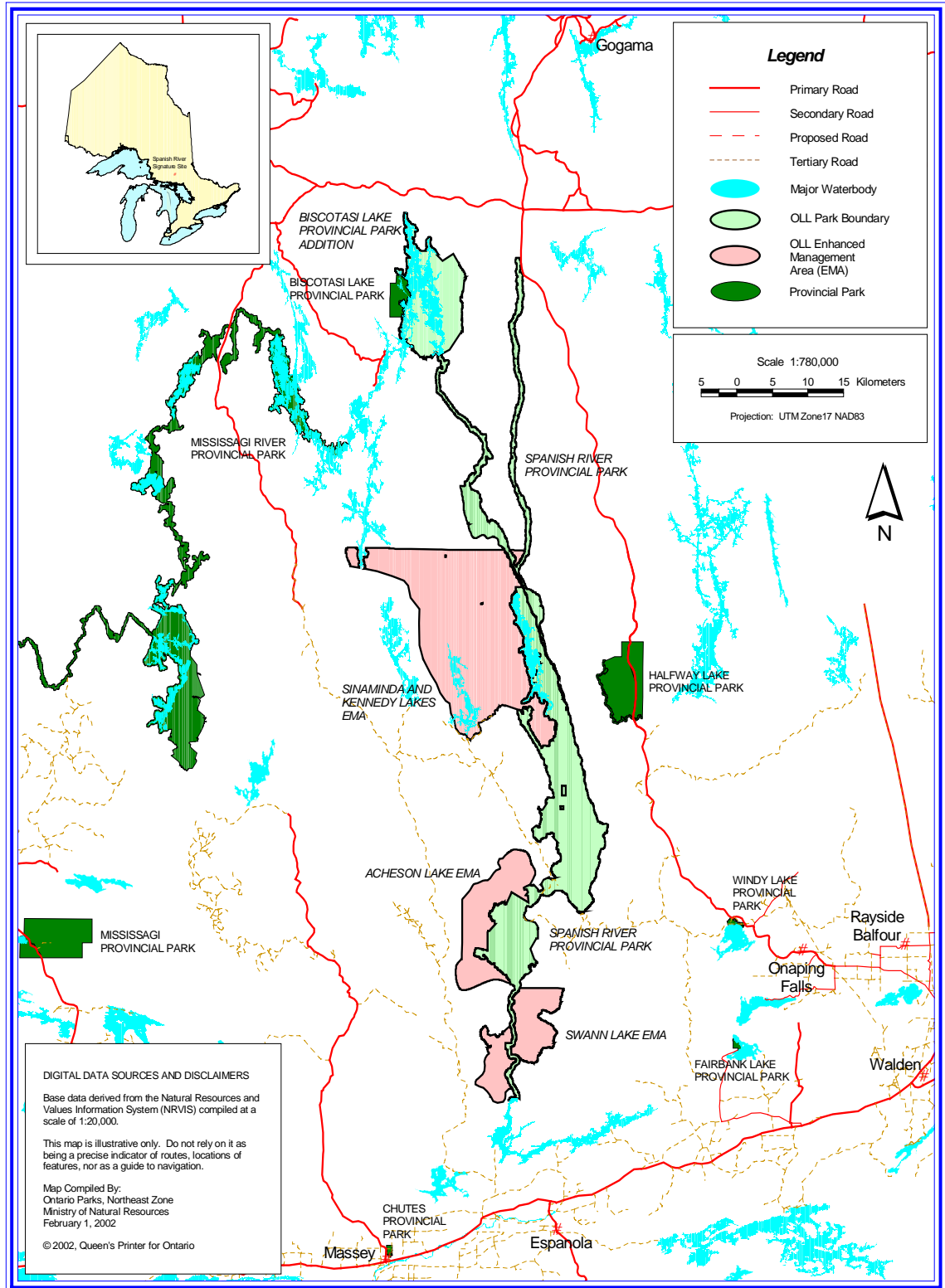


SPANISH RIVER VALLEY SIGNATURE SITE BACKGROUND INFORMATION

EXECUTIVE SUMMARY

Autumn 2002

Figure 1: Spanish River Valley Signature Site



Context for the Project

The identification of the Spanish River valley as one of the nine signature sites under *Ontario's Living Legacy* is based upon the work carried out during the *Lands for Life* planning process. The document, *Ontario's Living Legacy Land Use Strategy* (OLL LUS), which was approved in July 1999, provides broad land use classifications and directs that future detailed planning be carried out for the signature sites.

The intent of this initiative is to develop a resource management strategy that will provide for the protection of the Spanish River valley ecosystem and its significant attributes, while allowing for compatible and appropriate tourism, recreation and resource sector development.

General Description of the Spanish River Valley

The valley is noted for its outstanding scenery, recreational waterways and wildlife habitat. The Spanish River flows through a valley of rugged country that remained largely undeveloped until the Canadian Pacific Railway was constructed in 1884. Since then, a variety of commercial users have shared the land and water resources. Over time, the area has also become a popular place to camp, hunt and fish due to its relatively remote nature. Most notably, the river caters to white water canoeing opportunities.

The Spanish River Valley Signature Site (**Figure 1**) is a 98,634-hectare protected area that is comprised of two provincial parks and three enhanced management areas (EMAs). These components are: the Spanish River Provincial Park, Biscotasi Lake Provincial Park and its OLL Addition, plus the EMAs - Sinaminda and Kennedy Lake, Acheson Lake and Swann Lake. The Spanish River Valley is located in Northeastern Ontario – north of Lake Huron's North Channel and south of the height of land. Sudbury, the largest population center, is approximately 80 kilometres to the northeast.

The signature site includes the central portion of Biscotasi Lake and the upper portion of the Spanish River (both East and West branches) to Agnew Lake. It also contains a substantial land base west of Pogamasing Lake to Sinaminda Lake, south to Kennedy Lake and portions of land near Acheson Lake and Kerr Lake. **Table 1** outlines details of the specific components of the signature site.

Table 1: Provincial Parks and EMAs - Spanish River Valley Signature Site

TITLE	CLASSIFICATION	AREA (HA)	YEAR REGULATED
Biscotasi Lake Provincial Park	Recreation	1,204	1989
Biscotasi Lake Provincial Park Addition (P1572)	Natural Environment	11,079	OCT 2001
Spanish River Provincial Park (P192)	Waterway	35,386	OCT 2001
Sinaminda and Kennedy Lake EMA (E193r)	Recreation	34,461	N/A
Acheson Lake EMA (E204a)	Remote Access	8,627	N/A
Swann Lake EMA (E217a)	Remote Access	7,877	N/A
TOTAL in Hectares		98,634	

The signature site initiative is a key part of *Ontario's Living Legacy*, which represents the largest-ever expansion of the parks and protected areas system in Ontario. The development of the strategy for the Spanish River Valley Signature Site will take place over the next three years. Preparation of the strategy is the responsibility of a multi-disciplinary team consisting of Ontario Parks staff and Ministry of Natural Resources (MNR) staff from the three participating administrative districts: Sudbury, Timmins and Chapleau. **Table 2** lists significant milestones in the schedule for the planning process.

Table 2: Planning Schedule

Invitation To Participate - Approved Terms Of Reference	Summer 2002
Review Of The Background Information	Autumn 2002
Review Of The Issues And Options	Winter 2003
Review Of The Preliminary Management Strategy	Spring 2003
Review Of The Recommended Management Strategy	Summer 2003
Release Of The Approved Management Strategy	Autumn 2003

There are no permanent communities or settlements within the signature site. However, the area is heavily utilized by the forestry and mining sectors, and used by camp owners, hunters, anglers and general recreationalists. The users of the area come from a variety of communities that surround the signature site: Sudbury, Timmins, Sault Ste. Marie, Espanola, Gogama, Cartier, Biscotasing, Massey and Webbwood, and the First Nation communities of Sagamok, Mattagami and Brunswick House.

Access

The signature site is known for its accessibility with opportunities for remoteness. It is roughly a 1.5 hour drive northwest of Sudbury on Highway 144 and less than a day's drive from the Greater Toronto Area, via Highway 69. The Canadian Pacific Railway (CPR) has provided rail access to the Spanish River valley since 1884. VIA Rail continues to service the area using a self propelled Rail Diesel Car, referred to as the Budd car.

The northern portion of the signature site is accessed via Highway 144 or Highway 101 and a route of forest access roads. Just west of Cartier, a gravel forest resource road, followed by old tote roads, provides seasonal access to The Elbow just above the Graveyard Rapids on the Spanish River. Travelling west of Sudbury on Highway 17 provides access to the southern portion at Agnew Lake via the Webbwood Road, approximately 10 kilometres north.

Land Tenure

Remarkably little land disposition or development has occurred within the Spanish River valley. The provincial parks exclude all patent land, mining claims and mining leases. There are a variety of land tenure types in the signature site, such as Land Use Permits (LUPs) for private recreational camps and commercial outpost camps. These are located throughout the signature site.

Due to the managed nature of the Spanish River valley watershed, there are a number of water control structures at various locations. They are held under Licence of Occupation with the Ministry of Natural Resources, but operated by private interests.

All patent properties containing cottages are limited to Pogamasing, Little Pogamasing, Kennedy and Piano lakes. The Canadian Pacific Railway has portions of a right-of-way (unpatented) adjacent to the Spanish River Provincial Park. A CPR line bridge crosses the Spanish River above Sheahan rail siding.

There is an active aggregate permit to extract carbonatite, an inorganic natural fertilizer. The location is near The Elbow of the Spanish River, in Tofflemire and Venturi Townships, adjacent to the south side of the park boundary.

Existing Land Use and Development

Development is minimal in the signature site and is usually associated with recreational activities. Current land use activities include trapping, baitfish harvesting, hunting, angling, timber harvesting, mineral exploration, and remote commercial tourism.

At the downstream end of Agnew Lake, there are four substantial hydroelectric generating complexes. In addition, some 21 control dams are located throughout the watershed that impacts the signature site. Two bridges built in 1992 and 1993 for forest harvest activities exist on the West and East Branch respectively. Duke Lake is an MNR-controlled access point, providing entry to the East Branch canoe route of the Spanish River. It contains a parking lot and outdoor privy.

Other existing facilities are limited to numerous campsites, landing areas and launch ramps that have been developed by traditional users. Developments in association with patent cottages are boat caches, portages, and winter snowmobile trails to access property and to recreational areas. There are no provincially designated TOP (Trans Ontario Provincial) snowmobile trails within the parks, nor authorized all-terrain-vehicles (ATV) trails.

Social and Economic Context

Traditionally, the signature site is a resource hinterland providing employment through forestry, mineral exploration, trapping and resource-based tourism. The local communities are representative of small, resource dependent communities in northeastern Ontario that range in population from 25 to 6,000 with a large, near-by, service-based city (Sudbury at a population of 165,000).

Since the Spanish River Valley Signature Site is a newly protected area with few established facilities, it is difficult to determine its potential impacts and benefits to the surrounding communities. However, it has been an area of Crown land recreation for years, and there is a certain level of remote tourism, local hunting and fishing, and outfitting related to canoeing.

The Spanish River Valley Signature Site is involved as a study entitled "*A Study of the Social and Economic Benefits Associated with the Nine OLL Signature Sites*". One objective of the study is to identify the benefits associated with the recreational activities associated with the signature site.

Climate

The Spanish River valley is characterized by a modified continental climate. It has long cold winters and short warm summers. The average January temperature is from -17°C to -12°C from north to south, while the average temperature in July is 19°C. Annual precipitation is approximately 872 mm of which 267cm fall as snow.

Bedrock Geology

The Spanish River Valley Signature Site lies within the Abitibi subprovince of the Superior Province in the Precambrian Canadian Shield. The Abitibi subprovince is a granite-greenstone-gneiss complex that developed some 2.8 and 2.6 billion

years ago. Most of the area is underlain by gneiss and granitoid intrusions with localized areas of metavolcanic and metasedimentary rock. The signature site occurs within the Ramsey-Algoma granitoid complex, with the Ramsey Gneiss Domain occurring mainly north of The Forks and the Algoma Gneiss Domain southward. The Benny Greenstone Belt outcrops through the Algoma Gneiss Domain between Cliff Rapids and Mogo Creek in Craig Township. The watercourses of the signature site follow a number of well-defined fault lines.

The Spanish River Carbonatite Complex, is a relatively rare igneous intrusive of magma origin located by The Elbow of the Spanish River, and occurs in a fault zone. The complex contains primarily calcite with zones rich in biotite, apatite, and magnetite.

Surficial Geology

The surficial geology of the valley is dominated by events that occurred during the late Wisconsinan glacial period and during the early Holocene (post glacial) period. During the ice retreat, the Spanish River valley and its tributaries were used as conduits and channels to drain away glacial meltwaters. A thin, discontinuous cover of till was deposited throughout the area by glacial ice. Biscotasi Lake shoreline is composed of pink granitic bedrock outcrops, thick outwash material and lacustrine deposits.

The landscape is dominated by undifferentiated ground moraine composed of boulders, sand and gravel, often interrupted by surface bedrock exposures, valley outwash, eskers and kame deposits and glaciolacustrine sediments.

Significant quaternary features of the Spanish River are ice-dammed and channeled features, boulder lag deposits and various forms of deltaic deposits. Deltas are located at the confluence of the Agnes, Reynolds and Wakonassin rivers with the Spanish River and were formed either by ponded meltwater or ice-contact. A rare feature in this part of Ontario is an extensive levee, recurved spit, and baymouth bar system that has developed near the confluence of Bannerman Creek and the Spanish River in Moncrieff Township.

For the most part, the river is strongly defined by a bedrock-controlled channel. The major exception to this is The Inch Worm, a strongly meandering segment of the West Branch just north of The Forks, where a surplus of sediments account for the meandering forms.

Topography

The topography of the Spanish River valley is strongly influenced by both bedrock geology and glacial history. Elevations range from 404 metres on Biscotasi Lake to 262 metres on Agnew Lake, a drop of 142 metres over approximately 135 kilometres.

Surface expression is highly variable, with a subdued undulating topography adjacent to Biscotasi Lake. The East Branch of the Spanish River is characterized by strongly to very steeply sloping rock bluffs with occasional low-angle fans. The remaining Spanish River is quite variable with broad, level fluvial and glaciofluvial terraces and benches. Bedrock bluffs are common where the river is constricted.

Soils

Sand is the most prevalent material class in the signature site occurring as a shallow mantle of sandy or silty sand till over bedrock with local areas of deep sand. Organic deposits are generally restricted to river and lake fringe areas.

Watershed

The Spanish River is the largest watershed draining into Lake Huron. The total surface area covered by the Spanish River is 13,500 square kilometres. The Agnes, Wakonassin, Snake, Aux Sables and Vermilion rivers and Bannerman (Moncrieff) Creek are the main tributaries. Biscotasi Lake is one of the headwater lakes of the Spanish River. The entire Spanish River is 260 kilometres in length, with 13 controlled lakes on the system.

The water control structures ensure proper water levels to produce hydroelectric power downstream of the signature site at four dam locations. Of significance, are the fluctuating water levels on the water bodies of the signature site, which can vary up to 1.5 metres annually. The managed release of water over the summer months actually supplement low summer flows, giving the Spanish River higher than normal summer water levels.

Management of the watershed is directed by the *Spanish River Watershed Water Management Plan* (1993), written in cooperation with the Ministry of Natural Resources and two companies: INCO and Domtar Inc.

Vegetative Communities

The Spanish River Valley Signature Site straddles both the Boreal and the Great Lakes-St. Lawrence Forest Region. The northern Boreal forest component is represented by stands of black spruce and Jack pine in lowland bogs and dry uplands, respectively. The Great Lakes-St. Lawrence forest component is represented by mixed stands containing varying proportion of white pine, red pine, yellow birch and sugar maple.

The most significant vegetation feature of the signature site's provincial parks is the old-growth pine forests, which currently cover over 2,000 hectares. The Agnes River Old Pine, Craig/Tofflemire Old Pine, Spanish River Valley and Old Pine were all identified as provincially significant old-growth pine forests. Provincially significant areas are those that contain the best representatives

examples of all landform/vegetation associations known to occur in an ecodistrict, in this case 4E-3.

The extensive aquatic habitat and large wetland complex of central Biscotasi Lake was identified as provincially significant. A few riparian habitats on the Spanish River are proposed as regionally significant riverside wetlands, including The Inchworm. Other common vegetation communities include soil bluffs, cobble beaches and rock barren and cliffs.

Flora

A variety of vascular plants occur in the signature site, which are typical of the transition forest between the Boreal forest region and the Great Lakes-St. Lawrence forest region. A total of 367 species have been documented for the protected areas, of which 58 are moss and lichen species and 309 are vascular plants. Of interest are a few regionally significant species of vascular plants and mosses. The fact that few non-native species are found in the valley is testament to low levels of disturbance.

Forest Fire History

Forest fires in the Spanish River Valley Signature Site were responsible for the natural establishment and maintenance of most of the pine stands, and assisted in the continuation of red oak, yellow birch and other shade tolerant hardwoods within the Great Lakes-St. Lawrence forest region. Most of the mature Jack pine and white pine stands in the signature site resulted from fire caused by railroad development and lightning fires between 1880 and 1930.

Wildlife

About 50 species of mammals have been identified as having their range within the Spanish River Valley Signature Site. The area contains species common to the Boreal forest and to some extent the Great Lakes-St. Lawrence forest.

Most species provide opportunities for recreation (hunting and viewing) and commercial activities (tourist outfitting and trapping). The Spanish River Valley Signature Site is within the boundaries of Wildlife Management Units (WMUs) 37, 38 and 39.

To date, 133 species of breeding bird have been identified within the Spanish River valley. Most birds nest widely in the habitats afforded in the deciduous, coniferous and mixed forest including forest edge. About a quarter of these species can be considered wetland-dependent, nesting in dense marsh vegetation or riparian thickets.

The only species of special concern identified habitat within the Spanish River Valley Signature Site is the bald eagle (*Haliaeetus leucocephalus*). No other species of special concern have been documented, to date.

Fisheries

The Spanish River Valley Signature Site has fish communities of both cold water and warm water systems. There are a number of known lake trout lakes, such as Pogamasing, Sinaminda, Kennedy, Squirrel, Dennie, McGuey, Kerr and Acheson.

The Spanish River, though termed a warm water body, is blessed with cold water stream tributaries containing brook trout. Further north, the geography is more undulating with heavy till and outwash deposits providing shallower and more nutrient rich water bodies supporting significant warm water fisheries resources such as those found in Biscotasi Lake. Common warm water species include walleye (pickerel), northern pike and smallmouth bass.

Most lakes are popular amongst anglers and vary in fishing pressure. A number of the lakes are stocked with a variety of species. In the early 1990s a series of angler surveys and biological studies on the Biscotasi chain of lakes showed that fishing pressure was affecting the health of the fishery.

Cultural History

The Spanish River valley is important as a pre-contact traditional Aboriginal travel route with evidence of habitation. Archaeologists have divided the prehistory of Northern Ontario into the following temporal / cultural sequences: Late Palaeo, Shield Archaic, Initial Woodland, and Terminal Woodland.

Situated near the signature site, the earliest known occupation site is in Venturi Township. Dated approximately 7,670 years ago, the site signals that the area was in active use during the Palaeo-Indian period. Archaic sites are known to exist along the Spanish River/Biscotasi Lake area and are generally associated with glacial lake levels. The inhabitants of the signature site prior to historic contact were probably the ancestors of the Algonkian speaking Ojibwa groups.

The earliest records of European contact in the Spanish River valley are from the early 19th century. The Spanish River and Biscotasi Lake played a secondary role in the early fur trade, with Hudson's Bay trading posts on Biscotasi and Pogamasing lakes.

The Canadian Pacific Railway was constructed through the valley in 1884, with Biscotasing serving as a major rail section stop until the late 1950s. No major European settlement developed in the site. Since the advent of the mining and

pulp and paper industry in the Sudbury Basin at the turn of the 20th century, the Spanish River has served as a source of hydroelectric power.

The first decades of the 20th century were brisk for the logging industry in the valley. Numerous logging camps were based along the Spanish River, with seasonal river log drives taking timber to market. Many dams were built to regulate and store water on the Spanish River and its tributaries. The last river drive was 1967.

Grey Owl (Archie Belaney), the noted early conservationist, lived in the Biscotasi region before and after the First World War.

Recreation

The Spanish River valley provides a wide range of recreational opportunities. The river is well renowned for its white water canoeing. Centrally located in the province with excellent scenery in a remote setting, provides for an appealing canoe route.

Spanish River is accessible by rail, road and plane and various access points allows for 2-10 day trips. Biscotasi Lake is also the headwaters of other canoe routes: the Sakatawi and Upper Mississagi rivers. The Sinaminda and Kennedy Lake EMA has potential lake canoe routes. Currently, there are no regular patrols or maintenance of the canoe routes. There are a number of local tourist outfitters who provide transportation or equipment rental to the canoeist.

Within the signature site, there are ten lakes designated for remote tourism. Lodges and/or campgrounds developed on Agnew, Fox, Pogamasing, Little Pogamasing and Biscotasi lakes, with clients using the Spanish River and the Biscotasi chain of lakes, mainly for angling and hunting. Recently, there has been some movement within the resource-based industry towards a more ecotourism-adventure experience, with the provision for wildlife viewing, retreat cabins and custom outfitted canoe trips.

Other recreational activities include Crown land camping, angling, hunting, motorboating, and beach use. Accessibility and the quality of the resource limit the use of recreational activity. The majority of private camps and outpost camps are used for seasonal angling and hunting.

There are no designated hiking trails established within the signature site. All-terrain-vehicles (ATVs) use old logging tote roads to access the river and lakes. Winter trails and portages are normally used by trappers and property owners who snowmobile in to their property/trapline area.

Forestry

The forest industry has had a major presence in the valley since the 1880s with the construction of the CPR, as it made accessible for the first time, the extensive forest areas of this region. Much of the area has been subjected to intense logging activity over the past 50 -100 years. Initially, production was for the supply of construction material needed by the railways and for pine square timbers. By the turn of the 20th century, square timber operation was in decline and there was a gradual increase for other products such as pulpwood and mining timbers.

In 1905, a pulp and paper mill began operation in Espanola. The industry fell on hard times during the depression and the mill ceased operations in 1930, but reopened as a Kraft mill in 1945 and continues to this day.

The early technology of driving logs necessitated augmenting low flows on the main branch of the Spanish River. Control dams for this purpose were built in the headwater areas in the late 1880s. Changes in logging technology and increased road construction resulted in the demise of the river log drive in 1967.

The Spanish River Valley Signature Site is contained within two Sustainable Forest Licences (SFL). Domtar Inc. is the licence holder of the Spanish Forest Management Unit. This forest surrounds the majority of the signature site. Northshore Forest Inc. is the holder of the Northshore Forest Management Unit, situated in the lower south portion of the signature site.

Past timber harvest depletions (1985-1999) have concentrated in the Townships of Bigelow and Vernon (Northshore Forest) and for Domtar, the Township of Smuts, Battersby, Athlone, Breadner, Cavana, Chalet, Craig, Stralak, Venturi, Hart and Moncrieff.

Fisheries

The abundance and variety of aquatic habitats that are present support a diversity of fish species and community types that provide recreational opportunities, including remote and drive-to angling. Although there is no commercial fishery, commercial opportunities in terms of tourism outfitting and baitfish harvesting occur.

Mineral Resources

There is some high mineral potential in the northern part of the Biscotasi Lake basin, and there has been a long history of mineral exploration activity in Stralak, Craig and Tofflemire Townships.

There is an active aggregate permit on mining leases to quarry a carbonatite volcanic pipe, an inorganic fertilizer, near The Elbow on the Spanish River.

Agricultural Mineral Prospectors Inc. who acquired the property in 1992 operates the surface deposit.

Water Resource Use

The water resources of the Spanish River have a long and often contentious past due to the needs of multiple user groups. The Spanish River has been a managed watercourse for over 100 years. Water control structures were initially put in place to serve the lumber industry for log drives. Soon after, mining development in Sudbury turned to the region's waterways for cheap sources of electrical power needed to fuel the extraction process.

INCO has been involved in hydroelectric production on the Spanish River since their first project, High Falls dam, in 1904. Important water control structures within the signature site are dams on Biscotasi, Pogamasing and Sinaminda lakes.

In the late 1970s INCO considered development of additional hydroelectric power facilities, but never carried the proposal further. With the *Spanish River Special Area Plan* (1990), a moratorium on new hydroelectric facilities was put in place. With the regulation of the Spanish River Provincial Park in 2001, no additional commercial hydroelectric power will be developed.

Resource Harvesting

Trapping and baitfish harvesting both have a long tradition in the Spanish River Valley Signature Site. There are 25 traplines with six trap cabins within the signature site. Associated with the signature site are 23 townships allocated for baitfish harvesting, with 14 licensed harvesters. Bear Management Areas (BMAs) are allocated to licensed tourist establishments, with 20 authorized blocks of varying sizes in the signature site.

Market Analysis Of The Signature Site

Tourism has become a key component in the Ontario economy. Resource-based outdoor activities account for 50 per cent of the total overnight visitors to Northern Ontario.

The Spanish River Valley Signature Site currently caters to a mixed tourism market. The main attractions of the signature site are river canoeing, high quality fishing, wildlife viewing and opportunities for a wilderness experience in a relatively remote setting.

The Spanish River canoe route is well known. It is very marketable because of its appeal as a white water river in an incredible setting of towering white pine

and valley cliffs. In addition, the Biscotasi and Sinaminda/Pogamasing/Kennedy lakes region has endless canoeing potential.

Despite a lack of current information on the pattern of use of the Spanish River, it is known that the average party size is four to eight, and the average stay is four nights. It is estimated that approximately 500 groups per year use the river with the peak season from June to August. To gather essential information required for the planning process, a recreational survey was initiated this summer and will be distributed again in the 2003 season.

Most clients of the commercial tourism camps are sport fishermen, along with some hunting parties in the fall. Increasingly, more families are going to these locations as retreats, where they enjoy the ambience of the environment. There is a definite trend towards ecotourism, with an adventure and cultural component.

The Spanish River Valley Signature Site is well positioned to attract visitors who have an outdoor and/or cultural interest. Its exceptional scenery and waterways are unique to Ontario and can provide visitors with authentic experiences. Two of these experience could be travelling the VIA Rail Budd car to access the canoe routes, and activities relating to the theme of "conservation consciousness" due to the historical association with Archie Belaney (Grey Owl).

Issues and Opportunities

Preliminary objectives for the development of a signature site strategy are focused on several broad themes: Aboriginal interest, access to the provincial parks, tourism and recreation, protection of the natural and cultural heritage features, Crown land use in the EMAs, watershed management and adjacent forestry and mining activities.

The planning team anticipates that issues may be identified within several broad categories. They include Aboriginal communities, access, adjacent land uses and activities, protection of resources, area social and economic opportunities and visitor management services.

Public Consultation

For further information or to provide comment on the planning process, please contact:

*David Coulas, Project Manager,
Spanish River Valley Signature Site
199 Larch St., Suite 404
Sudbury, ON, P3E 5P9*

*Tel. (705) 564-7297 Fax (705) 564-3137
Email: david.coulas@mnr.gov.on.ca*