

# Wetland Restoration & Establishment Beneficial Management Practices (BMPs)

Wetland restoration and the construction of new wetlands offer farmers a sustainable approach to enhance ecosystem services, improve water quality, and provide habitat for wildlife. Wetlands are critical for farm resilience, biodiversity, and on-farm water access.

To qualify for RALP wetland funding, the applicant will need to be enrolled in the Alberta Environment and Protected Areas Wetland Replacement Program.

## **HOW TO RESTORE OR ESTABLISH WETLANDS**

- Restore a wetland which had been previously drained, by installing a ditch plug, for example.
- Identify an ideal site for a new wetland, a flood prone area, for example.
- In either case, consider planting soil stabilizing plants such as willows and perennial grasses. You may also consider pollinator species.

**Note:** Legislation like the Water Act may apply to your project. Make sure to speak to a wetland specialist prior to planning your project.

# **Management Benefits**

## **Water Quality Improvement**

- Wetlands act as natural filters, trapping sediments and nutrients, improving water quality in nearby water bodies.
- Help reduce the risk of nutrient runoff and contamination of groundwater.

#### Flood Mitigation

- Wetlands function as natural sponges, absorbing and slowing down floodwaters.
- Provide flood mitigation benefits by reducing peak flows during heavy rainfall events.

## **Biodiversity Enhancement**

- Wetlands support a diverse range of plant and animal species, contributing to overall biodiversity.
- Provide critical habitat for migratory birds, amphibians, and other wildlife.

#### **Groundwater Recharge**

- Wetlands contribute to groundwater recharge by allowing water to infiltrate into the soil.
- Help maintain water table levels and support local aquifers, leading to drought resilience.

## **Erosion Control**

- Wetland vegetation stabilizes soil, preventing erosion and protecting against the loss of valuable topsoil.
- Contribute to overall soil conservation efforts on the farm.

# **Key Considerations**

### **Site Selection**

 Identify suitable locations for wetland restoration or construction based on topography, soil conditions, and proximity to water sources.

## **Vegetation Selection**

- Choose native wetland plant species adapted to the local climate and soil conditions.
- Incorporate a mix of emergent and submerged vegetation for enhanced biodiversity.

## **Hydrological Considerations**

- Assess the hydrology of the area to ensure proper water flow and seasonal variations in wetland water levels.
- Consider working with a hydrologist to optimize wetland design.

#### **Buffer Zones**

- Establish buffer zones around wetlands to protect them from runoff and potential contamination.
- Plant native vegetation in buffer zones to enhance habitat and water filtration.

## **Permitting and Compliance**

- Check local regulations and obtain necessary permits before initiating wetland restoration or construction.
- Comply with environmental laws to ensure the project aligns with conservation goals.

# **Start a Project Today**

1-866-310-RALP info@RALP.ca



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