

# Municipal Perspectives on the Wetland Replacement Program

## NSWA Wetland Forum

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# Agenda

1. Wetland Policy Background

2. WRP Overview

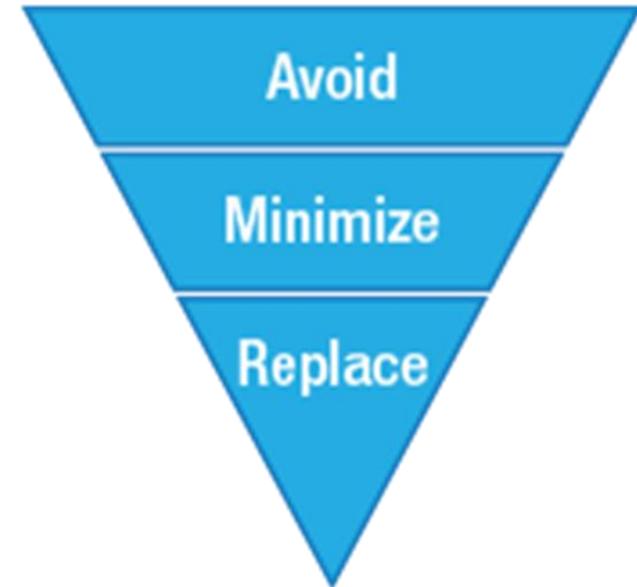
3. Priorities

4. Project examples

5. Challenges & Opportunities

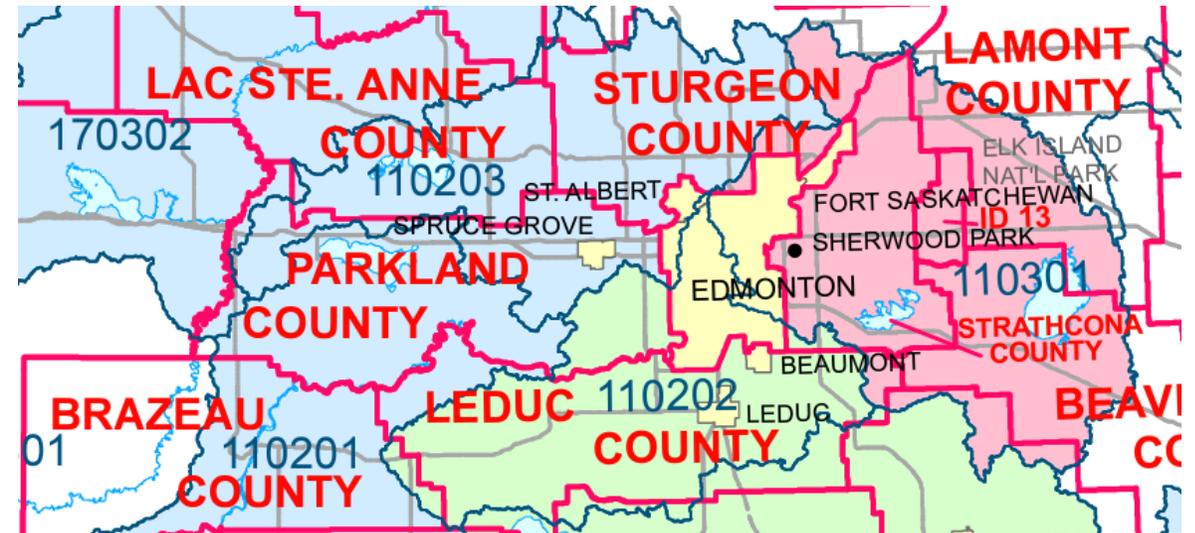
# The Alberta Wetland Policy

- The goal of the Alberta Wetland Policy is to conserve, restore, protect and manage Alberta's wetlands.
- Policy focuses on four main outcomes:
  1. Wetlands of the highest value are protected for the long-term benefit of Albertans
  2. Wetlands and their benefits are conserved and restored in areas where losses have been high
  3. Wetlands are managed by avoiding, minimizing and if necessary, replacing lost wetland value
  4. Wetland management considers regional context



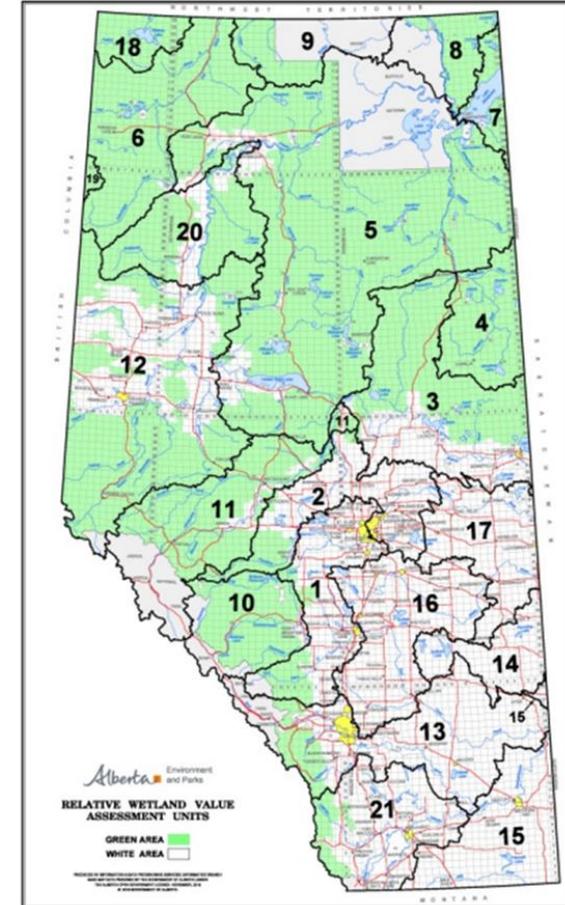
# WRP Overview

*"Wetlands are a vital part of Alberta's ecological landscape and necessary for a sustainable economy and healthy communities. The Wetland Replacement Program (WRP) aims to re-establish wetlands in partnership with Albertans by providing resources for collaborative restoration projects across the province."*

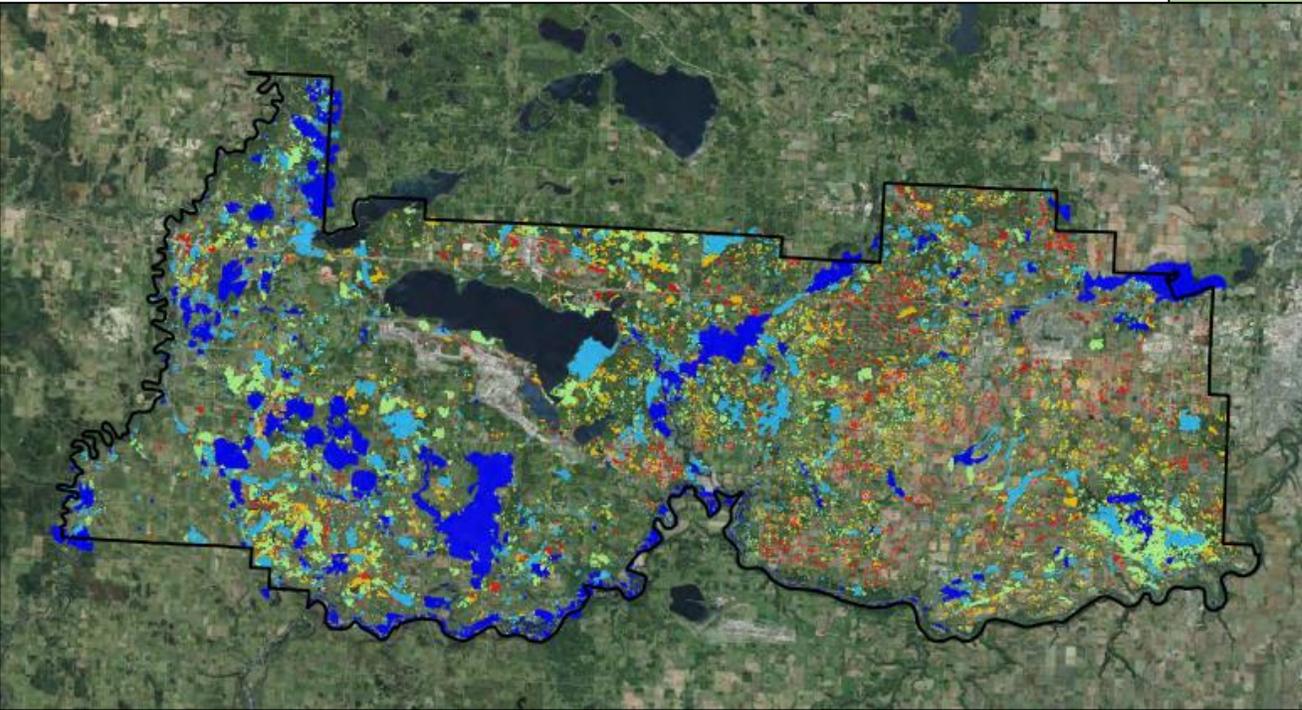


# WRP Overview

- Wetland Replacement includes:
  - Wetland Restoration
  - Wetland Construction
- AEP has funding available for eligible wetland replacement projects:
  - In-lieu wetland replacement fees
  - Partnerships with municipalities and non-profits to identify and undertake projects



# WRP Project Process



- **Phase 1:** Site Selection & Proposal Development
- **Phase 2:** Detailed Design & Regulatory Authorization
  - Water Act Code of Practice for Wetland Replacement Works
- **Phase 3:** Construction
- **Phase 4:** Monitoring & Maintenance
  - A minimum of 4 years

# Site Selection



# Wetland Replacement Program – Uncas Project



# Road Upgrade & Drainage Concerns

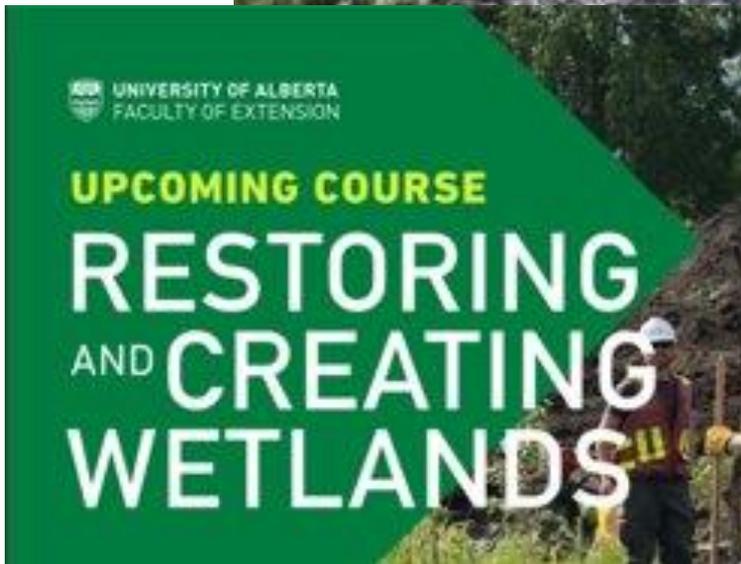


1950



2021

# Education Opportunities



# Construction



# Lessons Learned





# Drainage Concerns



# Communication



Strathcona County

August 16 · 🌐

This month marks the beginning of the first wetland replacement projects within the County. Construction at Uncas is currently underway, and we are looking forward to starting up at our next location: Busenius Estates!

To learn more about the Wetland Replacement Program, in partnership with the Alberta government, be sure to head to our webpage for tons of information, photos and more!

<https://www.strathcona.ca/.../wetland-replacement-program/>



## Wetland Replacement Program

Work is underway in Uncas, at the first Wetland Replacement program location in the County!

For more details on this project site, and upcoming wetland replacement projects please visit:

[strathcona.ca/wetlandreplacementprogram](https://strathcona.ca/wetlandreplacementprogram)



# Lessons Learned



# Projects in Agricultural Land



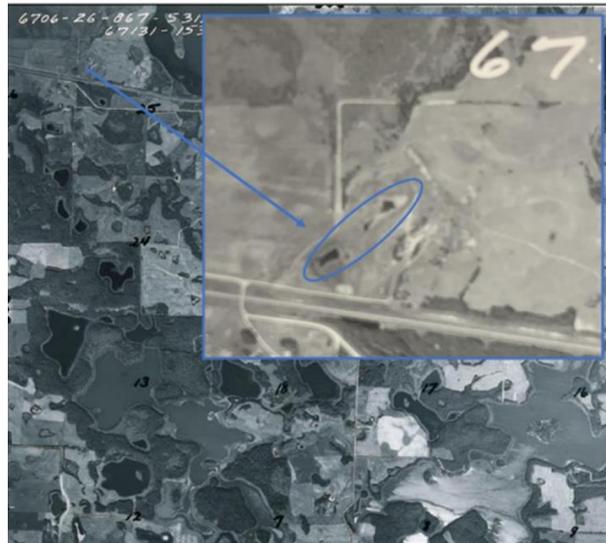
-  Proposed Wetland Replacement Project Area
-  Natural Wetland
-  Increase in Wetland Area (5,568 m<sup>2</sup>)
-  Catchment Area
-  Elevation Contour (0.5 m)
-  Road

-  Proposed Wetland Replacement Project Area
-  Road
- Target Wetland Vegetation Community**
-  Natural Revegetation
-  Seasonal Graminoid Marsh
-  Temporary Graminoid Marsh
-  Shrubby Swamp
-  Landscaped Upland - Grass
-  Naturalized Riparian Area
-  Protective Buffer - 3 m

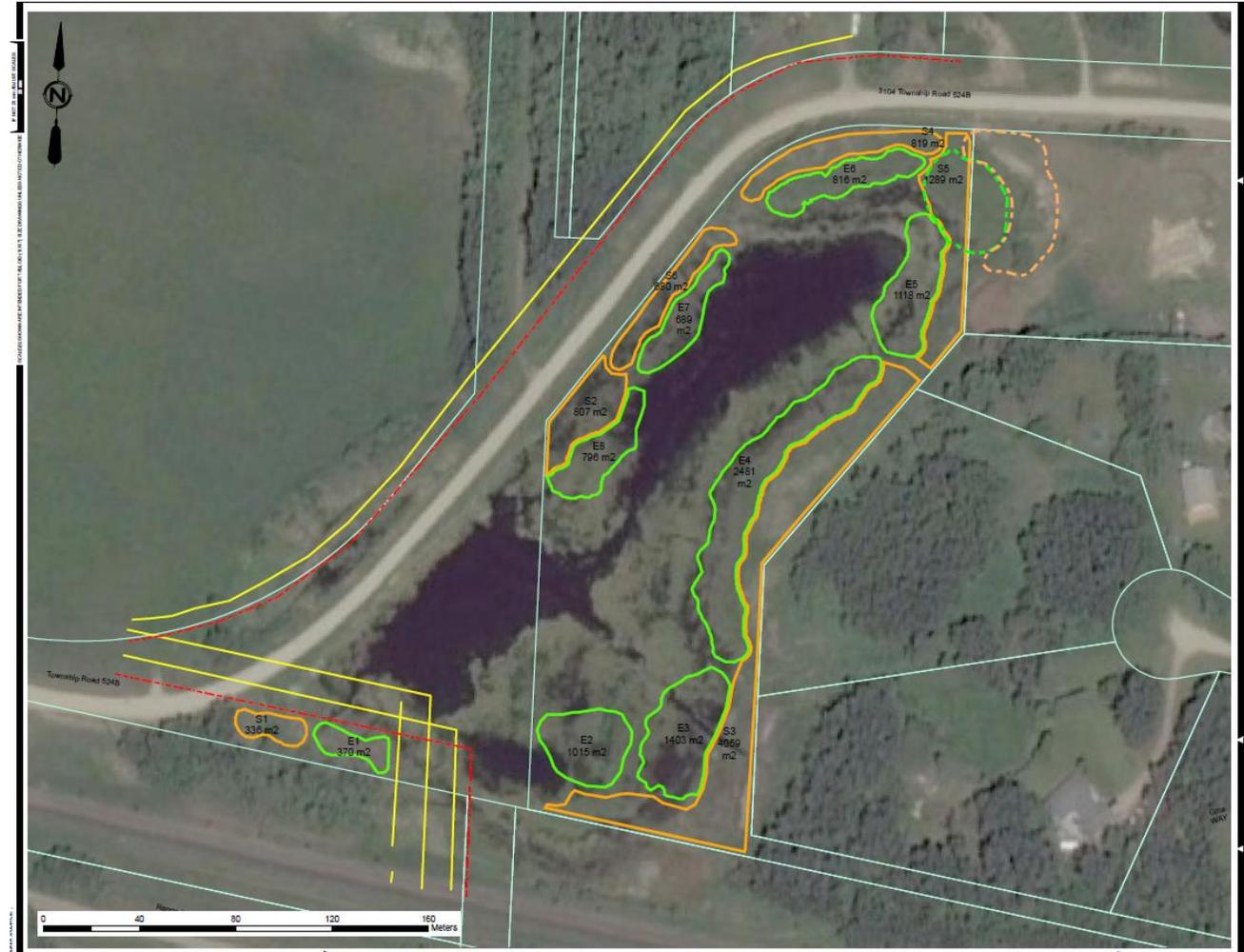
# Edinburgh Park Wetland Construction Project



1950



1967



- Legend:**
- Telus - Direct Buried Copper
  - Telus - Underground Trench
  - Property Line
  - Excavation Area (8,201 m<sup>2</sup>)
  - Soil Spreading Area (7,990 m<sup>2</sup>)

FIGURE 1  
 EDINBURGH PARK WETLAND CONSTRUCTION  
 CONCEPT DESIGN

AE PROJECT No.	2022-8101
SCALE	1:1,500
APPROVED	
DATE	2022SEP02
REV	
DESCRIPTION	ISSUED FOR DRAFT

# Road Repairs Reduce Open Water

**May  
2018**



**June  
2018**



**Temporary  
ditch  
check  
installed**



**April  
2021**



# Project Plan

**Goal:** Construct a permanent wetland while maintaining road integrity

**Objectives:**

- Naturally appearing and functioning
- No high maintenance water control structures
- Mitigate flood and drought
- Increase species richness and biodiversity
- Diversification of wetland zones
- Clean runoff from surrounding residents

**Conceptual design plan:**

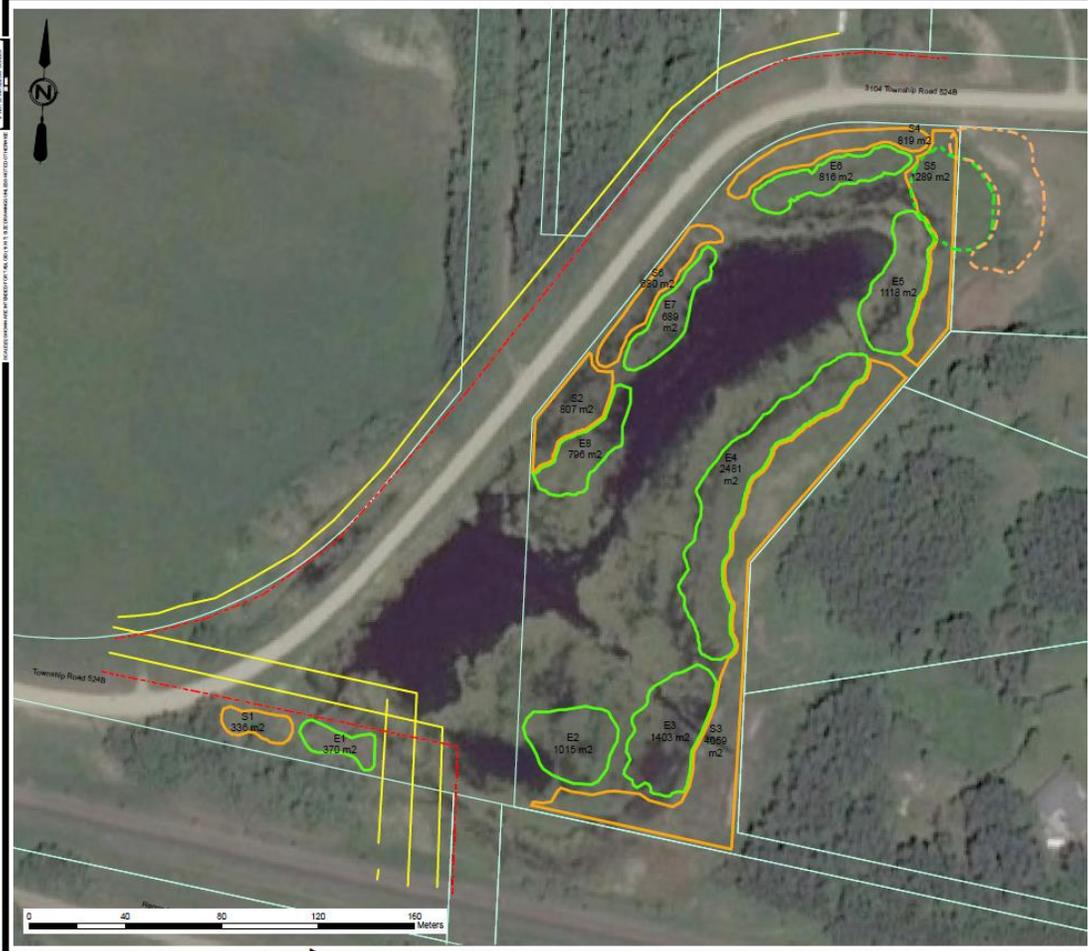
- Build a 5-hectare wetland that is connected to the county drainage network
- Include:
  - Deep water pools
  - Tufts, mounds (diversity)
  - Large woody debris
  - Planted native trees and shrubs
- Remove temporary ditch plug
- Hold open water similar to pre-road repairs



# Importance of Landowner Consent

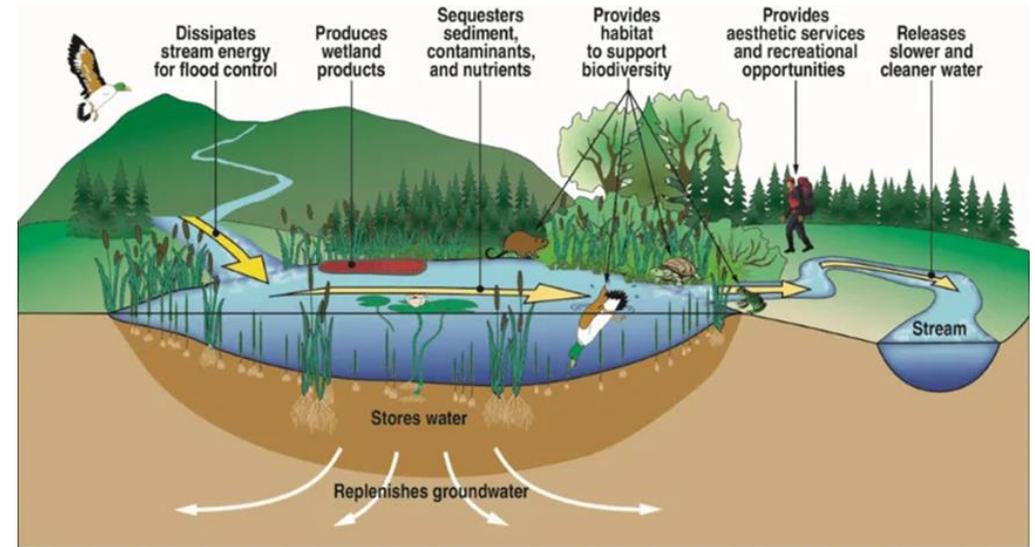


# Lessons Learned



# Challenges & Opportunities

education  
community risk  
wetland perfect functions  
engagement  
site timing  
cost difference use  
drainage  
concerns



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