# BENEFICIAL **MANAGEMENT PRACTICES**

**Environmental Manual** for Crop Producers in Alberta







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The primary purpose of the *Beneficial Management Practices: Environmental Manual for Crop Producers in Alberta* is to assist crop producers in selecting and implementing beneficial management practices.

While the authors have taken every effort to ensure the accuracy and completeness of the *Manual*, the *Manual* should not be considered the final word on the areas of law and practice that it covers. Producers should seek the advice of appropriate professionals and experts as their individual situations may differ from those set out in the *Manual*.

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## **Foreword**

### **Beneficial Environmental Practices for Crop Producers in Alberta**

This manual was prepared for Alberta crop producers to create greater understanding of beneficial environmental practices for crop production. It was developed through the cooperation of government, industry, and interested stakeholders. Information presented in this manual is based on the best available research data and years of experience. The manual provides a range of management options so producers can choose those alternatives best suited to their own operation.

This manual is a living document. It will be updated regularly to incorporate changes in regulations and new information on environmentally sound practices.

### Developed by:

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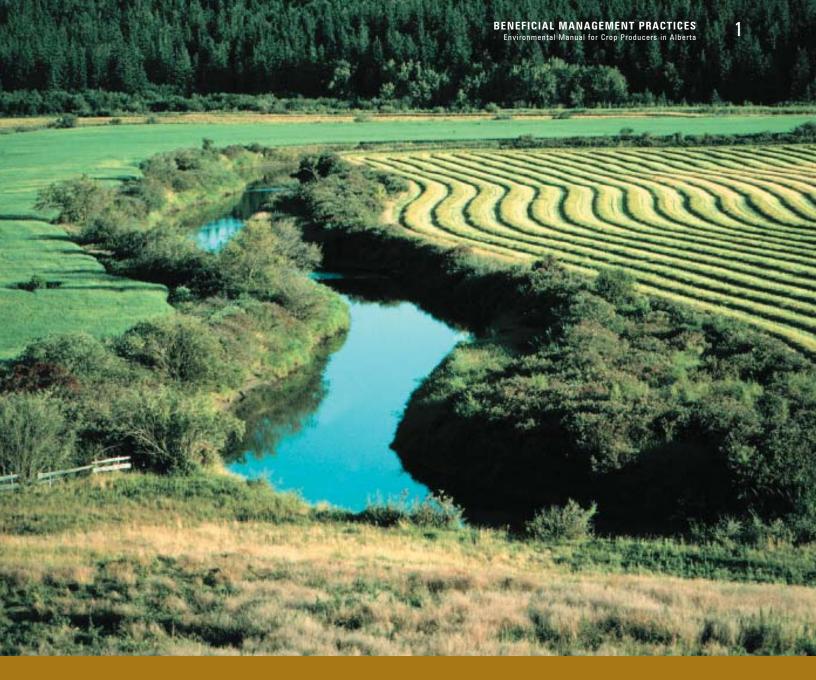
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Reduced Tillage Linkages

### **Note:**



- throughout this manual, this symbol identifies where additional information is available.

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# CHAPTER 1.0

# Introduction

This chapter discusses **beneficial management practices** and environmental stewardship. Beneficial management practices are practices that benefit the environment while being practical for producers to meet or exceed legal requirements.

### 1.1 Purpose

This manual has been prepared for you, an Alberta crop producer, to provide information about a wide range of **beneficial management practices** (BMPs) suited to crop production in Alberta. BMPs are practices that benefit the environment while being practical for producers to meet or exceed legal requirements.

BMPs improve a farm's soil, water, air and wildlife habitat resources, and so contribute to the farm's overall sustainability and to the farm family's quality of life. BMPs also contribute to the environmental health of the surrounding landscape and communities.

Chapter 2 describes the environmental considerations related to crop production. Chapters 3 to 7 discuss farming practices that reduce or prevent impacts on soil, water, air and wildlife habitat. Chapters 8 and 9 describe community and legal considerations in crop production. Chapter 10 is a glossary of terms used in the manual; words defined in the glossary are highlighted in bold when they first appear in the main text of the manual. The manual provides both metric and imperial units in most instances; information on converting units is provided at the end of the manual.

This manual is aimed at producers who are striving for excellence in environmental stewardship. Therefore, many of the practices described in Chapters 3 to 7 go beyond the basic legal requirements, outlined in Chapter 9, that Alberta producers must meet.



→ Beneficial management practices contribute to a healthy landscape.
Courtesy of AAFRD

Each farm is unique. Not all of the practices in the manual are suited to every cropping operation. You will need to consider the various options, choose those best suited to your needs, and adapt them to the specific conditions on your farm.

If you are an experienced crop producer, this manual can help you enhance your stewardship of the environment. If you do not have a strong knowledge of crop production, you will need to consult other information sources – such as experienced farmers in your area, college and university courses, other publications, and professional agronomists – because all aspects of farm management need be taken into account when deciding on the best practices for your farm.

### 1.2 Background

Most agricultural producers in Alberta value the environment and feel strongly about their role as stewards of the environment. They also understand that, for their farm to remain productive and for Alberta's agricultural industry to be competitive on world markets, they need to safeguard environmental quality.

The competition for land and water resources has increased in recent decades as Alberta's population and economy have grown. This trend makes it increasingly important for everyone, including farmers, to manage these resources wisely.

Implementing BMPs suited to your farm is an important component in building and maintaining an operation that is economically sound as well as socially and environmentally responsible.



Competition for land and water resources makes it important to manage these resources wisely.
Courtesy of AAFRD