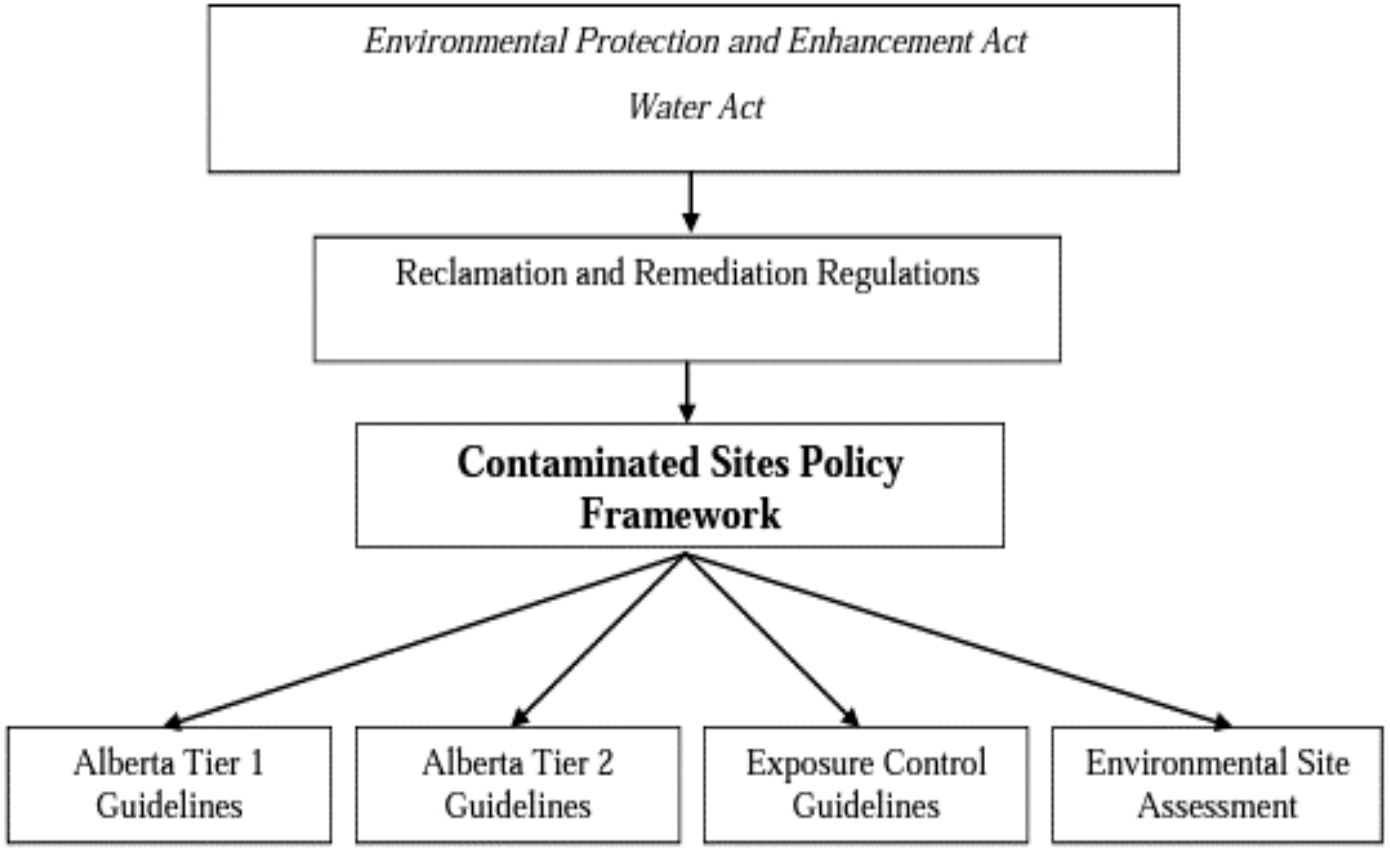
Q2 2025 Update
Operations Services

Agriculture and Environment Services

June 24, 2025

Contaminated Sites

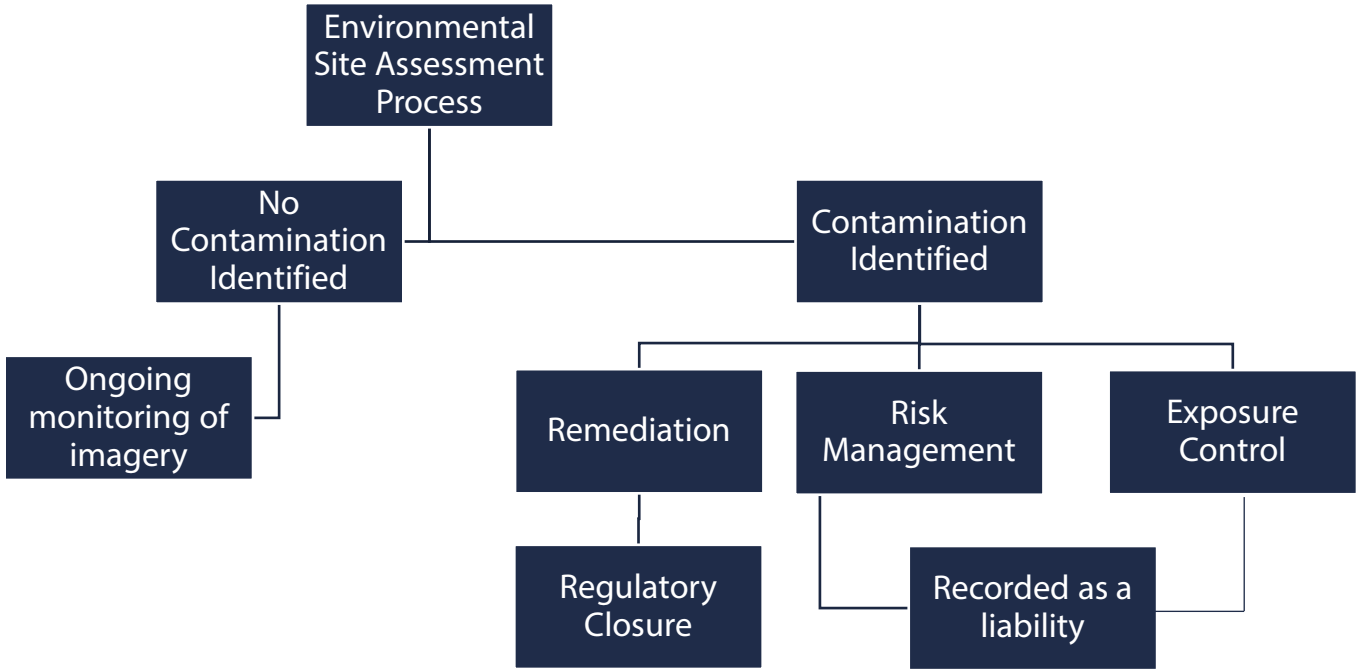
Legislated Obligations



- Other relevant legislation
  - PSAB 3260 Liability for Contaminated Sites
  - PSAB 3280 Asset Retirement Obligations
  - Code of Practice/Standards for Landfills in Alberta
  - Code of Practice for Wastewater Systems Using a Wastewater Lagoon

Contaminated Sites

Process & Outcomes



- Contaminated Sites we are currently managing:
  - 4 nuisance grounds
  - 5 service yards
  - 1 industrial site
- Additional sites with ongoing groundwater monitoring
  - 6 closed landfills
  - 4 lagoons

*Landfills & contaminated sites that are risk managed will appear on financial statements as liabilities

Contaminated Sites

Work Completed

Total: 70+ ESAs Completed

1,790 Land Holdings

- 267 eligible under PS 3260
- 5 high risk, 170 medium risk, 92 low risk
- 31 Phase 1 ESAs
- 15 Phase 2 ESAs

Wabamun Dissolution

- 86 sites screened
- 69 eligible under PS 3260
- 4 high risk, 54 medium risk, 11 low risk
- 6 Phase 1 ESAs
- 1 Phase 2 ESA

Service Yards

- 38 sites screened
- 35 eligible under PS 3260
- 9 high/medium risk
- 4 Phase 1 ESAs
- 4 Phase 2 ESA

Other

- 4 old nuisance ground
- Phase 1 & 2 ESAs

Contaminated Sites

Ongoing Work

- Addressing Encroachment
- Improving process for property acquired through P&D process
- Management of County Service Yards
- Remediation at Wabamun
- Update Spill Response Procedures
- Investigation of Former Land Disposal Sites

TWP RD 532A Wetland Replacement

Update:

- Creation of 1.25 ha wetland upstream of Rollin Meadows subdivision to mitigate flooding, improve water quality, & increase wildlife habitat/biodiversity
- Completed & participated in community engagement
- Proposal submitted to the Province & awaiting approval
- Construction scheduled for Fall 2025

Desktop Hydrological Study

Purpose:

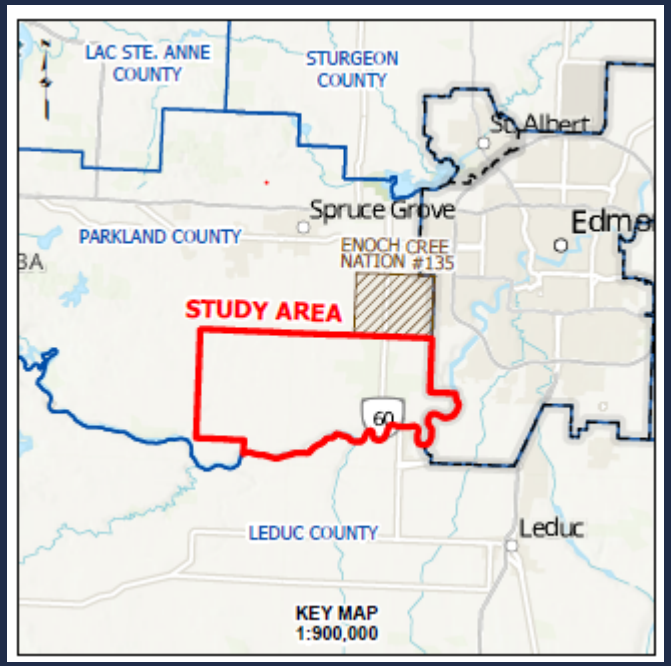
- Identify suitable locations for wetland replacement under the Provincial Wetland Replacement Program
- Alleviate pressure on the southeast drainage system and mitigate flooding issues on private lands by improving water storage and addressing historical wetland loss

Scope:

- Conduct hydrological analyses (2-D modelling) to characterize study area hydrology under average spring runoff conditions
- Identification and prioritization of potential sites for wetland development
- Development of prioritization criteria for 31 sites:
  - Ownership, cost effectiveness, flood mitigation, etc.

Results:

- Identification of 8 potential wetland replacement sites
  - One ready to move to concept development (within County-owned parcel)
  - Remaining seven require additional evaluation and engagement
- Limited opportunities on County-owned land



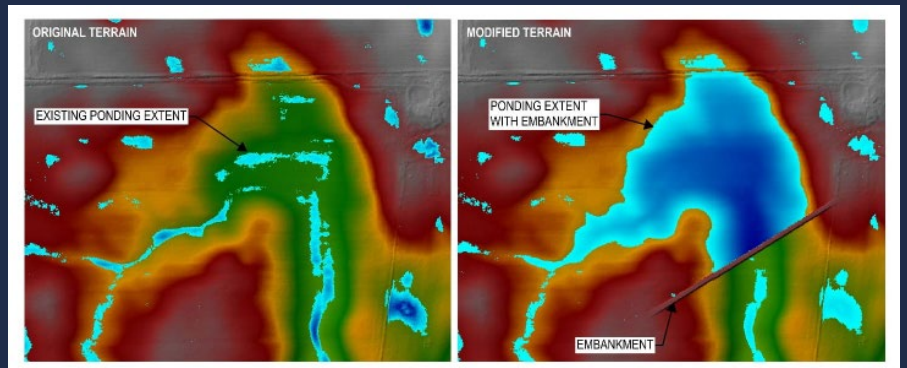


Figure 14 – Model Ponding Results Before and After Embankment

Climate Change

01

Facilities Energy Management Plan

- Energy Specialist hired in February
- Conducting baseline assessments
- Facilities audits
- Internal workshop and scenario development
- Additional funding from Alberta Ecotrust!

02

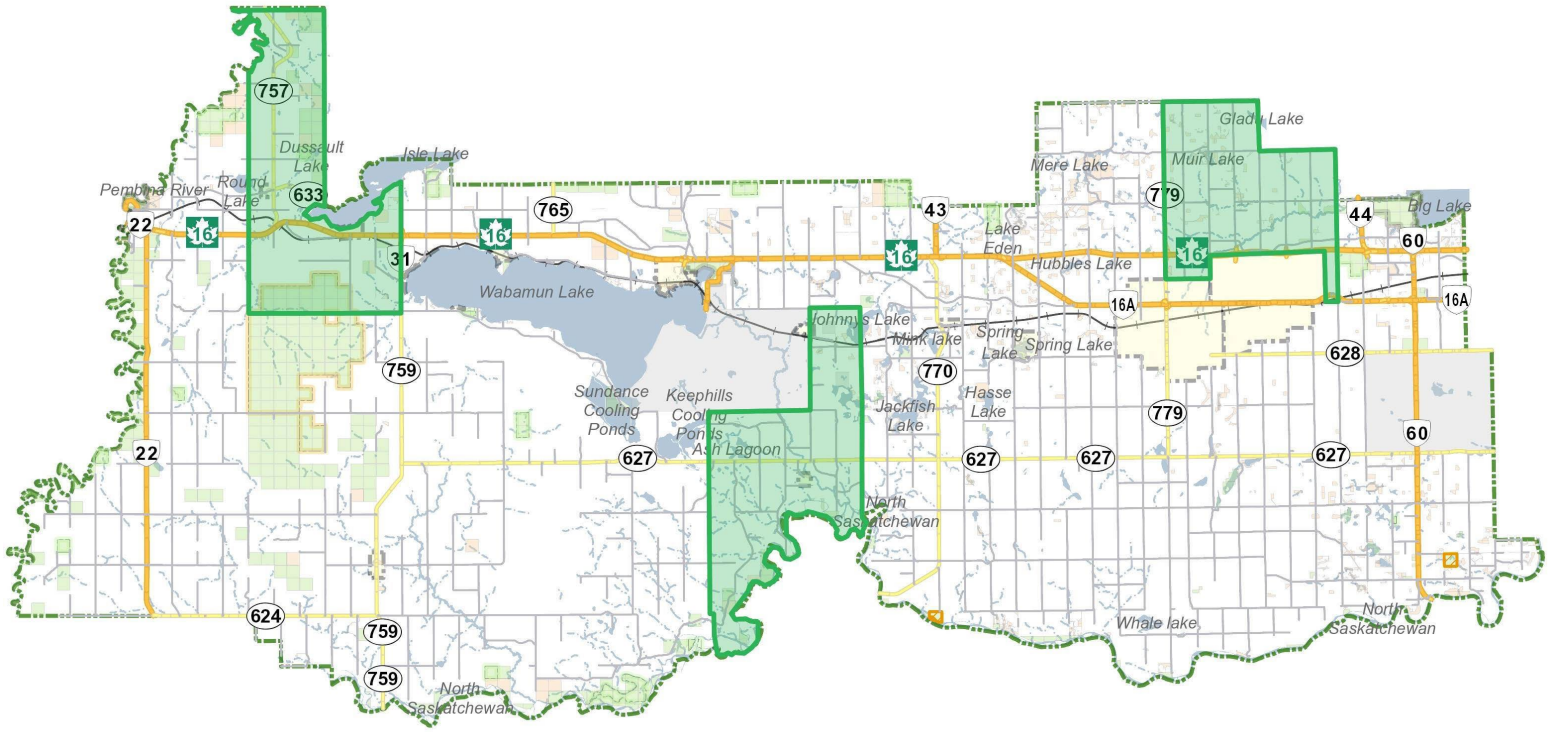
Climate Change Adaptation Plan

- Grant funding approved!
- Draft engagement plan & communications material
- Climate risk and vulnerability assessment: winter 2025-2026
- Action plan development: 2026

Horticulture

- Annual flowers planting
  - County buildings
  - Wabamun
- Hazardous tree assessments
  - Fire sites
  - By complaint

2025 Weed Control Focus Areas



- The 3 focus areas for 2025 are located:
  - Northwest region of county (East of Entwistle)
  - Central/South region of county (Keephills and surrounding area)
  - Northeast region of county (North of Spruce Grove)

01 Weed Inspection

- Season runs May 5 - August 29
- 7 Agricultural Field Inspectors
- Will inspect all properties in the focus areas
- Also address complaints
- Provide education materials
- Compliance on Noxious and Prohibited Noxious weed concerns is achieved through voluntary compliance or potential enforcement action

02

Vegetation Management Crews

Season Runs May 5- Aug 29

- 1 seasonal Team Lead & 4 summer applicators/assistants

- Work to control Noxious and Prohibited Noxious weeds on all Parkland County property within focus areas
- Also address complaints
- Use Integrated Pest Management Approach

03 Roadside Mowing

- Season runs June 9 - September 11
- 1 Seasonal Team Lead
- 6 Mower Operators
- 5 large tractors + 15 FT mowers
- 1 small tractor + 8 FT mower
- All County roads mowed once/season
- Prioritize focus areas
- Some major collectors mowed twice
- Mow shoulder to fenceline for weed control

Partnering on Aquatic Invasives

- Communications on invasive plants
- Installation of a watercraft cleaning unit
- Participation at WWMC inspection and weed pull events
- Reporting all active cases to Province

Education/Outreach

Newsletters

Are you planning to subdivide or develop your land in the future? It is important to understand that wetlands are protected under the Alberta Wetland Policy and the overarching Water Act.

What is a wetland? The Alberta Wetland Policy defines wetlands as "…land saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic (water loving) vegetation and various kinds of biological activity that are adapted to the wet environment." It is estimated that Alberta has lost approximately 60 – 70% of the wetlands in settled areas and Parkland County has lost approximately 56% of its wetland area since the 1950s.

Why are they important? Wetlands play an important role in improving water quality and quantity of water supplies, providing critical wildlife habitat, supporting biodiversity, recharging groundwater and reducing the effects of drought and flooding.

How do you know if you have a wetland on your land? If you use the terms slough, swamp, swampy area, muskeg, low area or marsh to describe an area on your land, then you likely have a wetland. Water may not always be present in these areas due to natural fluctuations; however, they are still protected!

How can this impact your subdivision or development plans? Upon review of your application, Parkland County may require the use of setbacks from or avoidance of wetlands. Land dedication or technical studies may also be necessary to protect these environmentally sensitive features.

For more information, please view the Alberta Wetland Policy and the Landowner Guide to the Alberta Wetland Policy, available at **www.WetLandsAlberta.ca**.

Did you know Elm trees in Alberta can only be pruned between October 1 and March 31 annually?

A pruning ban during the spring and summer months is provincially legislated in the Alberta Pests Act to prevent the spread of the devastating Dutch Elm Disease (DED). Because of intensive management and monitoring, Alberta has been DED free.

In summer 2024, the City of Edmonton found infected trees and subsequently removed them. Because of this close call, Parkland County is taking steps to ensure that residents know their responsibilities if they have an unhealthy tree.

Unhealthy trees have:

- Leaves that droop and turn yellow and then go brown, but remain on the tree.
- Dark brown or red streaks in the wood under the bark.

How you can help:

- Learn how to identify an elm tree — they are non-native trees used in landscaping as a shade tree with serrated/sawtooth edges and veined leaves.
- Report all suspect infected trees to the STOPDED hotline: 1-877-837-ELMS (3567).
- Follow best practices to keep your trees healthy and less susceptible to DED.
- Do not transport firewood from other provinces into Alberta. Buy locally and burn onsite.
- Do not store Elm wood on your property.

If you are pruning elms, the Parkland County Transfer station at 52514 Range Road 11 accepts Elm prunings, be sure to notify the scale staff that you have Elm (fees may apply).

For more information or for DED testing, please contact the Agriculture and Environment Services Building at 780-968-8467.

Join
ALUS

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ALUS.ca

THE ALUS ADVANTAGE

COMMUNITY LEADERSHIP DELIVERS LOCAL SOLUTIONS

SUSTAINING AGRICULTURE, WILDLIFE, AND NATURAL SPACES FOR COMMUNITIES AND FUTURE GENERATIONS

ALUS helps cost-share the establishment of beneficial management projects and practices, providing an annual payment for the management and maintenance of the project.

ALUS PARKLAND

NATIVE PLANT GARDENING

Plants native to Parkland County make a beautiful addition to any garden. Native plants are perennial, naturally adapted to local conditions and, if planted in the right place, require little maintenance once established. Using native plants in your garden enhances biodiversity, helps native pollinators and improves climate resilience.

POLLINATOR GARDENS

Planting a diversity of flowers of different shapes, colors, sizes and bloom times will attract native pollinators to your garden. Clumps of 3 to 8 native plugs or seeds of varied species together mimic natural settings and provide foraging opportunities for pollinators. Untidy gardens with decaying wood, hollow stems and patches of undisturbed bare soil will also provide habitat for bees.

Pollinator-friendly wildflowers include: giant hyssop, blanket flower, beebalm, bearberry and nodding onion.

DROUGHT-TOLERANT GARDENS

Drought-tolerant plants include: Little bluestem grass, woodland strawberry, northern bedstraw, smooth fleabane, blue-eyed grass, heart-leaved Alexanders and smooth aster.

Shrubs and trees include: jack pine, junipers and saskatoon.

FLOOD-TOLERANT GARDENS

Flood-tolerant plants include: fireweed, bunchberry, smooth fleabane, northern bedstraw, early blue violet and blue-eyed grass.

Shrubs and trees include: paper birch, alder, tamarack, red-osier dogwood, willows and balsam poplar.

Use rainwater on your garden to conserve water, reduce energy use and save money!
Don't have a rain barrel? Come to the Tri-Municipal Rain Barrel Sale on April 26. Details on page 13.

GROWING YOUR OWN FOOD

Growing fruits, vegetables or herbs in your garden can positively impact your mental and physical health, improve your diet and save you money at the grocery store! Food gardens also increase biodiversity and provide habitat for pollinators, especially when combined with native gardening.

Common Gardening Methods:

- Planting in the ground
- Using garden boxes
- Container gardening

GARDEN TIPS

- Double-check wildflower mixes to ensure they do not contain invasive weeds. A full list of invasive plants can be found at **www.abinvasives.ca**
- Place plants with similar lighting and water requirements close together.
- Conserve water by adding compost, using a rain barrel and directing water to the base of the plants with a hose or a drip irrigation system.
- Use FireSmart landscaping to keep your property safe.
- Check your soil. Good garden soil is deep, loose, well-drained and contains decayed organic matter.
- Choose your plants by talking to a local horticultural club or supplier.
- Use a planting calendar to determine vegetable planting times.
- Harden off seedlings prior to planting to increase plant survival.
- Use compost to help your plants thrive! Compost should be added into holes when planting and placed around the base of plants once they are growing quickly.
- Plants in garden beds benefit from fertilizers every 2 to 4 weeks. Use compost, castings, aged manure or other organic fertilizers to avoid chemicals.
- Water plants in the early morning or in the evening and direct the hose to the base of the plant to maximize absorption and minimize evaporation.

For more information, visit **www.parklandcounty.com/Grow**

Remember to check local bylaws for any restrictions prior to setting up your garden and contact Alberta One Call prior to digging if you are planting in the ground.

COMMON FOOD PLANTS

Full sun (>6 hours): basil, lavender, peppers, strawberries, tomatoes, beets, cucumber, squash, onions and raspberries.

Partial sun (3 – 6 hours): dill, beans, carrots, beets, chives, peas and arugula.

Full shade (<3 hours): cilantro, parsley, kale, spinach and lettuce.

USE OF FERTILIZER

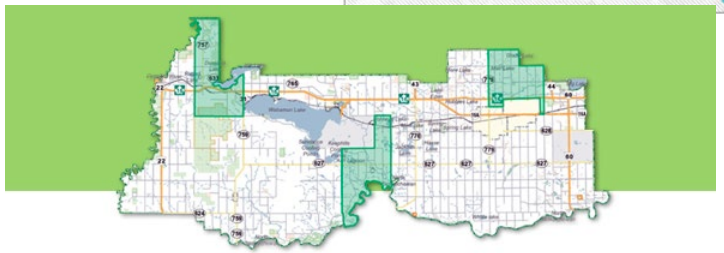
Fertilizer runoff is identified as a nonpoint source pollution, meaning it doesn't come from just one location but rather multiple dispersed areas — complicating its regulation.

In Alberta, which features some of the highest household fertilizer usage rates, the consequences are particularly severe, as most lakes in the region are already eutrophic — rich in nutrients. The additional nutrients from fertilizer runoff further increase this condition, elevating nutrient levels and contributing to the growth of blue-green algae, which poses risks of skin irritations upon contact and illnesses if ingested. Over-fertilizing also leads to runoff that degrades water quality and undermines long-term soil fertility.

Residents in Parkland County can utilize funding available through programs like the Land Stewardship Centre's Green Acreages Program to support sustainable land use practices that benefit local waterbodies.

PRACTICES THAT CAN HELP REDUCE IMPACTS OF FERTILIZER USE:

1. **Maintain a Healthy Buffer Zone:** Maintaining a strip of healthy native vegetation along shoreline areas can help filter runoff, while also improving shoreline stability. The wider the buffer width, the greater the filtering capacity for stormwater runoff.
2. **Alternative Landscaping:** Native plants are an alternative to lawns that require less water, fertilizer and maintenance. This is because they are already adapted to local conditions. Decreasing hard surfaces can also reduce runoff from your property.
3. **Soil Testing:** Testing soils prior to fertilizer application can help analyze nutrient content in relation to plant nutrient needs. This can provide essential information to prevent over-fertilizing.
4. **Timing:** Avoid applying fertilizers on windy or rainy days and only apply when plants are actively growing. Applying before heavy rains is a waste of product, money and time for landowners. Much of the unabsorbed fertilizer will end up in local waters.
5. **Placement:** Apply fertilizer as close to the plant as possible and avoid applying near waterways and on hard surfaces.
6. **Alternatives to Synthetic Fertilizers:** Synthetic fertilizers do little to improve long-term soil fertility and are higher in nutrients than most plants can uptake. Although overuse can still lead to runoff, organic fertilizers act as slow-release fertilizers with lower nutrient values. Many organic fertilizers can also contribute to improvements in overall soil health and water retention, if used appropriately.



2025 Weed Control Program

Not all plants are good. There are specific weeds you cannot leave unmanaged on your property. These weeds, designated as "prohibited noxious and noxious" under the Alberta Weed Control Act, can spread rapidly and cause serious problems. Property owners are responsible for controlling these plants on their property.

As shown in the image above, we have selected areas of the county where we will focus our resources for 2025. We will start by controlling weeds on County lands and then begin assessing private properties. Properties with noxious and prohibited noxious weeds will be inspected and given recommendations for control.

A weed notice can be issued where no effort is made to prevent the spread of noxious weeds or destroy prohibited noxious weeds.

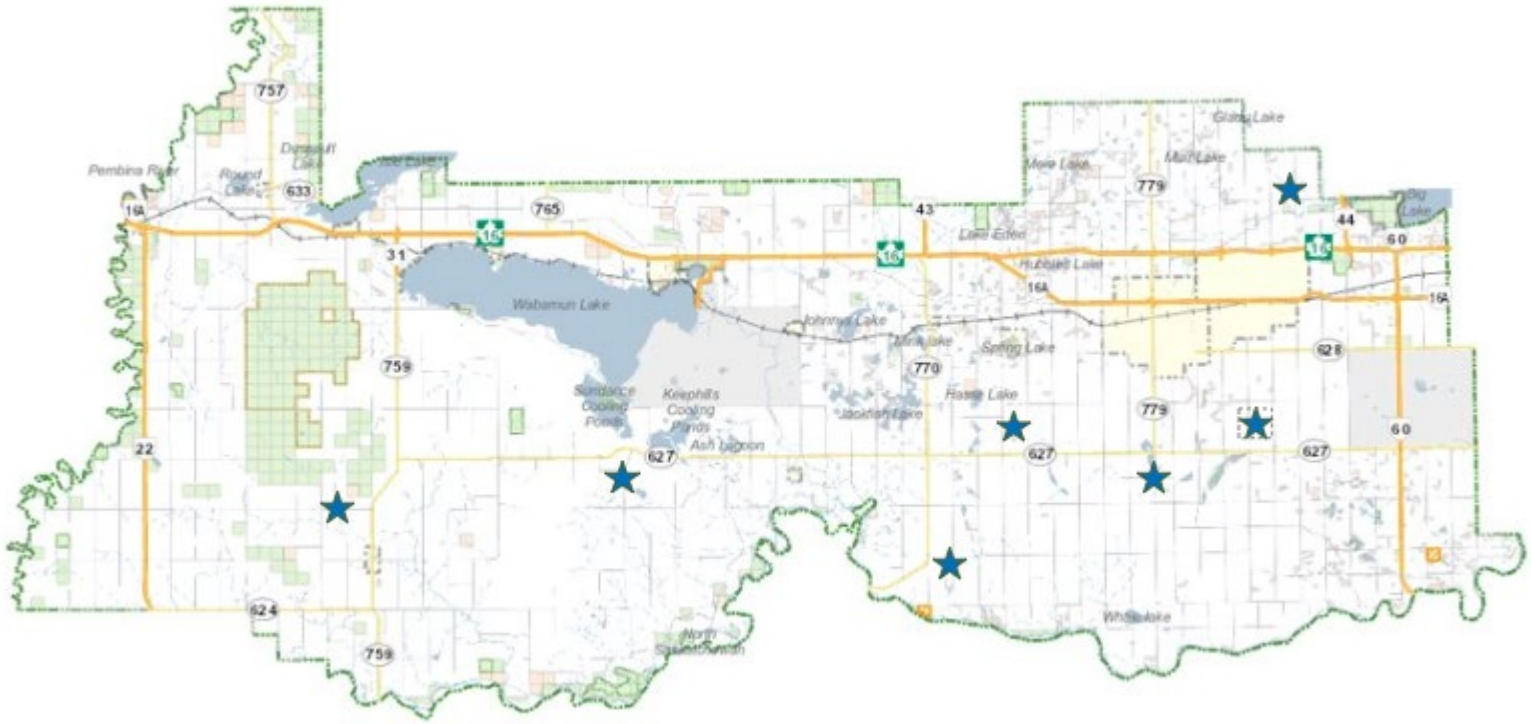
Vegetation Control Program

Parkland County's Agriculture and Environment Services Department will be using an integrated pest management approach to control noxious and prohibited noxious weeds on County lands as designated under the Alberta Weed Control Act. These methods include herbicide application, mowing, biological control agents and manual removal.

For more information on the Vegetation and Weed Control Programs visit **www.parklandcounty.com/weeds**

Education/Outreach

Road Safety Communications



Education/Outreach

Fertilizers and Waterbody Protection

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PROTECTING YOUR WATERFRONT

There has been an increase in residential development around many of the lakes and other water bodies in Parkland County. Quick access to gorgeous views and recreational opportunities are major reasons why year-round waterfront living has become so popular.

But, with new development comes added pressures on the lakes and surrounding environments. These changes can often lead to a decrease in water quality and aquatic health. With this decline often comes blue-green algae spikes, making the water unsafe for us to enjoy. It is important that we all do our part to protect the waters we love. For those living directly on a lake, there are many ways you can enjoy the lakefront benefits and protect the environment.

Restoring or preserving your shoreline with a riparian buffer will help to improve the water quality of the lake and protect your property from erosion and flooding. Unlike typical lawns and artificial beaches, natural vegetation can absorb and filter pollutants, such as excess fertilizer before they reach the lake. When designing a buffer, a minimum 30-meter width is recommended. The larger the buffer the better, however, any width is better than none. More benefits provided by shoreline buffers are listed below. Please note that work in and around water bodies may require regulatory approval. Checkout the "Waterfront Living" page on the Parkland County website for more tips on how to protect our lakes!

BENEFITS OF ESTABLISHING A LAKEFRONT RIPARIAN BUFFER

- Improved water quality
- Increased wildlife biodiversity, habitat and connectivity
- Decreased shoreline erosion
- Protect and possibly increase property value and aesthetics
- Flood protection and mitigation
- Less maintenance for landowners than lawns

BUFFER DESIGN

A. Trees like poplar (15 – 25m) and Birch (10 – 15m) can be planted strategically to preserve your view and stabilize the soil.

B. Paths should be made of permeable materials and meander along the slope instead of straight down.

C. Wildflowers like goldenrod (1m) and fireweed (1.5m) add habitat for pollinators.

D. Some local species to plant include red osier dogwood (1 – 4m), wild rose (1.5m) and willow species like sandbar (4 – 6m) and beaked (0.5 – 10m).

E. Plants in the lower areas including cattails (1.5– 3m), sedges (up to 1m) and other aquatic species will often revegetate on their own.

F. If you build a dock, try less damaging options like a raised dock.

Upcoming Education/Outreach

June

- Pod Days
- Staff solar sessions
- Tree planting

July

- Lady Bug Release
- Pollinator workshop
- Wabamun Invasive Species Inspections

August

- Green Acreages
- ALUS Field Day
- ASB Tour

Questions?