

**DISCLAIMER:** PTAC does not warrant or make any representations or claims as to the validity, accuracy, currency, timeliness, completeness or otherwise of the information contained in this report , nor shall it be liable or responsible for any claim or damage, direct, indirect, special, consequential or otherwise arising out of the interpretation, use or reliance upon, authorized or unauthorized, of such information.

The material and information in this report are being made available only under the conditions set out herein. PTAC reserves rights to the intellectual property presented in this report, which includes, but is not limited to, our copyrights, trademarks and corporate logos. No material from this report may be copied, reproduced, republished, uploaded, posted, transmitted or distributed in any way, unless otherwise indicated on this report, except for your own personal or internal company use.

PROGRESS REPORT- NATIVE VEGETATION/WETLAND INVENTORY AND GIS  
MAPPING: PARKLAND NATURAL REGION  
RON BJORGE, ALBERTA SUSTAINABLE RESOURCE DEVELOPMENT  
JANUARY 2003

BACKGROUND

The Parkland Natural Region, covering about 10% of Alberta, is the most heavily impacted Natural Region in Alberta. It is located between the drier grass covered grasslands to the south and the wetter more heavily treed Boreal areas to the north and west. This study focused on the Central Parkland Sub Region, which covers the majority of the land in this Natural Region. Major centres located within the study area include Lloydminster, Edmonton, Camrose and Red Deer.

It is characterized by a climatic and topographic regime well suited to agriculture. Today most of the native vegetation has been lost to agriculture development, infrastructure and other industry. Some have suggested that only about 10% remains a native land, although this number has not been quantified. The remaining native land is very important as it is from this land and associated water that almost all plant and animal life depends.

In spite of the amount of habitat alteration that has occurred throughout the Parkland, and abundance and diversity of biodiversity persists, mostly on remaining native lands. For example much of the provinces waterfowl and white tailed deer come from this area.

Also several "threatened species occur here including piping plover, peregrine falcon, northern leopard frog, Sprague's' pipit, and loggerhead shrike occur here.

This project provides a scientific basis for indicating where remaining native vegetation occurs, their size and distribution and if this native land is land is on public or private ownership. The project utilized a combination of available data, new interpretation of available data and newly acquired data to undertake the project.

The major result of this project will be a GIS map, which will provide a comprehensive basis for planning and running conservation initiatives, agricultural and industrial activity and research in this important landscape.

The project is coordinated by Alberta Sustainable Resource Development, Red Deer with involvement of many partners. These included Alberta Conservation Association, North American Waterfowl Management Plan/Ducks Unlimited Canada, Canadian Wildlife Service, Nature Conservancy of Canada, Alberta Research Council and Petroleum Technology Alliance Canada.

PROJECT OBJECTIVES

The project was designed to answer the following questions:

Where are our native vegetation patches and wetlands?

How many native vegetation patches and wetlands do we have and what size are they?

What is the dominant vegetation associated with our remaining lands?

Is the remaining native vegetation and wetlands on public or private land?

To answer these questions the following objectives were established:

- determine the amount, type (grassland/shrub, deciduous trees, coniferous trees) and distribution of size for remaining native vegetation and trees.
- determine number, size and distribution of wetlands.
- determine the amount of remaining native vegetation and wetlands that occur on public vs. private land.
- conduct analysis of the above in relation to major geographic areas including watersheds, wildlife management units and municipalities.
- present all data in GIS database.

### RESULTS ACHIEVED TO DATE

- all data layers (land ownership, vegetation i.e. native grass/shrub, and deciduous and coniferous trees, and standing water) have been completed for the study area and placed in a GIS environment. A small area north of Vermilion Alberta will have the grass layer updated in spring 2003, based on photography from 2002.
- a contract has currently been set to add flowing water data, which is available, but is not included in the current data. This should be completed by mid February 2003.
- a protocol has been established for summarizing key components of the data (amount, size and location of native vegetation parcels and wetlands and association with public vs. private land) and has been applied to Lacombe County.
- a contract is being established with a GIS familiar company to conduct analysis as outlined in the previous report. This should be completed by March 31, 2003.
- data has been made available to a variety of partners in response to data requirements for ongoing projects.
- A final report will be prepared in 2003.

### FINANCIAL MANAGEMENT

The Alberta Conservation Association administers all funds contributed by partners. Here there are adequate resources to ensure completion of the two contracts outlined above (adding the moving water layer and conducting analysis of basic results i.e. amount, size and location of native vegetation parcels and wetlands and association with public and land), in addition to any other lesser costs associated with completion of the database. Any funds remaining will be utilized in creation and distribution of the final report.

PROJECT CONTACT

Ron Bjorge  
Alberta Sustainable Resource Development  
Fish and Wildlife Division  
4911-51 St  
Red Deer, Alberta  
T4N 6V4  
Ph 403-340-7699  
Email: [ron.bjorge@gov.ab.ca](mailto:ron.bjorge@gov.ab.ca)