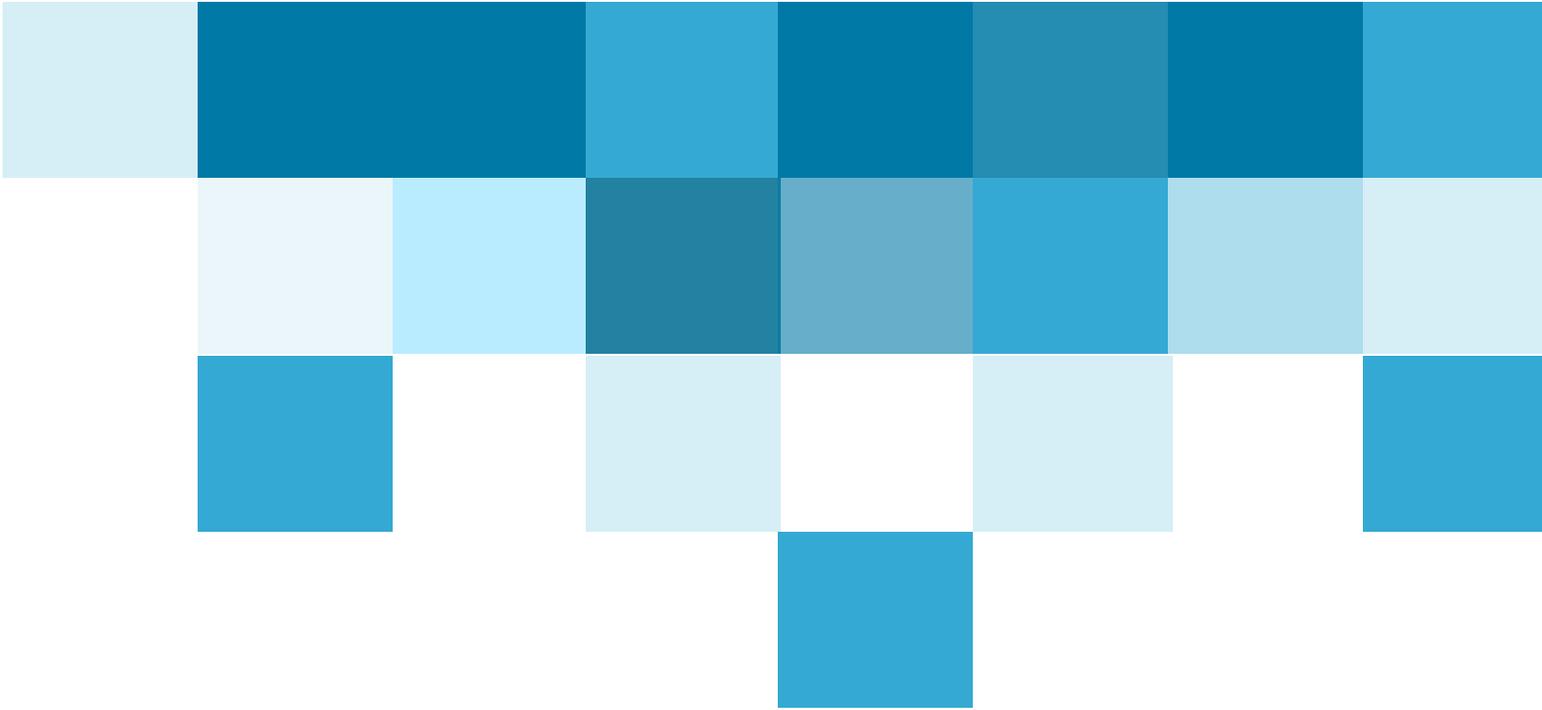


MANURE & SURFACE WATER

Best Management Plan
Template



Lesser Slave River



The MD has prepared this Best Management Plan template to help area producers manage manure and protect surface water resources from potential contamination related to agricultural activities.

A proactive and adaptive framework for minimizing environmental risks on your farming operation

This best management plan is a living document. It should be reviewed and updated periodically to reflect operational changes, advancements in management practices, and modifications to applicable regulations. Through awareness of — and adherence to — the guidelines outlined

in this plan, you can mitigate potential dangers and risks to your operation’s animals and personnel.

For more information, call the MD’s Agricultural Services department at 780.681.3929 (toll-free 1.866.681.3929) or email agriculture@mdlsr.ca.



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General Information

Acreage Size

1. What is the total size of the acreage in acres or hectares?
2. What is the land's current zoning (agricultural, serviced-residential, etc.)?

Livestock Information

1. What type(s) and number of livestock are present or do you want to keep in the future?
2. Do you have a Premises Identification (PID) Number?
3. What is the average weight and daily manure production for each type of livestock?
4. Are there any seasonal variations in the number of livestock?

Manure Storage & Handling

1. How is manure currently stored (e.g., pile, covered storage, composting system)?
2. What is the storage capacity?
3. Is the storage capacity adequate for manure produced?
4. How frequently is the manure storage emptied or turned?

Manure Handling Equipment

1. What equipment is used to move and spread the manure?
2. Is this equipment adequate for the acreage size and type of livestock?

Manure Utilization

Manure Application

1. How often is manure applied to the land?
2. At what rate (tons/acre or kg/ha) is manure applied?
3. Is manure applied uniformly across the field or pastures)?
4. What method is used for spreading (broadcasting, injection, etc.)?

Land Area and Application Timing

1. How much land is available for manure application?
2. Are there specific times of year when manure application is avoided (e.g., frozen or snow-covered ground)?
3. How do you decide the best time for application (weather, crop rotation)?

Nutrient Management

1. Is soil testing done to determine nutrient needs before applying manure?
2. Are manure nutrient contents analyzed (e.g., nitrogen, phosphorus, potassium levels)?
3. How do manure application rates align with crop or pasture nutrient needs?

Surface Water Management

Water Protection

1. How far is manure storage & application site from water bodies (rivers, creeks, lakes)?
2. List buffer zones or vegetative barriers to protect water sources from nutrient runoff.

Erosion and Runoff Control

1. List measures to prevent erosion or nutrient runoff during/after manure application.
2. Is manure applied during heavy rainfall or before forecasted storms?

Regulatory Compliance

Compliance with Alberta Legislation

1. Are manure management practices compliant with Alberta's [AOPA](#)?
2. Are there any permits required for manure storage or application?
3. Are records kept of manure production, storage, and application?

Proximity to Neighbours

1. Are there steps taken to minimize odour and fly nuisances for nearby residents?
2. How close are the manure storage and application areas to neighbouring properties?

Future Considerations

Expansion

1. Are there plans to increase the number of livestock or expand the acreage?
2. How will the manure management plan be adjusted for future needs?

Sustainability Practices

1. Are there opportunities to improve the environmental sustainability of manure management (e.g., renewable energy from biogas, reducing nutrient losses)?



References

Manure Management

[Alberta Agriculture and Irrigation](#) WEBSITE

This resource provides guidelines on handling, storing, and applying manure on small-scale operations. It covers environmental best practices, including buffer zones and nutrient management for pasture lands.

Agricultural Operation Practices Act (AOPA)

[Open Government](#) PDF

The AOPA sets out guidelines and regulations for manure management, including storage, application, and runoff prevention to protect soil and water resources. It applies to all livestock operations, including small-acreage farms.

Beneficial Management Practices for Manure Management

[Open Government](#) PDF

This document provides best management practices for the responsible application of manure to land, covering methods to avoid nutrient loss, prevent runoff, and improve soil health.

Livestock Production and Air Quality

[Alberta.ca](#) WEBSITE

A comprehensive resource outlining environmental guidelines for livestock producers, focusing on manure management, protecting water quality, and mitigating air quality concerns.

Soil Testing Guidelines

[Open Government](#) PDF

These guidelines provide instructions for soil sampling and testing to ensure nutrient management plans align with crop or pasture needs. They are particularly useful for determining the appropriate manure application rates.

Green Acreages

[Land Stewardship Centre of Canada](#) WEBSITE

This program supports Alberta producers in implementing environmentally sustainable practices.

References (cont.)

Building & Development Resources

[MD of Lesser Slave River](#) **WEBSITE**

The MD's Planning & Development team governs sensible, sustainable growth that protects the interests of Lesser Slave River communities, and that complies with the Municipal Government Act.

Water Act

[Open Government](#) **PDF**

The *Water Act* supports and promotes the conservation and management of water through the use and allocation of water in Alberta. It requires the establishment of a water management framework and sets out requirements for the preparation of water management plans.

Environmental Protection and Enhancement Act

[Open Government](#) **PDF**

The *Environmental Protection and Enhancement Act* is the primary act in Alberta through which regulatory requirements for air, water, land, and biodiversity are managed

Fisheries (Alberta) Act

[Open Government](#) **PDF**

Provides unique protections for fish that allow action to be taken to prevent the spread of ecological threats to fish, including fish parasites, diseases and genetic contamination of fish.

Wildlife Act

[Open Government](#) **PDF**

The Wildlife Act provides for the protection and conservation of wild animals in Alberta. Integrated Watershed Management Plan – The Lesser Slave Watershed Council Summary: Our shared goals and actions for the region manage land, water and related resources on a whole watershed basis.

Integrated Watershed Management Plan

[Lesser Slave Watershed Council](#)

Alberta's Premises Identification Program was established to plan for, control and prevent the spread of animal diseases. **WEBSITE**

Premises Identification Program

[Alberta.ca](#)

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