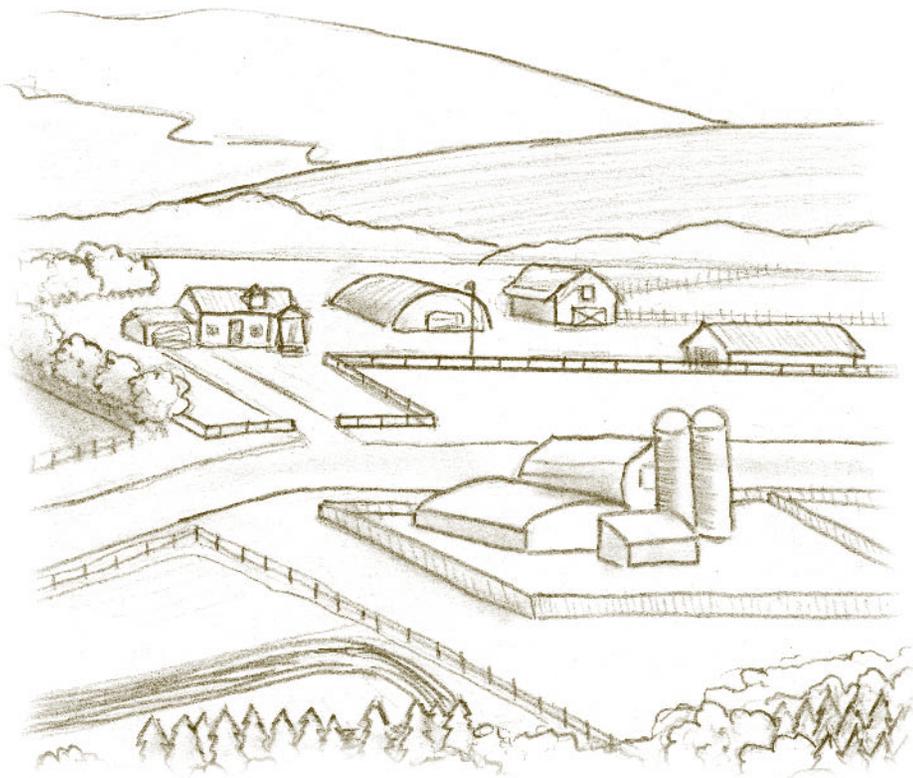


Chapter 1.1

About this Guide



➔ learning objectives

- Describe the objectives of the Nutrient Management Planning (NMP) Guide.
- Identify key resources available in Alberta to complete a NMP.

tip



See the Association of Alberta Agricultural Fieldmen website, www.aaaf.ab.ca, for a list of Agricultural Fieldmen.



Drawing from theory, critical procedures and Alberta-specific considerations, the Nutrient Management Planning Guide is a resource for developing field-scale nutrient management plans. These plans will ensure the responsible use of plant nutrients, from livestock manure or commercial fertilizers, to protect surface water resources.

Objectives of this Guide

The primary objective of this guide is to facilitate nutrient management planning in Alberta. It will:

1. Provide a basic understanding of interactions among soil, nutrients, plants and the environment,
2. Identify and describe key nutrient management planning procedures,
3. Describe management practices and site-specific controls to reduce the risk of nutrient loss to air and water, and
4. Communicate legislated standards on nutrient management in Alberta.

Target Audience for this Guide

This guide is intended as a train-the-trainer resource for extension personnel and service providers. However, it is also a useful resource for crop and livestock producers and students.

How this Guide is Structured

The guide is organized into eight modules. Each module consists of specific activities and topics.

Module 1 Introduction

Module 2 Nutrient Cycling and Interactions

Module 3 Field and Soil Evaluation

Module 4 Manure Inventory and Application

Module 5 Fertilizer Application

Module 6 Determining Nutrient Requirements

Module 7 Record Keeping

Module 8 Land and Production Management

Is There a Recommended Format for a NMP in Alberta?

For NMPs in Alberta, content is more important than form. NMPs must meet specific information requirements (see Chapter 1.2); however, there are no standard formatting requirements.

Resources

Service providers and producers can use several sources of information to complete a NMP, including:

- Government and non-government resource personnel,
- Print and online publications,
- Internet-available tools and calculators.

People

» Extension Specialists and Agricultural Fieldmen

Extension Specialists and Agricultural Fieldmen work for local municipalities throughout the province. Contacting your municipality is a good first step in obtaining information related to nutrient management planning.

» Ag-Info Centre

The Ag-Info Centre (Alberta Agriculture and Food) is an excellent resource for production-related inquiries. The Centre has specialists with extensive expertise in crop and soil fertility issues.

Hours of Operation:

8:00 am to 5:00 pm, Monday to Friday,
except statutory holidays

How to Contact the Centre:

Toll-free (in Alberta): 310-FARM (3276) or
1-866-882-7677

Out of province: (403) 742-7901

» **Certified Crop Advisors**

Certified Crop Advisors (CCA) work for agricultural retailers, fertilizer dealers or as private consultants. They can be valuable sources of information for a wide range of issues relating to crop production, including nutrient management. CCA are accredited through the American Society of Agronomy.

Publications

Alberta Agriculture and Food (AF) Publications Office in Edmonton has many free and priced publications related to crop production, soil fertility and environmental management for agriculture.

To order an index catalogue or hard copies of selected publications, call 1-800-292-5697 (toll-free in Canada) or (780) 427-0391.

Most free publications can be viewed and downloaded (.html or .pdf format) from AF's website, Ropin' the Web, at www.ropintheweb.com.

Internet-Available Tools

In addition to online publications, Ropin' the Web has several tools to assist in developing a NMP. Some of these are described briefly below and are also mentioned later in this guide.

» **Alberta Soil Information Viewer**

This free online viewer allows the user to view and search soils information in the Agricultural Region of Alberta Soil Inventory Database (AGRASID) Version 3.0. Many have found this tool useful when making land management decisions.

To access the viewer homepage on Ropin' the Web, enter "soil information viewer" in the search window.

» **Alberta Farm Fertilizer Information and Recommendation Manager (AFFIRM)**

AFFIRM is a software package that generates customized fertilizer recommendations based on cropping practices, soil and environmental conditions and crop production economics. AFFIRM was developed from Alberta research and can recommend fertilizer rates for over 40 different Alberta crops.

To access the AFFIRM homepage on Ropin' the Web, enter "AFFIRM" in the search window.

» **Alberta Manure Management Planner**

The Alberta Manure Management Planner (MMP) software package is an adaptation of a manure management tool developed by Purdue University (West Lafayette, Indiana, United States) that incorporates Alberta data. Information about an operation's fields, crops, nutrient requirements, manure storage, animals and manure application equipment is used to plan nutrient applications.

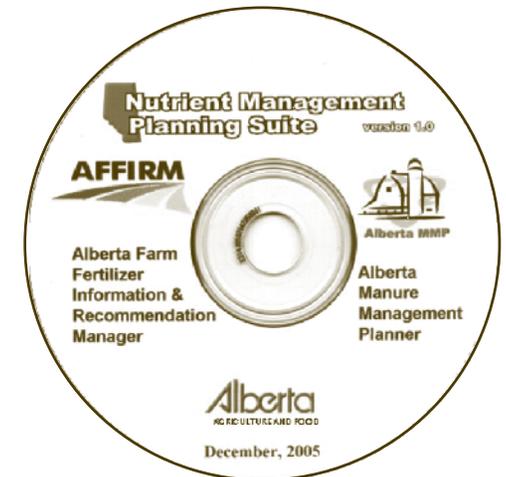
To access the MMP homepage on Ropin' the Web, enter "MMP" in the search window.

Online Calculators

Ropin' the Web also houses several online calculators that relate to crop production, including:

tip

To find a CCA near you, visit the Prairie CCA Board online at www.prairiecca.ca.



tip



Ropin' the Web is updated frequently with new resources.

Check the website regularly to see what's new.



» **Seeding Rate Calculator**

Calculates seeding rates for a wide range of crops based on: desired plant density, germination rate, emergence mortality, row spacing, 1000-kernel weight and the number of acres to be seeded.

» **Forage Seed Mixture Calculator**

Calculates a seed mix and estimates a seed density for drills or broadcast seedings for any grouping of plant species in the list.

» **Grains, Forage and Straw Nutrient Use Calculator**

This calculator allows producers to estimate the crop uptake and removal of nitrogen (N), phosphorus (P), potassium (K), sulphur (S) and calcium (Ca).

To access the homepage for online calculators on Ropin' the Web, enter "crop calculators" in the search window or click on the "Calculators" tab on the toolbar above the main viewing window.



summary

- The main objective of this guide is to provide an understanding of the principles and practices of nutrient management, with the goal of facilitating nutrient management planning.
- There are many resources available to support the development of a NMP, including public and private sector experts, extension publications and web-available tools and calculators.