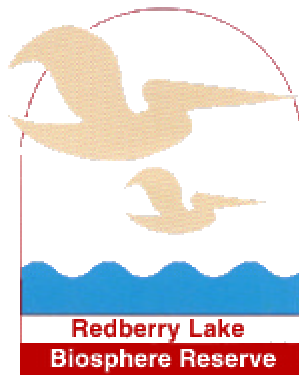


REDBERRY LAKE BIOSPHERE RESERVE

COOPERATION PLAN

Prepared for:



Hafford, Saskatchewan

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FORWARD

In the spring of 2001, the Community Committee for Redberry Lake Biosphere Reserve initiated a sustainable community planning process. This series of workshops generated a plan entitled, *Redberry Lake Biosphere Reserve: A Community's Plan for Sustainability*. This plan was enthusiastically received by the Canadian Biosphere Reserves Association at the Annual General Meeting in Sorel, Quebec in June 2001. CBRA members determined that similar plans would be valuable for Canada's network of biosphere reserves to strengthen capacity and better inform the national strategic planning process.

On behalf of the Canadian Biosphere Reserves Association, Parks Canada urged the Steering Committee for the World Summit on Sustainable Development (WSSD) to provide support for a national project to work with communities, businesses, government agencies, non-government organizations, and universities in interested biosphere reserves to develop a standardized cooperation plan. These cooperation plans would then be part of Canada's contribution to the World Summit on Sustainable Development that is scheduled to take place in Johannesburg, South Africa.

The process to expand *Redberry Lake Biosphere Reserve: A Community's Plan for Sustainability* into a cooperation plan consisted of a multi-stakeholder meeting in February 2002 and a follow up implementation session with the Community Committee and interested volunteers. In addition to creating the *Redberry Lake Biosphere Reserve Cooperation Plan*, these activities resulted in a supplementary document entitled *Implementation Strategy for 2002/2003: Moving Forward by Working Together*. The latter document is an operational document that details task timelines for the six projects that the community deemed critical to start within the next few years. The projects deal with agriculture, health, community outreach, and environmental education.

INTRODUCTION

A biosphere reserve is an area selected by a national committee, proposed by its country and designated by UNESCO (United Nations Educational, Scientific and Cultural Organization) to demonstrate innovative approaches to living and working in harmony with nature. There are more than 400 biosphere reserves in 91 countries and each of them is typical of one of the world's major ecosystems.

The word "Biosphere" means "sphere of life" and represents all the living parts of planet Earth. The word "Reserve" means that it is an important area of the world that has been recognized for its special qualities. UNESCO prefers this term because it can be translated and understood in many countries. This term does not mean that these places are set aside from human use and development - human activity and the health of people and communities are part of the biosphere reserve program. Simply put, the words "Biosphere Reserve" highlight a special area within the biosphere where people demonstrate better approaches to conservation and sustainable resource use.

In the standard configuration for a biosphere reserve, there are three parts - a core area, a buffer area and an area of cooperation. The core areas are protected areas that act as reference points on the natural state of the ecosystems represented by the biosphere reserve. Information from these core areas may be used to assess the sustainability of activities, or the maintenance of environmental quality, in surrounding areas. Also, managers of the core areas may contribute resources to projects developed with residents, businesses and other partners of the biosphere reserve in the adjacent buffer area. In this region, an effort is made to deal with boundary issues affecting the protected area and other nearby land users.

The large outer part of a biosphere reserve is the area of cooperation. This is the area where people live and work, and where the goal of sustainable resource use is explored and encouraged through research, education and community-based planning. This term emphasizes the role of cooperation as a way to address the objectives of a biosphere reserve.

A committee or organization with strong community representation normally provides direction for biosphere reserve activities, in Canada. The authority over the planning and management of land and water use, however, is not changed when a biosphere reserve is designated in Canada. Government jurisdictions and private rights remain as they were before designation. A stakeholder's signature on a nomination document for a biosphere reserve implies only a moral commitment, not legal commitment, to cooperate with others to achieve the objectives of a biosphere reserve.

The three major functions of a biosphere reserve are: the conservation of biodiversity, sustainable development and support for logistics. The term “logistics” refers to the activities of education, research, training and monitoring which partners in a biosphere reserve provide in support of conservation and development. Education, training, research, and monitoring build local capacity to make sound decisions and implement them. The planning of these activities helps residents in a biosphere reserve to identify and meet their own needs, in their own way. Additionally, it provides opportunities to draw together broad-based support from all sectors of the community or communities associated with the biosphere reserve.

Residents and organizations in a biosphere reserve address conservation and sustainable development in a variety of ways that are meaningful for them, and take the opportunity to share their discoveries with others. This often occurs informally, as people in the surrounding region notice the development of community-based expertise in a biosphere reserve, and want to find out more about it.

Formal networks are also used to share information. The Canadian Biosphere Reserves Association supports national coordination and communication for its member biosphere reserves. At the same time, the Canadian Biosphere Reserve Student and Research Network uses volunteers to help researchers prepare their studies in or about biosphere reserves. Internationally, a world network of biosphere reserves facilitates meetings and exchanges among coordinators of biosphere reserves. UNESCO supports this network and helps to share positive examples among countries. There are joint projects and studies at both national and international levels.

UNESCO has been encouraging biosphere reserve coordinators to develop Management Plans or Coordination Plans to increase their effectiveness. In Canada, where most coordinators have no authority over land use, biosphere reserve activities depend on cooperation. For this reason, the term *Cooperation Plan* is preferred and local participation is emphasized. This plan, developed for the residents, businesses and other organizations and agencies of the biosphere reserve, links the goals for the three functions of the biosphere reserve to the challenges and actions that best reflect local needs and desires. This cooperative approach encourages innovation, fosters pride in local achievements, and creates a desire to share these experiences within Canada and with other countries around the world.

BACKGROUND

Location

Redberry Lake is one of Canada's eleven UNESCO-designated biosphere reserves. It is situated in southwestern reaches of the provinces about 80 kilometres northwest of Saskatoon. Its two closest neighbours are Waterton Biosphere Reserve to the west and Riding Mountain Biosphere Reserve to the east.

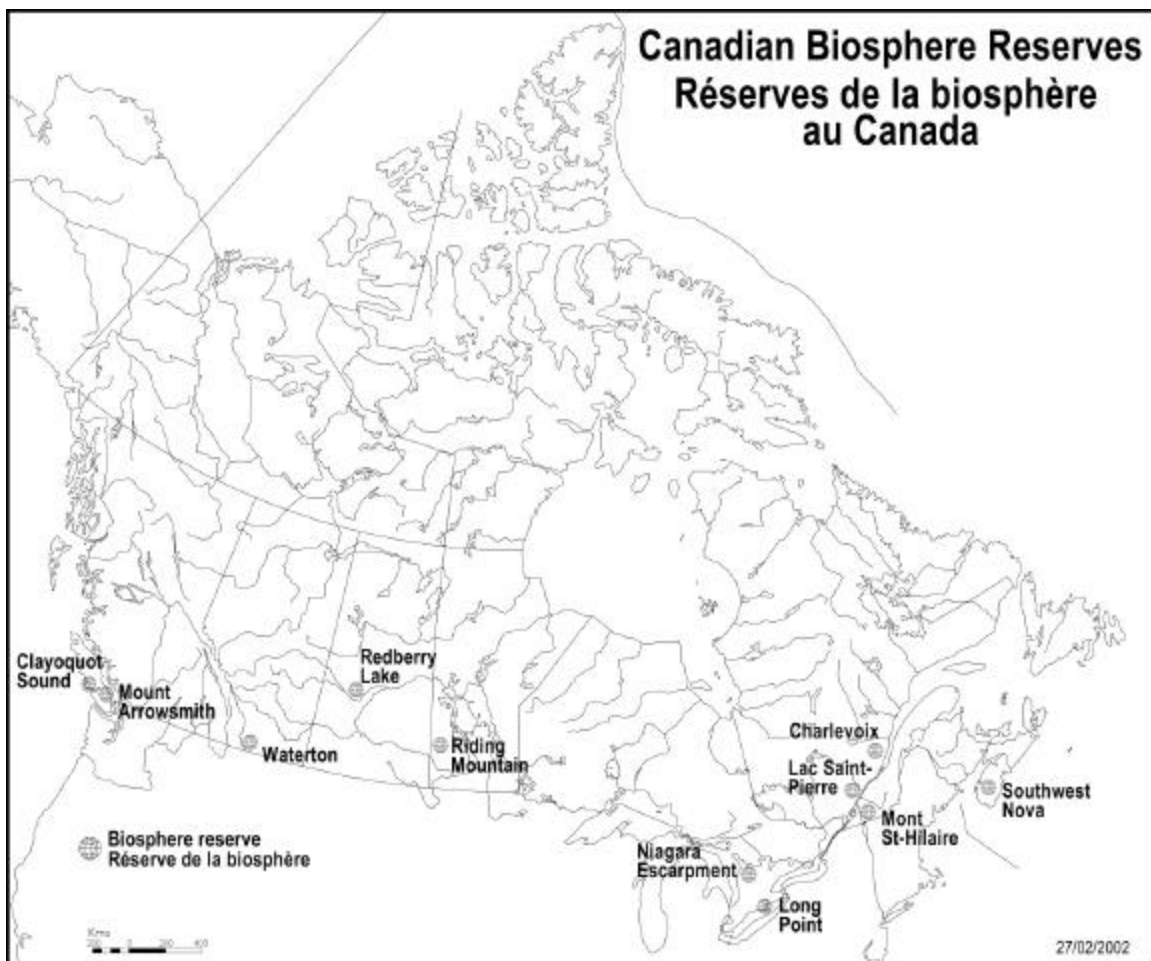


Figure 1. Canada's Biosphere Reserve Network

Redberry Lake Biosphere Reserve coincides with the Redberry Lake watershed. At the center of this closed watershed is a saline lake called Redberry Lake. Several jurisdictions are nested within or overlap with the watershed (Refer to

Figure 2). They are the Rural Municipality of Redberry (RM 435) as well as much smaller portions of the Rural Municipalities of Meeting Lake (RM 466), Great Bend (RM 405) and Douglas (RM 436). The Town of Hafford is also located in the heart of the watershed a short, ten-minute drive west of Redberry Lake.

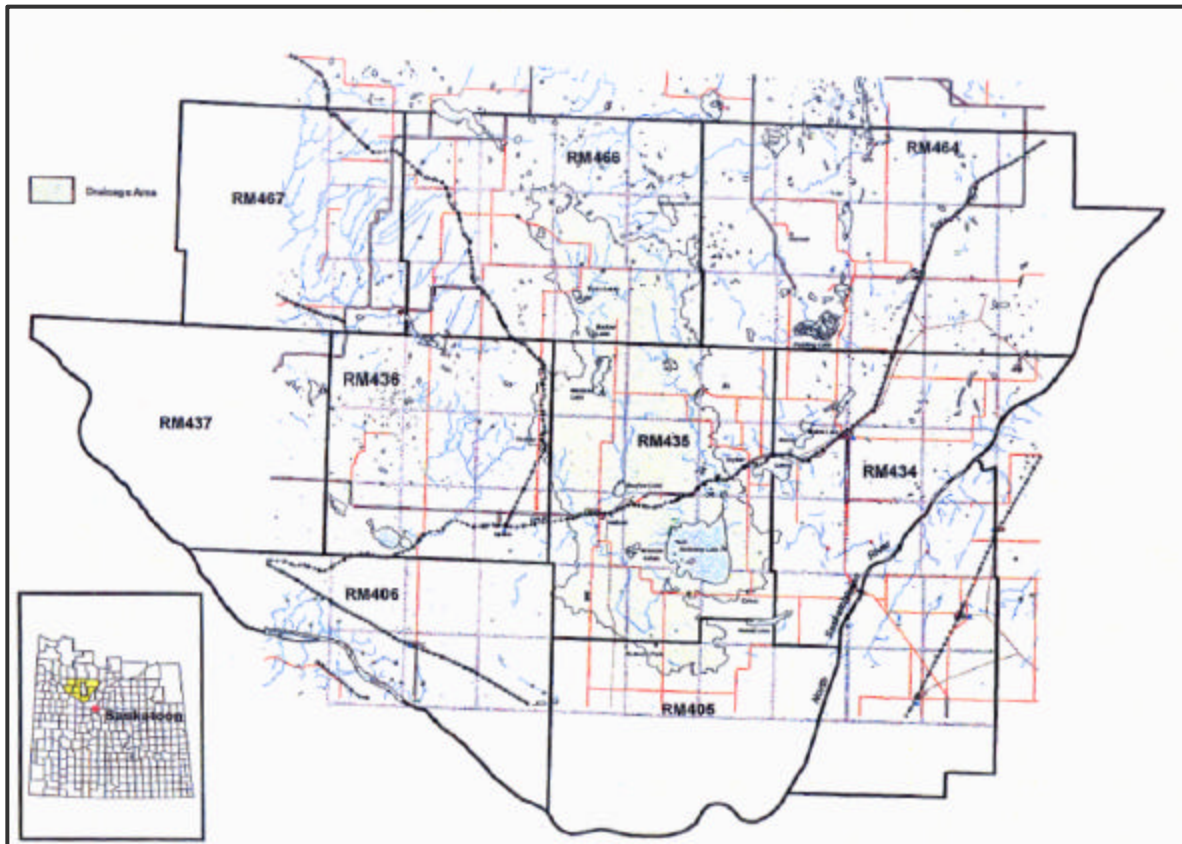


Figure 2: Jurisdictions within Redberry Lake Biosphere Reserve

Structure

Redberry Lake Biosphere Reserve is divided into three main parts depicted in Figure 3: a core area, a buffer area and the area of cooperation. The core area consists of Redberry Lake, the four islands within it as well as a major peninsula. This region accounts for 5,600 hectares. The lake and its islands are designated a Federal Migratory Bird Sanctuary. The islands are also Wildlife Refuges under Provincial jurisdiction, and part of the Federal Ecological Monitoring and Assessment Network (EMAN) and the Provincial Representative Areas Network.

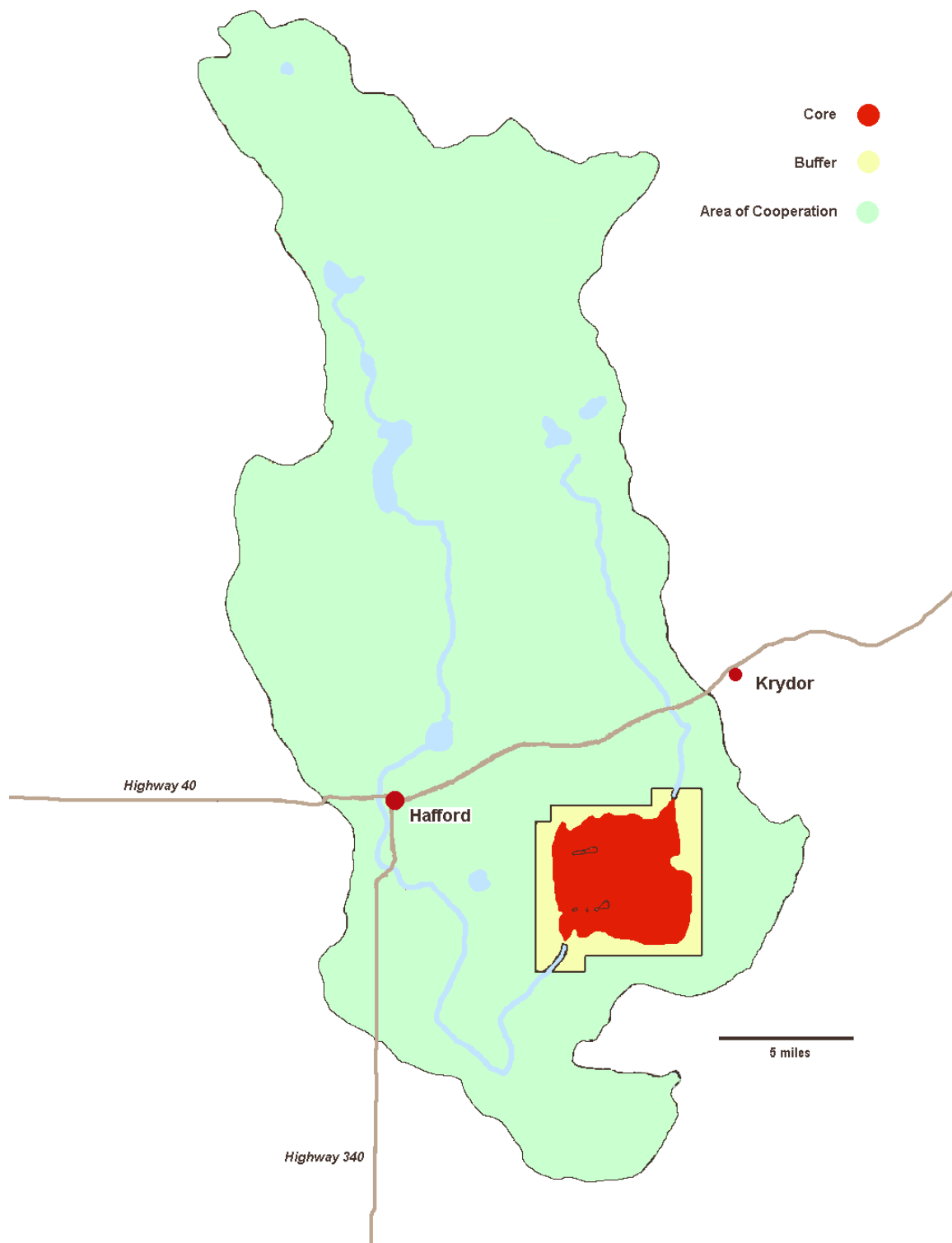


Figure 3: The Areas of Redberry Lake Biosphere Reserve

The surrounding buffer is 6,300 hectares and includes the portion of the shoreline that is within the Redberry Lake Regional Park. The buffer zone consists of the lake shoreline and the uplands of the watershed that terminates in Redberry Lake. The buffer consists of both Crown and private lands. The area coincides with several special designations, including a Federal Ecological Monitoring and Assessment Network site, a Provincial Representative Areas Network site, and a Regional Park. Some parcels of land within this zone are designated as Critical Wildlife Habitat. Furthermore, in 1988, the Rural Municipality of Redberry #435 recognized the importance of the core area and enacted zoning bylaws to ensure that environmentally inappropriate development was prevented within 1 mile of the lake and shoreline.

The area of corporation includes the lands adjoining the park to the full extent of the watershed, approximately 100,300 hectares. The land within the area of cooperation includes crown lands and privately owned lands, under the jurisdictions of the Rural Municipalities of Redberry Lake, Meeting Lake, Great Bend, and Douglas.

History

In 2000, Redberry Lake received the biosphere reserve designation, making it Saskatchewan's first and only biosphere reserve. The beginning of the planning process that ultimately made the region deserving of such international recognition began much earlier with the formation of the Redberry Pelican Project (Canada), a non-profit society. The society formed in 1989 with the goal of promoting environmentally sound ecotourism development. The Society then built a year-around research, education and interpretation center (the Stuart Houston Ecology Centre), developed a small network of nature trails and designed and implemented a unique video monitoring system for sensitive nesting sites.

It was not until the winter of 1996, that the Society first became aware of the biosphere reserve concept when a visiting local biologist, Jacques Sirois, pointed out that the Redberry Pelican Project (Canada) Foundation was already using the biosphere reserve approach. Upon realizing the connection, the Society formally decided to become involved with the program.

To this end, the Director General for the Redberry Pelican Project (Canada) Foundation devoted staff and resources to assemble the nomination document and to enhance understanding of the ecosystem and economic sustainability as central tenets of the biosphere reserve. The Director General attended a meeting of the Canadian Biosphere Reserves Association in 1998 and discovered that other regions were experiencing challenges similar to those at Redberry Lake. National linkages with this network were seen to offer considerable benefit in dealing with contentious land use issues. Within a year, the

nomination document received municipal and provincial support, and was enthusiastically accepted by UNESCO and received its Biosphere Reserve designation in 2000. Eventually, a Community Committee was established to replace the Society as a governing body. The Society continues to serve as a link between the Community Committee and the Technical Committee.

From the beginning, the Community Committee for Redberry Lake Biosphere Reserve adapted its goals from the Seville Strategy. They are:

- To be a model for the conservation of natural and cultural diversity;
- To be a model for environmentally sustainable land management practices and community cultural and economic sustainability;
- To be a centre of excellence for research monitoring, education and training; and
- To be a model to Canada and the world of the application of the biosphere reserve concept.

These goals remain the same today. Recent community planning processes, however, have enriched the relevance of these goals to the daily lives of local people. These goals have been re-interpreted in words of local people for inclusion in the Cooperation Plan. This plan effectively represents an extension in the commitment of local people, government, non-government organizations, businesses and educational institutions to work together.

Land Use

The predominant land uses in the region are agriculture, ranching, and mixed farming. Some of the Crown land in the buffer zone is leased for agricultural use, primarily grazing. Much of the agricultural land has limitations and some is marginal. Production has been poor in recent years due to drought conditions. Many producers have increased the size of their operations in hopes of achieving greater profit margins, however, this activity comes with greater financial risk.

All the basic services are available in Hafford to support an expansion in tourism activity. The economy is expected to benefit from emergent ecotourism, and recreation industries. Greater than 180 bird species reside or visit Redberry Lake annually, making it a hot-spot for bird watching. Among the greatest attractions are the White American Pelican and the Whooping Crane.

The Regional Park within Redberry Lake Biosphere Reserve features cottages and recreation facilities along the Northwest shore of the lake. Sailboats and swimmers can be seen using the lake on hot summer days. There are a bible

camp and a sailing club on one shore, a rough institutional campsite and the Regional campground on another. Hunting of white-tailed deer and waterfowl are also popular activities.

Cultural and Social Dimensions

The residents throughout the region are primarily of European descent and many (50%) speak Ukrainian within the Town of Hafford. In outlying regions, the cultural fabric is a patchwork quilt of French, English, German and Belorussian communities.

The age structure of the region provides even greater insight, highlighting regional shifts. The Rural Municipalities found within Redberry Lake Biosphere Reserve demonstrate a notable difference from the population of the Town of Hafford. The average age of the population in the Rural Municipalities extends from 36.1-40.5 years. The average age in Hafford is much higher (51.7 years). This difference reflects the tendency for seniors to move to town for greater access to services such as health care, and groceries. Younger age groups, however, are declining by virtue of rural depopulation. Most notable have been the declines in the Rural Municipalities of Redberry and Meeting Lake that declined by 20% and 18.5%, respectively between 1991 and 1996.

Rural depopulation has affected all of the Rural Municipalities forming part of Redberry Lake Biosphere Reserve. This decline results from the evolution of agriculture in Saskatchewan characterized by fewer but larger farms that are more reliant on inputs and technological advancements to work the land. This trend is a slow transition from the family farm to the industrial scale farm that bears greater financial risk and requires more intensive use of the land to sustain high yields. Small family farms are having difficulty surviving until such time as the debt of attempting to farm becomes too high for supplementary income to support it and the land is sold. This has led to out-migration.

The overall health and well-being of the region correlates with the level of education, employment and income of local people. Redberry Lake Biosphere Reserve is mostly contained within the Parkland Regional Health District. This area is noted to have the 2^d-3rd lowest education and income levels among peer health districts in the Province of Saskatchewan (Berg, pers comm. March 3, 2001). Only 21% of the residents in the Parkland Health District have a post-secondary education. The average annual income for 1995 was \$35,171/household.

Infant mortality has remained stable and the average birth weight continues to be healthy in spite of low-income levels. The quality of medical care accounts for slight increases in the average lifespan. The most common causes of death are lifestyle and age related, and include respiratory infections, heart disease,

respiratory cancer, diabetes, prostate cancer and breast cancer. To date, there is no clear evidence of health problems directly attributable to environmental causes.

The demographic character of the Redberry Lake Biosphere Reserve is critical in the identification of suitable actions and the design of viable and effective strategies for achieving watershed-level sustainability. The economic relationships, political jurisdictions and social support networks extend far beyond the boundaries of the biosphere reserve. This situation increases the potential for social impacts and careful planning is required to ensure the equitable treatment of all citizens. Most marginalized are the young people that feel disempowered and seniors that are isolated from family and loved ones as a symptom of out-migration to distant cities by sons and daughters, seeking employment and fiscal stability.

Past Projects or Activities

The Redberry Pelican Project (Canada) foundation that had championed the Redberry Lake Biosphere Reserve continues to be an advocate for conservation and sustainable development. Many activities pre-dated the designation and demonstrated a strong commitment to the principles of biosphere reserves.

Research included a Lakeshore Management Study prepared by BEAK and Associates, the information piece and bibliography for the MAB nomination, an assessment of agricultural production and community resources prepared for the larger community by the Aspen Region Economic Development Association, and a Conservation Plan prepared under the Bird Studies Canada (Bird Life International) program. Monitoring endeavours focused on agricultural production (crops and livestock), water (quality, levels, and flow), and wildlife, especially colonial nesting waterbirds (counts, disease, and endangered species). Education and training projects included internships in ecotourism development, wildlife and endangered species monitoring, and wildlife viewing guidelines, in addition to providing resources and programming for primary and secondary school groups. The Stuart Houston Ecology Centre featured educational programs for area residents, tourists, and student visitors. The foundation's web site also provided a direct, live link to monitor the lake.

In 1999, Redberry Lake Biosphere Reserve initiated a project to develop ecotourism standards to guide the creation and promotion of ecotourism products for Canadian Biosphere Reserves. This project has since taken on a life of its own and evolved into a national certification program for sustainable tourism administered through the Sustainable Tourism Association of Canada.

Most recently the Community Committee for Redberry Lake Biosphere Reserve has made a concerted effort to expand its focus on sustainable development in

order to demonstrate the relevance of the biosphere reserve concept to local people. This was achieved through the multi-sectoral integrated planning process that fostered community learning about sustainable community development to implement sustainable approaches to agriculture, health, recreation, industry, and tourism. The result of this process was the release of *Redberry Lake Biosphere Reserve: A Community's Plan for Sustainability*. This Sustainable Community Plan has acted as a springboard for other community-based endeavours.

VISION OF THE BIOSPHERE RESERVE

We who reside within the Redberry Lake Biosphere Reserve live and work together in a healthy landscape under a common banner of equality, dignity, and respect. Democratic processes are fundamental to our community decision-making at every level, and community and economic growth are managed in an orderly and considered fashion that can be seen by others as an ideal for human community living and sustainable environmental practice.

CHALLENGES FOR REDBERRY LAKE BIOSPHERE RESERVE

Shortly after being designated, Redberry Lake Biosphere Reserve encountered its first of many challenges. Prior to designation Redberry Lake Biosphere Reserve was administered through the Redberry Pelican (Canada) Project Foundation. The Society had limited project and program funding usually less than \$40,000 that was used, in part, to run the Stuart Houston Ecology Centre. This funding supported a small number of staff. The number of staff was augmented depending on available project funding. The staff provided support for biosphere reserve activities, as required.

In 2000, the Stuart Houston Ecology Centre was forced to close its doors as a result of the discontinuation of funding, when the Canadian Wildlife Service, decided to terminate many of their research programs in the lake. As a result, many staff that had been working for the biosphere reserve were laid off.

Today, the Community Committee for Redberry Lake Biosphere Reserve operates solely on the goodwill and kindness of volunteers. Securing greater community involvement through the planning process has been a key element in enhancing capacity to implement the biosphere reserve concept. However, staffing continues to be a requisite for this area because planning and project implementation must be adapted to fit the schedule for the predominantly agricultural community.

This situation makes it difficult to undertake long-term planning and set realistic targets for the region. Furthermore, it is difficult to sustain a long-term vision when operating on soft money alone. Over the longer term, the Community Committee for Redberry Lake Biosphere Reserve would like to develop the means for achieving fiscal sustainability to support the long-term programming, essential for achieving any degree of success in biodiversity conservation.

GOALS OF REDBERRY LAKE BIOSPHERE RESERVE FOR THE THREE FUNCTIONS OF A BIOSPHERE RESERVE

Main Priorities of Biodiversity Conservation



***Biodiversity Conservation** is any activity that ensures that no species, or ecosystem (representing relationships between species and with their environment) disappears completely from the face of the earth.*

The biodiversity conservation goals of Redberry Lake Biosphere Reserve are:

- To maintain, and remain empowered to maintain, a healthy landscape with clean water and air and a thriving diversity of native species.
- To continue to restore degraded soils and waters, as vital ecological services needed for survival.

Main Priorities for Sustainable Development



Sustainable Development is any form of economic activity that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The sustainable development goals of Redberry Lake Biosphere Reserve are:

- To recognize that the concept of marginal land refers only to agricultural suitability and that non-agricultural lands are also valuable to society at large and worthy of careful management.
- To offer successful demonstrations of sustainable practice and be in a position to advocate on behalf of other places in Canada and the world that seek to have sustainable communities.
- To have profitable farms, businesses and community endeavors.

Main Priorities for Capacity Building



Capacity Building is any activity that helps to provide support for research, monitoring, education and information exchange related to local, national and global issues of conservation and sustainable development.

The capacity building goals of Redberry Lake Biosphere Reserve are:

- To entrench democratic process in decision-making for actions that affect the community, and preserve the right to meaningful and direct participation in the processes of our choice without manipulation from outside agencies.
- To engage young people in selecting and creating opportunities for recreation, employment, education, and spiritual well-being.
- To cooperate with other communities and other agencies and governments in all cases where tangible mutual benefit is assured.

ROLES OF THE BIOSPHERE RESERVE PARTNERS

The Redberry Lake Biosphere Reserve has found steadily increasing interest and support for the biosphere reserve initiative. Since the planning process has been initiated the following sectors have or could assume an active role in the functioning of Redberry Lake Biosphere Reserve.

Potential government partners are:

- Canadian Wildlife Service may provide short-term funding for conservation projects and staff support as they have in the past;
- The Prairie Farm Rehabilitation Administration may provide assistance in farm planning and mapping of regional land use change to support biodiversity conservation;
- Saskatchewan Agriculture and Food is working on a compensation program for alternative land uses for what have been traditionally agricultural land as part of the long-term sustainable development actions;
- Western Economic Diversification could help build capacity for the green business development compatible with sustainable economic development in a biosphere reserve; and
- The Rural and Urban Municipalities have provided some administrative support to enhance the operational capacity of the biosphere reserve and may continue to share this service on an as-and-when-needed basis.

Potential non-governmental partners are:

- The Nature Conservancy of Canada has expressed an interest in helping local people find more sustainable land uses through conservation easements;
- Ducks Unlimited could provide some support for waterfowl conservation as part of biodiversity conservation and sustainable

development as it contributes to ecotourism and nature tourism development; and

- The Canadian Commission for UNESCO can help Hafford Central School build the capacity to become a UNESCO-Associated School to better understand the relationship between conservation and sustainable development and peace as an effort to build capacity in young people.

Potential partners within universities and research institutes are:

- The Department of Geography, the College of Agriculture affiliated with the University of Saskatchewan have begun to work with Redberry Lake Biosphere Reserve on projects aimed at understanding how to build community capacity as well as more applied projects in sustainable agricultural practices, and
- The Community-University Institute for Social Research has funded a project dedicated to understanding social-capacity as a component of micro-enterprise development within the rural economy.

Please refer to the *Redberry Lake Biosphere Reserve: A Community's Plan for Sustainability* for complete details on the long-term projects and the requisite partnerships needed for implementation.

TOOLS FOR THE COORDINATION OF BIOSPHERE RESERVE ACTIVITIES

The operation of the Redberry Lake Biosphere Reserve relies on the Community Committee for Redberry Lake Biosphere Reserve with support from a Technical Committee.

The Community Committee is structured to account for the population distribution in the region and the geographic extent of the Redberry Lake watershed. The committee members include:

- One Reeve from each of the Rural Municipalities of Redberry Lake, Meeting Lake, Great Bend, and Douglas,
- The Mayor of Town of Hafford,
- The Chair of the Redberry Lake Park Board,
- The Chief of the Lucky Man's Band,
- A representative of the Redberry Pelican Project (Canada) Foundation (founding society),
- One public appointee from each of the Rural Municipality of Redberry Lake and the Town of Hafford.

The Community Committee is supported by a Technical Committee. The Technical Committee is made up of members of the scientific community such as Saskatchewan Environment and Resource Management, Canadian Wildlife Service, the University of Saskatchewan, Ducks Unlimited, SaskWater, and others. These researchers and technicians share information about their research and monitoring projects within the watershed.

A range of tools is available to the Community Committee and Technical Committee for Redberry Lake Biosphere Reserve to ensure that progress is made with respect to implementing the Cooperation Plan.

Committee Meetings: The Community and Technical Committees for Redberry Lake Biosphere Reserve hold quarterly meetings. However, they meet more frequently during the winter when the farming and ranching season is less active.

Web Site: Redberry Lake Biosphere Reserve has an Internet presence. The Community Committee's web site is used to report on progress in implementing the plans, to provide input on feedback on current activities and to discuss emergent policy issues affecting local people.

Public Meetings: Public meetings are held when appropriate to raise awareness and understanding about issues of concern to the local people of Redberry Lake Biosphere Reserve. Up until now, the majority of these meetings have been directed toward raising awareness of the biosphere reserve, the implications for land use and planning in general.

Conferences: Members of the Redberry Lake Biosphere Reserve's Community Committee participate in conferences in Saskatchewan aimed at rural re-vitalization and a variety of other agricultural topics. This raises awareness about the biosphere reserve throughout the province.

Cross-membership: The members of the Community Committee and Technical Committee have cross-linkages with a multitude of organizations by virtue of committee members serving on additional committee's throughout the region in addition to their appointments to their respective municipal councils. Some examples include the local Health Advisory Committee, and Hafford Tourism Committee.

RESOURCES TO ACHIEVE THE PRIORITY GOALS

Current Resources

Redberry Lake Biosphere Reserve, in undertaking a community-driven planning process has secured a high degree of community support. This situation has been advantageous in allowing Redberry lake Biosphere Reserve to develop solid partnerships with agencies and other organizations that can support the overarching goals of the biosphere reserve.

Money

Redberry Lake Biosphere Reserve has been accepted for a Community-University Institute for Social Research internship. This will allow the biosphere reserve to hire a graduate student from the University of Saskatchewan to undertake a community-research project.

In-kind Contributions

The school has provided in-kind contributions through the provision of space and meeting rooms for public meetings.

The editor for the *Riverbend Review*, the local paper, has made a firm commitment to provide a series of articles and information on the activities of Redberry Lake Biosphere Reserve. This allows for the cost-effective dissemination of information.

Local Municipalities have coordinated mail-outs to coincide with other residential mail outs to provide information to local residents.

Lacking Resources

Redberry Lake Biosphere Reserve's most substantial lack of resources includes fiscal resources to serve as seed funding for projects and programs as well as to maintain critical infrastructure.

Until such time, as Redberry Lake Biosphere Reserve plays a role in stimulating employment in sustainable industries within the region, volunteers are needed to assist with project development and fund raising.

PROPOSED PROJECTS TO ACHIEVE PRIORITY GOALS

Communication

(Short-Term Initiative - 1-2 years)

Communication is a core function of biosphere reserves. The ongoing need to raise awareness of and pride in acquiring the status of a biosphere reserve for the Redberry Lake watershed was reaffirmed. In this effort, two separate information needs were identified; general information about the biosphere reserve and regular updates regarding current activities of the biosphere reserve.

Local people continue to want more information about what a biosphere reserve is and why Redberry Lake watershed received this special designation. A brochure was deemed to be the most appropriate medium for sharing this information since the message is somewhat static and can be delivered cost effectively to many people.

The community also indicated that they wanted more frequent reports on the activities of the biosphere reserve. Long-term public acceptance and political support for Redberry Lake Biosphere Reserve will depend on the level of awareness about the Community Committee's progress in implementing the Cooperation Plan.

Quarterly fact sheets or newsletters were suggested. However the cost of internalizing this function in the absence of core funding was deemed non-sustainable. A series of newspaper announcements and articles was deemed to be the most suitable way to share this information given the frequently of change expected in this information.

The tasks associated with improving communications to be implemented this year are a brochure and regular articles in the newspaper to highlight current events and activities associated with the biosphere reserve. The tasks and timelines required for implementation are described below.

Brochure

The Community Committee for Redberry Lake Biosphere Reserve will oversee the creation of a brochure. The intent of the brochure will be to convey two central messages:

- The rationale and basis for the receipt of the UNESCO - biosphere reserve designation; and
- The sense of place for the region that includes the services and events that enhance the quality of life for people living in and near, or visiting Redberry Lake Biosphere Reserve.

This project will be a community effort, involving Hafford Central School. Students will review existing hard copy and digital photos, and develop a photo archive to categorize photos for this and future publications. Photos collected will include: annual events, people, landscape, wildlife, flora, land use (farms, ranches, towns, dump, sewage lagoon), and demonstration projects (tourism, sustainable agriculture, composting). Photos will be compiled from the Redberry Pelican Project (Canada) Foundation, and area residents.

A layout artist will be secured to design two prototypes for the brochures. The prototypes will differ in language, styles, photos, and colour schemes. The Community Committee will select the brochure to be printed.

Estimates will be solicited from a range of printers capable of preparing glossy brochures. Given the desire to direct economic benefits to local businesses, this option will be examined in relation to quality and cost will be used to determine the most suitable mechanism for undertaking the printing.

Once the brochures have been printed they will be distributed to residents and tourists. The distribution to local residents in Hafford, Douglas, Speers, Borden and Mayfair may be streamlined with existing mail outs via the municipalities. Other community distribution will occur through the health center, library, regional parks, gas station, and North Battleford Center, and the John Diefenbaker Airport in Saskatoon, Saskatchewan.

Newspaper Articles

Newspaper articles will be developed as a means for sharing information about upcoming government, university or research and educational initiatives. To assist in this process in the absence of a Biosphere Reserve Coordinator, a one-window mechanism for access to the biosphere reserve will be developed through the web site.

Researchers and educators have advanced technological capabilities so this mechanism was deemed the most cost effective and efficient means for working with potential research associates (Faculty, students and other agencies) and educators to provide information about research proposals and education or training initiatives within the Biosphere Reserve.

Guidelines for researchers and educators have been drafted and will be posted to the web site. A short paragraph will be required for the research project. This information will be distributed to the Community Committee and shared with the local newspaper. A graduate student from the University of Saskatchewan has already prepared the prototype for the abstract. This will also be posted on the web site for Redberry Lake Biosphere Reserve.

All announcements of research or education and training activities will be sent to the newspaper as an announcement after review by the Community Committee (at a frequency deemed appropriate according to the level of activity within the biosphere reserve). The communications person will act as a conduit for these announcements.

The local newspaper will print an article or announcement regarding the project in the paper. Interviews may be arranged with the local news writer. At appropriate junctures, the Community Committee may organize panel discussions on current activities (research/education and training opportunities for the community). The local paper may also undertake follow up articles regarding the status of projects, as interest dictates.

Healthcare Capacity

(Medium-Term Initiative - 3-4 years)

The continued loss of some health care services throughout Redberry Lake Biosphere Reserves continues to be an issue of concern. Local people do not want to have to send ill family members out of their home community for health care. The only way to counter this is to bolster community health care services and to prevent the slow devolution of these responsibilities to larger urban centers.

Although some people recognize that some efforts need to be directed to prevention (e.g., through the promotion of healthy lifestyles), the initial emphasis will be directed to the improvement of medical health care capacity. The need for another rural doctor in order to re-open the operating room at the local hospital and to provide greater in-home support for the elderly is the prime focus of efforts to enhance health care capacity.

It is recognized that the Local Advisory Committee has direct input into decision-making processes regarding health care services. Local people want to use these more effectively by developing a coordinated approach with the Town of Hafford and the Rural Municipalities within the Redberry Lake watershed to address this concern.

As part of this initiative, a statement and support letter for health care improvements based on the Sustainable Community Plan was prepared for presentation to the Local Advisory Board. The statement on health care improvements has already been presented to the Local Advisory Board.

A Working Group on Health Care Capacity will be announced, the mandate of which will be to prepare a discussion paper reflecting key concerns in the region and actions to address them. A discussion paper for service enhancements outlining recommendations for delivery improvements (including recruiting more doctors and alternative health care models) will be prepared. The Working Group may consult with local health care professionals on the Community Committee.

In the meantime, a special meeting was organized with an industrial psychologist to profile the type of person most likely to be attracted to the area as a rural doctor. Based on this information, the Community Committee drafted an advertisement for a doctor.

Research into incentive programs for doctors and service assessment continues. This information will be incorporated into the discussion paper being prepared by the Working Group on Health Care Capacity. Upon completion, the Community Committee will review the discussion paper, provide input and identify potential partners that will help move the process forward.

Reducing Grain Transport Costs

(Short-Term Initiative - 1-2 years)

Grain transport continues to be an issue of concern for local farmers. Any effort to reduce farming costs is seriously being considered. A relatively straightforward project to demonstrate cost savings for grain transport through self-loading of cars is deemed the most appropriate vehicle.

Furthermore, this project could serve an important educational value for the community. Some farmers and ranchers still believe the biosphere reserve designation is intended to control land use and will in the end be to their detriment. This project provides a good example of how the biosphere reserve working with local people can directly benefit family farms and the agricultural sector on a regional basis.

Volunteers of the Community Committee will undertake a selection process to identify a farmer willing to participate in a demonstration project for self-loading of grain cars. Once identified, OmniTRAX would be contacted to determine the length of time required to make arrangements for and set up a location for self-loading grain.

The project would be initiated to coincide with an important day to the agricultural community, potentially the Harvest Festival. The media (the *Riverbend Review*, the *Star Phoenix* and CBC) would be invited to attend and report on the self-loading of grain. A cost-feasibility report documenting the entire process from start to finish will be prepared for the Redberry Lake Biosphere Reserve web site.

Agricultural Alternatives

(Medium-Term Initiative - 3-4 years)

The summer of 2001 has been another difficult summer for Saskatchewan farmers. This situation has left local farmers searching for alternatives for economically and environmentally viable agriculture and land management, in general.

In support of this request, the Community Committee will provide more general information about farming options for those seeking training in innovative agricultural practices to enter more specialized product markets (e.g., organics).

An inventory of sustainable agriculture alternatives (holistic, organic, PEP, etc.) has already been prepared. A public forum was held in March, 2002 featured these initiatives. This panel discussion was deemed the best method for identifying the training subjects of greatest interest to local people. Short-listed topics of the greatest interest to local agriculturists will focus fund-raising efforts.

When the funds have been secured, the training will be offered in a modular format. This format allows the greatest flexibility for course scheduling and is thus amenable to farming and ranching cycles. Indeed, maximizing participation will require setting the training schedule to coincide with slower times during the agricultural cycle. The winter has proven to be a good time for such efforts. Although where lead-time is required for implementation of these new techniques, the application of the course material could further be delayed.

The scope of the pre-selected training modules must be decided and funding applications must be submitted. Fundraising may take a year thus delaying back implementation of the training programs. The training is anticipated to

be longer term in a modular format based on level of interest on different topics.

Environmental and Social Justice Education

(Short-Term - 1 -2 years)

Environmental and social justice are key features of sustainable development. Building this capacity in young people is central to creating tomorrow's leaders. Young people in Redberry Lake Biosphere Reserve feel uncertain about their role in Redberry Lake Biosphere Reserve. In order to help young people realize their potential, the Community Committee for Redberry Lake Biosphere Reserve is supporting Hafford Central School application to participate in the UNESCO Associated School Pilot Program.

The designation of the biosphere reserve coupled with the regional research being undertaken to support sustainable land use and capacity building could enhance the curriculum and specifically allow students to explore the transition of environmental issues into social issues (e.g., linkage between inequitable resource use and poverty and rural versus urban development) to develop the skills to resolve conflict and build a Culture of Peace.

Existing projects that fit into this model have been examined and gaps have been identified. Information has been requested from the Canadian Commission for UNESCO to support the development of new projects.

The lessons for the students will be based on field activities in and case studies of Redberry Lake Biosphere Reserve and other members of the World Network of Biosphere Reserves. Students will participate in activities to gain confidence in community peace-building processes. Programs currently offered and under development will help students to explore linkages between environmental and social issues.

The involvement of Hafford Central School in the UNESCO Associated School Program will serve as a precursor for more active youth involvement in Redberry Lake Biosphere Reserve and the community.

Alternate Valuation of Ecological Services

(Short-Term - 1 -2 years/Medium-Term - 3-4 years)

The alternative valuation of ecological services through conservation easements and other dispensation must be better understood. The exploration of alternatives will likely be a medium to long-term endeavour although there was an indication that the Department of Agriculture and Food for the Province of Saskatchewan is considering a compensation package for alternative land use in support of conservation. As a first step to enhancing understanding of the

available tools, the Community Committee will identify all agencies working on alternative valuation of lands for ecological services. The Community Committee will consider organizing a public forum on this topic that may feature The Nature Conservancy of Canada's conservation program as well as other similar programs.

WHAT WAS LEARNED DEVELOPING THE COOPERATION PLAN?

Having started the sustainability planning effort one year ago, the Community Committee has had the opportunity to see some notable changes. The most obvious areas of growth are:

- ***Community Committee Re-form:*** The earliest meetings conducted in February-April 2001 raised questions regarding the adequacy of the Community Committee in representing the Redberry Lake Biosphere Reserve. In response, the Community Committee altered its composition to be more representative of local people and community interests.
- ***Perceived Relevance of the Biosphere Reserve Initiative:*** The number of local people participating in the community meetings has changed and there has been an increase in participation of the agricultural community.

In spite of these obvious advancements, some challenges remain. These are:

- ***Difficulty in Comprehending the Biosphere Reserve Concept:*** The biosphere reserve concept continues to be poorly understood and information packages that re-interpret the impact of biosphere reserve on all manner of stakeholders with interests in health, agriculture, conservation, education and a multitude of other topics needs to be developed.
- ***Adaptability to the Rural, Agricultural Communities:*** Current planning and program implementation efforts target funding cycles. In most cases these are advantageous from the perspective of having access to year-end funding available from government. Funding cycles and implementation schedules differ and projects need to be implemented in such a way as to be adaptable to the cyclic nature of resource-based economies.

The local people in Redberry Lake Biosphere Reserve were appreciative of the opportunity to re-visit and extend their planning efforts from last year. This

does create expectations within the community of tangible change. In the absence of mechanisms for continued support, biosphere reserves in rural communities will continue to suffer from more limited access to support structures. The Canadian Biosphere Reserves Association will need to find ways to address inequities in access to resources so that rural communities also see tangible benefits of their contribution to community-planning processes.