

The River Current

Spring 2008



Our Mission: Promoting watershed sustainability through awareness, linkages and stewardship.

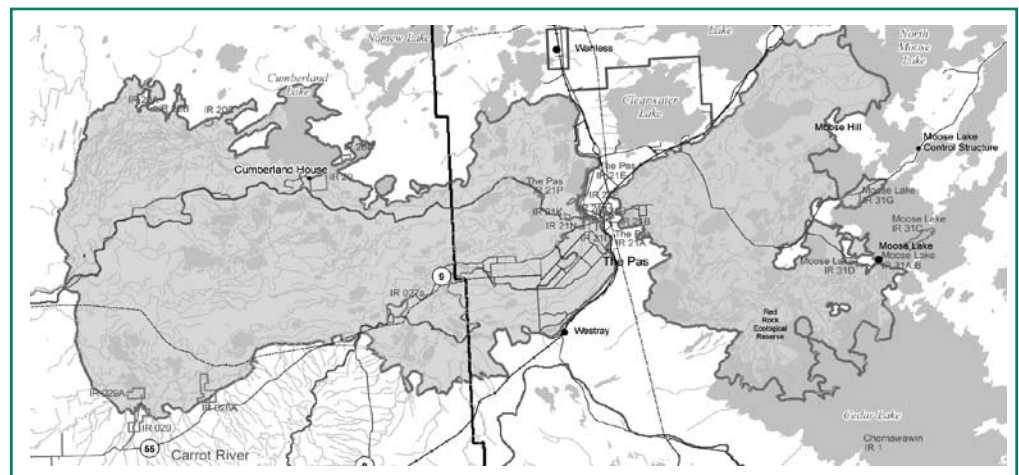
Saskatchewan River Delta

The Saskatchewan River Delta is one of the largest inland river deltas in North America, covering approximately 9,500 km². The Delta is over 9,000 years old and has played an important part in Canada's history. The area is a unique marshy lowland that extends in Saskatchewan north of Carrot River to Cumberland House and east across the Manitoba border to Moose Lake. The Saskatchewan River Delta is rich in biodiversity providing important habitat for hundreds of species of birds, mammals and fish. It also plays an important role for the First Nations and other communities in the area. The region has a population of approximately 13,000 people; 68% of which are aboriginal and 32% non aboriginal.

Saskatchewan River Delta Symposium

The Saskatchewan River Delta Symposium, "Past, Present and Future" was held in Saskatoon, Saskatchewan April 1st - 3rd, 2008. The conference was the end result of the meetings from the Technical Working Group,

an informal group of stakeholders, university groups, interested parties and managers of various private and government organizations from Saskatchewan and Manitoba. During these meetings it was discovered that although there was a lot of information available on the Delta, this information was generally not well known, being in the form of unpublished technical reports and university research projects, among other forms. As this information was mostly scattered and inaccessible to the majority of interested individuals it was determined that the development of the symposium would be the perfect opportunity to bring some of this information together into a usable format as well as to educate the general public about the delta.



Map of the Saskatchewan River Delta

There were a total of 21 different presenters at the conference. Presenters included biologists, hydrologists, engineers, foresters, conservationists, habitat protection and environmental specialists, archaeologists, fisheries experts and remote sensing analysts. Delta residents, trappers and farmers were also present as were representatives from provincial and federal governments, SaskPower and Manitoba Hydro.

Saskatchewan River Basin State of the Basin Report

Article by Lis Mack

Partners FOR the Saskatchewan River Basin is in the process of developing a document that will incorporate the background history of the Saskatchewan River Basin together with current research. This report will enable the policy makers and users of the basin to readily access the information required to make appropriate decisions concerning the basin and our water resources.



The Saskatchewan River Basin is a vast area incorporating portions of Alberta, British Columbia, Manitoba, Montana and Saskatchewan. The basin drains a surface area of 405,864 square kilometres, an area almost the size of France. The Saskatchewan River system is the fourth longest system in North America, travelling 1,940 kilometres from the continental divide to Lake Winnipeg. Lake Winnipeg is the tenth largest freshwater lake in the world by surface area. The river system originates on the eastern slopes of the Rocky Mountains of Alberta and Montana, and extends across a vast interior plain to the Canadian Shield.

Human activity has distinctly altered the Saskatchewan River Basin. Agricultural development, mining and forest harvesting has modified the landscape as has the construction of dams and diversions and the draining of wetlands. The Great Irrigation Canal was constructed in 1900 to divert water from the St. Mary River. This was the first of many projects that would alter the timing and quantity of the water flow in the Saskatchewan River Basin.

The North Saskatchewan River originates, for the most part, at the Saskatchewan Glacier in Banff National Park at an elevation of over 2000 m above sea level. By the time the river reaches the confluence with the Ram River, the elevation has dropped to 1000 m. The elevation of the river at the Interprovincial boundary is 500 m, dropping an additional 100 m when it reaches the confluence with the South Saskatchewan River at the Forks.

On the other hand, the South Saskatchewan River originates in the mixed grasslands at the confluence of the Bow and Oldman Rivers at an elevation of 740 m. The South Saskatchewan River mainly serves as a conveyance channel for the waters from the Bow and Oldman Rivers as there are no large tributaries that supply water to the river in over 1000 km of river channel. Only 2% of the annual flow in the river is the result of tributary inflow primarily from the Red Deer River and Swift Current Creek.

The Gardiner dam, completed in 1967, resulted in the creation of Lake Diefenbaker. This artificial reservoir can store more water than all the reservoirs in Alberta. It can store 9.4 million cubic decametres of water, more than the median annual flow of the river. The annual cycle of the reservoir is set to capture the spring runoff and then release water during the remainder of the year. Water is released from the dam to meet peak power demands, usually in the winter. This has significantly altered the natural river system.

There are various dams along the Saskatchewan River System that were constructed for power generation. As a result, these dams have altered the seasonal flow of water. The effect of the dams is to increase winter flows while decreasing summer flows since the demand for electricity is highest in the winter. Therefore, the natural higher summer flow that would flush the stream bed and enhance ecosystems occurs less frequently. Some examples of these dams include Bighorn Dam and Brazeau Dam on the North Saskatchewan River, Gardner Dam on the South Saskatchewan and E.B. Campbell Dam on the Saskatchewan River.

The State of the Basin document will be available late in 2008. For more information, please contact Jennifer Nelson at partners@saskriverbasin.ca.



Exploring the Forts: Fur Trade History on the South Saskatchewan

- by Cliff Speer

About 220 years ago, a young man, accompanied by a fur trader, paddled up the South Branch of the Saskatchewan River from Cumberland House. They landed at a spot about 18 kilometres downstream of present-day Batoche. This lad of 17, employed as an apprentice clerk by the Hudson's Bay Company, eventually became one of Canada's most famous explorers and mapmakers. His name was David Thompson and he helped build South Branch House fur trade fort and kept the daily journal for the 8 months he was posted there. Fortunately, his employer was fastidious about record keeping, so we still have Thompson's hand-written journal of his time at South Branch House.

Several years after Thompson worked there, South Branch House suffered a horrendous demise in an attack by an Indian war party. The fort was torched and the inhabitants massacred: only one man escaped to tell the traumatic tale.



What remains of the destroyed fort is now the subject of archaeological investigation. The Saskatchewan Archaeological Society is continuing an expanded excavation of the South Branch House site to unearth more evidence of the fort's precise location and activities. The

Society has transcribed the post journal entries for the 7 year period of the fort's existence, helping to create a picture of life at a late 18th century fur trade fort.

David Thompson reappears in today's picture with a 4-year international Bicentennial Celebration of Thompson's life and work, begun in 2007. Canadian participation in this celebration includes a variety of historic re-enactments such as voyageur brigades and races. One such event, the 160 paddler-strong David Thompson Brigade enroute from Rocky Mountain House to Fort William paddled the North Saskatchewan and Saskatchewan Rivers during late May and early June. In mid-July, another historic 3-day canoe journey called the David Thompson Voyageur Trek, will visit Batoche National Historic Site and continue on to visit South Branch House. At the fort site, paddlers will join visitors and nearby communities at the Archaeological Society's Open House events and learn about the fort and fur trade history. They will then camp overnight in the Nisbet Forest near another ancient fort site. The event-filled river trip concludes at St. Louis' Buffalo Park, site of a replica pre-historic monster bison, whose bones were unearthed by archaeologists near the proposed new St. Louis Bridge.



Paddling a voyageur canoe in the path of a famous explorer, experiencing Canadian fur trade history and enjoying the valley scenery and wildlife enroute will appeal to anyone with a sense of adventure and discovery. Getting re-connected to your Canadian roots will be the end result. For more information on the July 19th South Branch House Open House and the David Thompson Voyageur Trek, contact the Saskatchewan Archaeological Society at 306-664-4124 or CanoeSki Discovery Co. at 306-653-5693 for trek details or email: cliff@canoeski.com

Store It - Don't Pour It!

This spring, Drainage Services, City of Edmonton launched its new, "Store it, don't pour it" campaign. The campaign is designed to educate residents about the right way to get rid of fats, oils, and grease.

"Pouring fats, oils and grease down the drain can block the main sewer lines as well as those on private property. This can result in sewer backups, property damage, and significant costs to residents and to the City," said Andy Bowen, Director, Drainage Operations, Drainage Services, City of Edmonton. "We have approximately 3000 km of sanitary and combined sewers and the cost to clean the buildup of grease runs into a lot of money. In fact, in 2007, we cleaned approximately 650 kilometres of sanitary and combined sewers at a cost of \$1.2 million."

Edmonton residents are being asked to store fats and grease in a disposable container. When it is full, it can be thrown out with other garbage. Used cooking oil should be cooled and put into a covered plastic bottle, labeled, and put out for garbage collection. Residents who are disposing of four or more litres of used cooking oil can take it to an EcoStation.

Contrary to popular belief, running hot water and soap down the drain will not help break down the grease. Running hot water only pushes the grease further down the sewer pipes but once the grease cools, it solidifies and blockages can result in the sewer line on private property or in the City of Edmonton drainage system.

Store it – don't pour it! is part of the public education program initiated by Drainage Services. For information on Store it, don't pour it, call: (780) 496-1609.

Conference Listings

Protecting our Water, 60 years of Service, WCWWA 60th Anniversary Conference

September 23-26, 2008

www.wcwwa.ca/2007/2007wcwwa.htm

Regina, SK

13th Canadian National Conference and 4th Policy Forum on Drinking Water

October 4-7, 2008

www.cwwa.ca

Quebec City, QC

Partners FOR the Saskatchewan River Basin AGM

October 29, 2008

www.saskriverbasin.ca

Canmore, AB

North American Lake Management Society, 2008 Lake Louise Symposium

November 11-14, 2008

www.nalms.org/Conference/2008LakeLouise

Lake Louise, AB

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