

A Guide to Action for **AGRICULTURAL PRODUCERS**

Recommendations for Non-point Source Pollution Management

Agricultural Management

- Complete an Environmental Farm Plan in order to better understand challenges and opportunities for non-point source pollution management on your land.
- Implement beneficial crop, grazing and manure management practices (BMPs) aimed at non-point source pollution management.*

**See reverse side of fact sheet for specific BMPs*

Natural Areas

- Protect riparian areas (shorelines) and wetlands on your land that are currently in good health and undertake riparian and wetland restoration projects in unhealthy areas.

Waste Water Management

- Upgrade or replace private sewage systems that are failing, inadequate, approaching end-of-life, or not meeting current standards.

A Guide to Action for AGRICULTURAL PRODUCERS

Agricultural Beneficial Management Practices

Wetlands and fields in the Battle River watershed



Manure Management

- Do not spread manure on frozen or snow-covered ground. If necessary, increase your manure storage capacity in order to eliminate the need to spread manure in winter.
- Compost manure to reduce the volume produced
- Test the nutrient content of manure and soil to ensure manure applications do not exceed crop requirements. Apply manure based on phosphorus (rather than nitrogen) requirements.
- Consider developing a manure management plan for your operation.

Grazing Management

- Limit livestock access to natural water sources and dugouts and utilize off-site watering systems.
- Utilize grazing techniques such as rotational grazing in order to prevent overgrazing.
- Ensure seasonal feeding and bedding sites are located a minimum of 30 metres from any water bodies.



Cattle along Battle River south of Camrose

Crop Management

- Utilize conservation/minimum tillage.
 - Convert marginal crop land, flood-prone areas, and ephemeral (temporary) wetlands and creeks to permanent and native vegetation.
- Reduce the number of acres in summer fallow by planting cover crops or retaining crop residues or stubble on the land.
- Plant crops along the contours of the land (across rather than up and down the hill slope).

Manure and Fertilizer Application

- Apply only the amount of manure and fertilizer needed to meet annual crop nutrient uptake rates.
- Where possible, apply manure and fertilizer through direct injection.
- Where manure is surface-applied, vertical beaters are the preferred method. Incorporate manure into the soil immediately after application.
 - Do not apply manure, fertilizer or other chemicals in flood-prone areas or along the shorelines of creeks, rivers, lakes and wetlands.



Farmer's field in the Battle River watershed