

INTRODUCTION

A good portion of what's called nutrient management involves routine chores. Collecting and storing manure, and applying it along with other fertilizers to cropland are part-and-parcel of most livestock operations.

What hasn't been routine until recently is **planning** – specifically, accounting for and recording all the nutrients you have, which nutrients you'll need and when, and how much to apply to your land base.

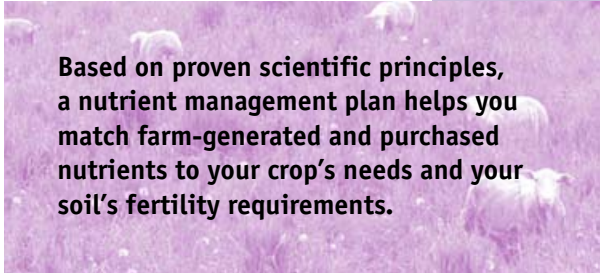
In the last decade, greater societal awareness regarding water quality and a better understanding of how nutrients cycle through the environment have put the spotlight on all on-farm nutrients, but especially manure. Tools to help farmers balance nutrients based on agronomic requirements have been refined. As a result, nutrient handling has evolved into a more formal set of farm practices known as nutrient management planning.

Nutrient management planning is a reality of farming life that's here to stay. Legislation may require you to develop a nutrient management plan or strategy, or both. Whether you're required to or not, the good news is that planning can protect water quality and save you money. (For more information on legislative requirements and nutrient management plans and strategies, please go to page 112.)

Since your farm is like no other, your plan will be unique, customized to your goals and circumstances. It's also very much a “living” document; one that can and should change with your operation.

In the nutrient management planning process:

- ▶ all nutrients are **inventoried** – including nutrients found in the soil and in a growing or harvested crop, and those considered to be deficient
- ▶ all nutrients are **managed** – according to land base, production goals, proximity to water resources, farmstead layout, equipment, and safety concerns.



Based on proven scientific principles, a nutrient management plan helps you match farm-generated and purchased nutrients to your crop's needs and your soil's fertility requirements.



Preparing nutrient management documents can give you greater insight into aspects of your operation that may not have received much scrutiny to date. In the process you can ensure that you are protecting air and water quality for the long term.

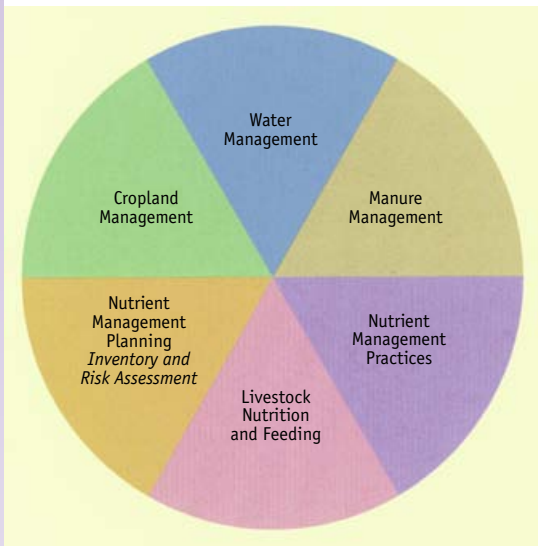
The process integrates the calculation of:

- ▶ application rates
- ▶ separation distances, and
- ▶ acreage needs

with

- ▶ farmstead planning
- ▶ odour issues and neighbourly relations
- ▶ application technology
- ▶ soil and water conservation practices, and
- ▶ contingency plans.

While your plan may be detailed, it's also “big picture.” Nutrient management planning involves a systems approach – understanding that a change to any one component will affect other components and the entire system.



Nutrient management planning is most effective when producers integrate a systems approach to changes planned for their operation.

BENEFITS

Saves money

- ▶ you may be surprised to learn how many nutrients are present but unaccounted for in your operation's manure and soil, and how much money can be saved by reducing commercial fertilizer purchases

Optimizes crop yields

- ▶ allows recycling of nutrients over entire land base, supplying crops with commercial nutrients only when required
- ▶ improved soil health from addition of organic materials

Protects soil and water resources

- ▶ a risk assessment is part of the nutrient management planning process, so you can store, handle and apply manure and nutrients with greater assurance of environmental protection
- ▶ the risks of over-application and nutrient loss are reduced by accounting for all nutrients

Integrates best management practices

- ▶ many of the steps in nutrient management involve best management practices – meaning they're practical, proven, and protect the environment
- ▶ you'll focus on taking an integrated (or systems) approach to management – not just for nutrients, but all components of your operation

Increases options

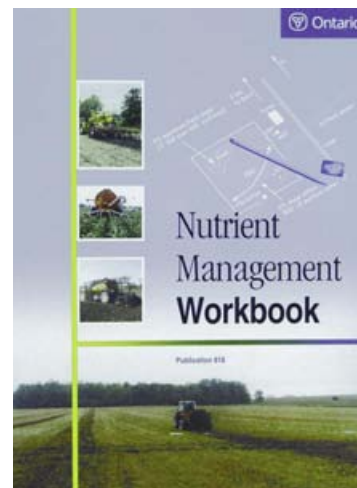
- ▶ by putting it all down on paper, you'll see a range of options

Avoids conflict

- ▶ the process shows ways to minimize farm-generated odours, and thus the potential for nuisance complaints from neighbours

Proves diligence

- ▶ your efforts are a testimony to your stewardship and reflect well on you and on the agriculture sector
- ▶ producing high quality products in environmentally responsible ways generates consumer confidence
- ▶ having a contingency plan demonstrates your preparedness for the unexpected



The *Nutrient Management Workbook* and NMAN computer software are tools to help develop your customized NM plan.



“There’s a lot of negativity about nutrient management plans. I think most of it has to do with people not understanding it. But once you understand the purpose of it, how it helps you manage manure better, and the safety for the environment – personally, I think it’s good.”

Erwin Horst, Perth County

CHALLENGES

Generates paperwork

- ▶ you may be spending more time at your desk or on the computer – try to remember you’re gathering some vital benchmark information about your operation that you can use
- ▶ as a living document, your plan needs to be flexible – to change with your operation

Incurs costs

- ▶ if you do the paperwork yourself, there will be a cost in terms of your time
- ▶ if you hire a consultant to help prepare your plan, the fee will depend on the size of your farm and the complexity of the plan

Preparing a nutrient management plan should be considered an essential part of farm business planning today.

10 STEPS TO NUTRIENT MANAGEMENT PLANNING



Nutrient management planning is a 10-step process. It’s also a continuous process – throughout the season, and from year to year, wherein you’ll be re-evaluating your plan based on experience and new developments in your operation.

This book is laid out for easy reference to information regarding each of the 10 steps. Look for the step numbers in page margins.

WHERE THE ENVIRONMENTAL FARM PLAN FITS IN

If you've participated in the Environmental Farm Plan (EFP) program, you're already one step ahead. Nutrient management planning builds on the risk-assessment and planning process started with EFP, and continues to develop an action plan to deal with the identified nutrient management-related risks in a farming operation.

If you haven't yet completed an EFP, get involved! You'll be equipping yourself with risk-assessment and corrective tools that were developed by farmers for farmers. The plan covers a wide range of agricultural environmental issues – 23 topics in all.

To complete a farm plan, participants attend workshops facilitated by the Ontario Soil and Crop Improvement Association (OSCIA). Farmers, hired by OSCIA, review the environmental farm plans, and when "deemed appropriate" by OSCIA are often used as prerequisites for agri-environmental financial assistance programs.

A nutrient management plan is a more detailed plan, with a focus on fewer topics, namely those pertaining to fertility and manure management (i.e., seven of the above mentioned 23 topic areas).

Both programs give strong testimony to the proactive environmental stewardship of its participants.



The EFP program is voluntary. EFPs are confidential and are reviewed by farmers during peer review. EFPs and NMPs should be updated at least every five years to address changes in your farm operation.

The Ontario Farm Environmental Coalition and its partners promote the:

- ▶ **benefits to farmers who adopt nutrient management planning**
- ▶ **strategic utilization of on-farm nutrients**
- ▶ **adoption of soil, water and nutrient stewardship practices**
- ▶ **recognition by rural neighbours of the benefits of nutrient management planning, and**
- ▶ **acceptance of nutrient management planning by all residents of rural municipalities.**

