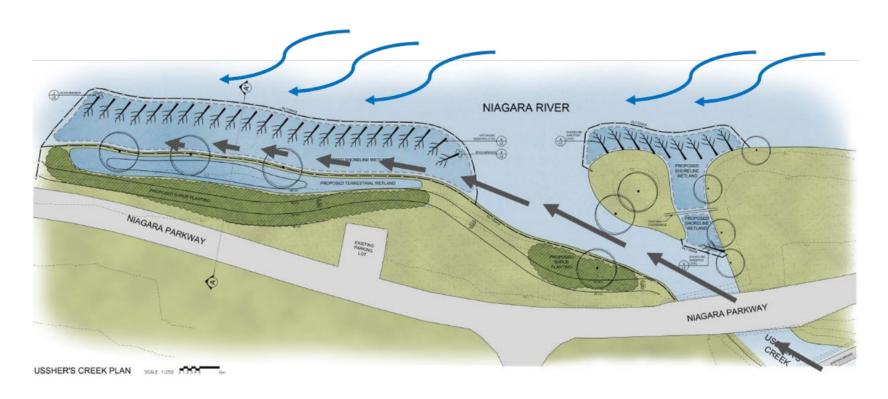


Gonder's Flats Restoration – Phase 2 – 2017/18:

Coastal Wetland Habitat Installation



## **Concept Design**











# Pollinator Garden Installation - 2017

- One of 12 gardens installed in recognition of Ontario 150 in 2017
- Native plant species which attract numerous pollinator species (butterflies, bees, etc.)
- Educational Signage





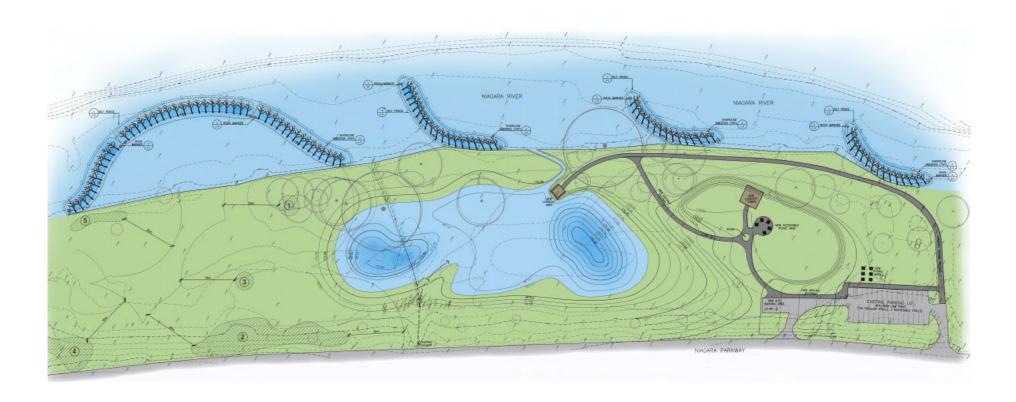


# Gonder's Flats Restoration – Phase 3 – 2020/21

Ash Tree Removals



## Gonder's Flats – Phase 4 – Wetland Enhancement





# Gonder's Flats – Phase 4 – Wetland Enhancement Project Objectives

#### Objective 1:

Restore and enhance functional wetland habitat

#### **Objective 2:**

Provide environmental educational opportunities

#### **Objective 3**:

Protect sensitive habitats and species from invasive species

#### **Objective 4:**

Expand accessible and passive recreational opportunities in natural areas

#### **Objective 5:**

Contribute to climate change resiliency



















# Wetland Enhancement Project Scope

- Excavation of pond approx. 3.5 acres
- Creation of berms with excavated soils
- Planting of wetland and shoreline vegetation
- Removal of invasive species and any remaining Ash Trees
- Wildlife habitat features (nesting structures, woody debris)
- Interpretive signage





# Example of Wetland Restoration in Niagara







## Benefits of Wetland Enhancement Project

- Flood water retention
- Management of invasive species
- Enhanced recreational and educational opportunities
- Enhanced wildlife habitat
- Improved aesthetics and views of the Niagara River
- Enables proper maintenance activities to adjacent areas





### **Improve Views of the River:**

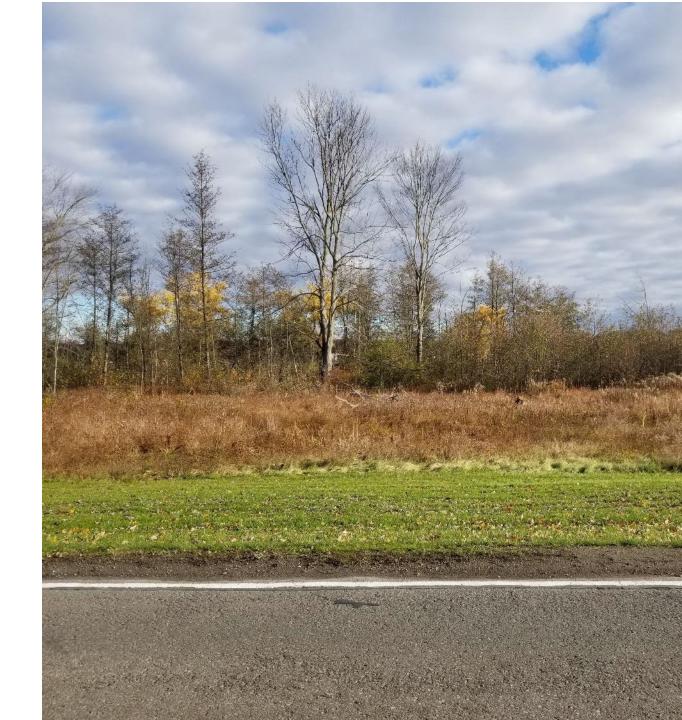
- Existing tall/dense growing invasive species will be removed and managed
- Any berm features will not extend higher than the existing parkway
- Lower growing shrubs and vegetation will be utilized.

### **Increase West Nile Virus Monitoring:**

Site will be included into NPC's existing West Nile
 Monitoring and Abatement Program

### **Maintains Parkway Residential Land Value**

- No impacts on zoning
- No additional Species at Risk
- No change to land use designation







# Wetland Enhancement Project Phases

### Phase 1 (completed)

- Archaeological Assessment
- Concept Design

### Phase 2 (underway)

- Securement of Funding (Pending final approval)
- Public Consultation (In progress)

### **Phase 3 (Early 2022)**

- Update Construction Design
- Construction







## Gonder's Flats Restoration: What's Next?

- Upgrades to existing trail system
- Installation of boardwalks and lookout points where appropriate
- Additional Interpretive Signage
- Addition of species-specific wildlife nesting structures
- Ongoing monitoring opportunities (e.g. citizen science)



### Questions

Please submit your questions online in the Questions and Answers Box

