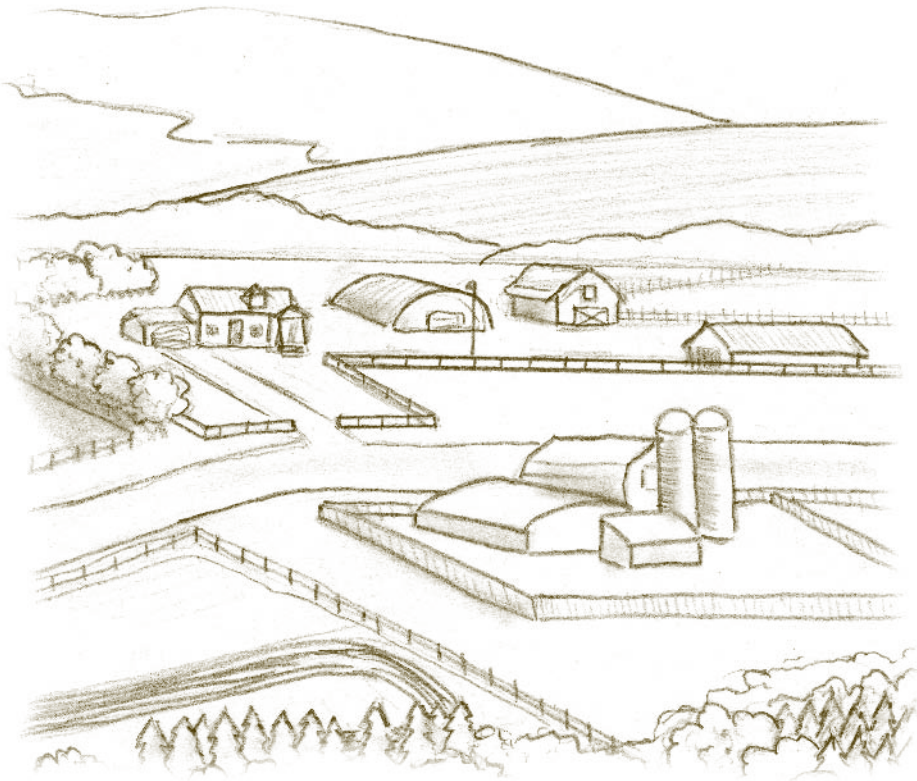


Chapter 1.2

Nutrient Management Planning in Alberta



➔ learning objectives

- List the five components of a NMP in Alberta.
- Briefly describe the role that the *Agricultural Operation Practices Act (AOPA)* has on nutrient management planning in Alberta.

side bar

NMPs in most jurisdictions share several common features including: an estimate of nutrient requirements for a crop and field; an evaluation of the nutrient content of available nutrient sources; and an application strategy to meet nutrient requirements in an efficient and environmentally responsible way.

more info



For more information about AOPA, please contact the NRCB office nearest you, or visit them at www.nrcb.gov.ab.ca.

Many producers are considering livestock manure as an alternative nutrient source to offset fertilizer requirements. NMPs integrate and balance sources of nutrients (i.e., fertilizer, manure and soil) with crop requirements. A NMP is key to ensuring that nutrients for crop production are utilized in an economically and environmentally responsible way.

NMPs in Alberta

A NMP in Alberta consists of the following components:

1. **Field (or site) assessment** – includes soil test information, area, soil texture, estimated length and grade of any slopes, problem soil conditions (e.g., solonchic soils) and limiting physical features such as environmentally sensitive areas (e.g., water bodies).
2. **Manure inventory** – includes estimated nutrient content (from lab analysis or standard values), estimated manure volume(s) and desired information about the animal population or the operation (e.g., number of animals, phase of production, housing and feeding system, etc.).
3. **Nutrient application plan** – includes information about manure application and incorporation methods, equipment calibration, planned crop rotation, cropping system, planned application rate (manure and fertilizer), timing of application and incorporation, and the nutrient on which application is based (i.e., N or P).
4. **Land management plan** – includes information on production practices and other control systems to reduce post-application nutrient losses.
5. **Record keeping system** – includes a system of record keeping that complies with the Agricultural Operation Practices Act (AOPA) record-keeping requirement for manure application.

AOPA

AOPA establishes standards for siting, development and certain management practices for livestock operations in Alberta. While AF is responsible for the Act, the Natural Resources Conservation Board (NRCB) administers the regulations under the Act.

The Standards and Administration Regulation under AOPA establishes standards for manure management in Alberta in five key areas:

- Manure storage facility design
- Manure application limits
- Manure application setback distances from water bodies
- Record keeping
- Soil testing

While manure storage facility design is not a component of this guide, compliance issues relating to the remaining four areas above are discussed in relevant chapters.

summary

- The components of a NMP in Alberta are: a field assessment, manure inventory, nutrient application plan, land management plan and record-keeping system.
- The Standards and Administration Regulation of AOPA establishes standards for storage facility design, application limits, application setback distances from water bodies, record keeping and soil testing.