

## AGRICULTURAL SERVICES COUNCIL OVERVIEW

March 8, 2022

# **AGRICULTURAL SERVICES**

## Overview

- Delivers programs to encourage production, profitability and sustainability of the diverse agricultural industry in the County
- Through its Community Sustainability unit, implements environmental land stewardship programs, develops and implements the Integrated Community Sustainability Plan (ICSP) including sustainability goals and strategies, and manages environmental compliance throughout the County



# **AGRICULTURAL SERVICES**

## Strategic Context

- Supports Council's Long-Term Strategic Plan's Strategic Economic Diversification Pillar by controlling weeds and pests that can negatively impact agricultural production
- Respected Environment Pillar is supported through the integrated vegetation management program and the implementation of the Integrated Community Sustainability Plan
- Responsible Leadership Pillar is supported by implementing cost effective program deliveries, such as low maintenance plantings at County facilities at minimal cost to ratepayers



## **ORGANIZATIONAL STRUCTURE**





# **AGRICULTURAL SERVICES**

Programs

## Agriculture

Weed Inspection Vegetation Management Pest Management

## **Community Sustainability**

Alternative Land Use Services Environmental Regulatory Compliance Agriculture and Community Sustainability Plans Agriculture and Community Sustainability Programs County Land Management Support– Hazard Trees, Hay and Grazing Permits Landscape Services



# WEED INSPECTION

- Inspect County and Private Properties under the authority of the Weed Control Act.
- Ensure County compliance with the Weed Control Act









# **PEST SURVEILLANCE PROGRAM**

- Monitor for Agriculturally significant pests
- Monitor Pests on the Agricultural Pests Act





# **VEGETATION MANAGEMENT**

Uses an integrated management approach for weed control on County Land:

- Roadside Mowing including herbicide application
- Herbicide spot application on County owned properties
- Grazing, biological control and mechanical removal in sensitive areas









# SUPPORT TO COUNTY LAND MANAGEMENT

Hazard Trees

## Hay and Grazing Permits

## **Encroachments on reserves**





## LANDSCAPE SERVICES

# Maintenance of Plant Material at County Facilities Engineering Design Standards - Inspections









# **AGRICULTURE AND SUSTAINABILITY PLANS**



- Development and renewal of Agriculture & Sustainability Plans and Policies
  - Participation in regional planning and watershed alliances
  - Development of sustainability strategies and special project management





county





#### LONG-TERM SUSTAINABILITY OBJECTIVES

county



# AGRICULTURE AND SUSTAINABILITY PROGRAMS

Implementing the plans and policies through extension, ecosystem restoration and special projects



# **AGRICULTURE AND SUSTAINABILITY PROGRAMS**

• Implementing the plans and policies through extension, ecosystem restoration and special projects



## **PARTNERSHIPS & FUNDING**



Alberta

















Government Gouvernement of Canada du Canada







# What is ALUS?

We help farmers and ranchers produce ecosystem services on their land, including:

- » cleaner air and water
- » flood mitigation
- » carbon sequestration
- » species at risk habitat and support for native bees and pollinators





## Agricultural-based Natural Infrastructure used by ALUS



**REVEGETATION** of bare patches with grass seed or planting site-appropriate tree seedlings along water bodies

» Deep roots stabilize banks and filter water. Shade regulates water temperatures



#### RIPARIAN FENCES keep livestock away from waterbodies

» Filters excess sediment and nutrients, slows water runoff, prevents bank erosion & soil compaction



WETLAND RESTORATION repairs the natural function of a once-drained wetland

 » Stores water during drought, mitigates flooding, provides bird & wildlife habitat







# **10 YEARS OF SUCCESS**





## Modelling Parkland County: A drainage case study & cost benefit analysis

## **Case study example:** Can Parkland County use natural infrastructure to solve rural drainage issues?

## What is a rural drainage system?

•Rural drainage systems consist of a network of roads, ditches and culverts

## **Main Questions:**

- How would riparian and wetland restoration impact drainage hotspots?
- •What is the cost of implementing proactive natural vs
- traditional infrastructure solutions compared to ongoing reactive maintenance?



## **Extended Lifecycle**

Can better water management increase infrastructure lifecycle?

## Increase Service

Will agricultural BMPs provide better service to communities?

## Decrease Design Standards

Will agricultural BMPs allow us to design to a lower standard?

## Climate Change Adaptation

Can Agricultural BMPs help prepare for predicted changes in climate?



# **ENVIRONMENTAL REGULATORY COMPLIANCE**

- Ensure facilities, operations and projects meet all environmental legislation
- Complete environmental audits every 5 years
- Review of external applications for environmental impact mitigation
  - Planning and development
  - Engineering
  - Land Management
- Risk management and remediation of contaminated sites
- Estimating environmental liabilities

Category	Audit Results		
	Non- Compliance	Best Management Practice	Noteworthy Positive Practice
Site Contamination	2	1	3
Storage Tank Management	9	2	0
Hazardous Materials Management	10	3	1
Pesticide Management	0	1	0
Fire Code	7	0	1
Waste Management	0	1	2
Water and Wastewater	1	1	0
Occupational Health & Safety	3	0	2
Environmental Sustainability	0	0	6
Total	29	12	14



## **IDENTIFYING AND MANAGING CONTAMINATED SITES**



# THE BIOPHYSICAL ASSESSMENT PROCESS

## Landscape Level

## High priority landscapes

- Environmentally significant areas
- High value wetlands

## Ground Level



### • Sensitive terrain/soils

- Listed plant/wildlife species
- Weed species/Vegetation clearing
- Surface or groundwater hydrology/water quality
- Wetlands/water bodies/watercourses

# Interpretation and Evaluation

## Management Toolbox

- Plan or design modifications
- Application of setbacks (buffers) including use of RSMM
- Designation of ER/MR
- Mitigation plans
- Monitoring plans/on-going monitoring
- Additional field surveys

# **THREATS AND CHALLENGES**

- Reduced grant funding from the Province to enforce provincial legislation
- Public perceptions of agriculture can impact farmers ability to do their job
- Deregulation of products used for pest control
- People are not familiar with how municipal systems function
- Urban agriculture it is not the same as rural agriculture
- Social media reduces science/fact-based decision making
- Cost impacts of climate variability
- Need for natural spaces for public use
- Desire for renewable energy and energy efficiency programs
- Retention and valuation of natural assets





# **OPPORTUNITIES**

- Green Programming for residents such as green infrastructure, water management, energy efficiency and climate risk management
- Programming opportunities to manage risk
- Enhancing resident appreciation for agriculture
- In conjunction with Economic Development, support new food entrepreneurs.







## **DISCUSSION/ Q&A**



