The Oxbow

FROM THE NORTH DAKOTA STATE WATER COMMISSION

Missouri River System Anxiously Watched

By Patrick Fridgen

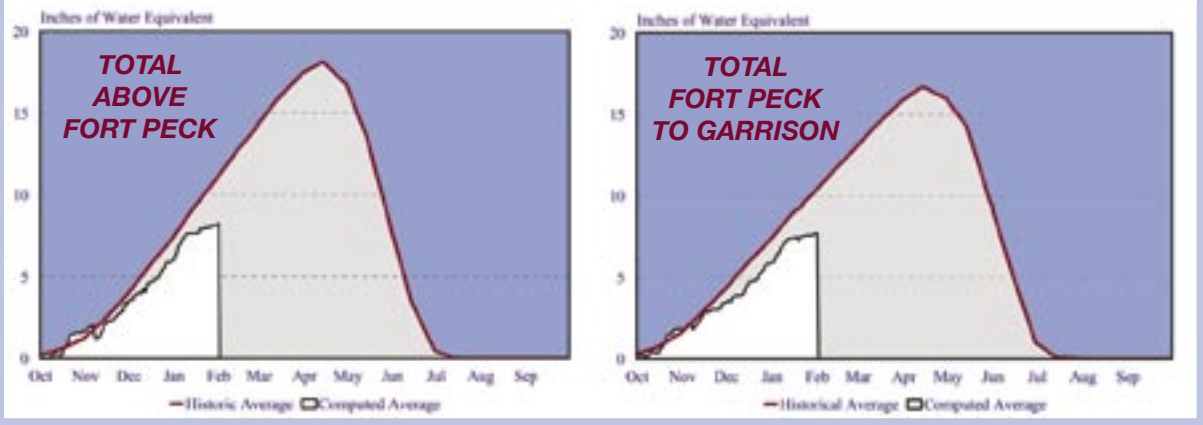
As the winter of 2006-2007 marches on, everyone from marina owners and fisherman to barge captains and power plant operators are anxiously waiting to see what kind of snow pack and moisture this winter will bring to the Missouri River basin. By year's end, 2006 proved to be the seventh consecutive year of below normal runoff in the Missouri River basin, with 19 million acre-feet (MAF), which was only 75 percent of normal.

However, even with several consecutive years of drought already in the books, there are many still clinging to the hope that 2007 and the years to follow will turn the tides, bringing much needed moisture. In turn, the Missouri River system could then begin its long road to recovery. However, if the first couple months of 2007 are any indication of how the rest of the year will go, the Missouri River system, and especially its reservoirs, may be in more trouble than ever before.

As of February 1, the U.S. Army Corps of Engineers was forecasting runoff in the Missouri basin to be 19.3 MAF, or 77 percent of normal. And at that same time, the Corps was reporting discouraging snowpack totals. Mountain snowpack above Fort Peck had only reached 74 percent of normal, and snowpack between Fort Peck and Garrison was also only 74 percent of normal. If these trends continue, reservoir levels and overall system storage will continue to break records – for all-time lows.

Another interesting point to consider is if the current drought continues through 2007, it is possible that the Missouri River system storage could fall below 31 MAF by March 15, 2008. The significance of that date and storage amount is together they trigger a navigation preclude. Meaning, there will be no water releases to support downstream navigation. If that occurs, it will be a first.

2006-2007 Missouri River Basin Mountain Snowpack Water Content



Missouri River basin mountain snowpack normally peaks near April 15. Normally 61 percent of the peak accumulation has occurred by February 1.

February 1, 2007 NRCS provisional data subject to revision.

Welcome Aboard Water Commissioners Berg and Foley

Arne Berg and Maurice Foley were both appointed by Governor John Hoeven to serve on the North Dakota State Water Commission. Their terms on the Commission began on December 6, 2006, and will run until June 30, 2011.

Commissioners Berg and Foley were appointed to the Water Commission to take the place of outgoing Commissioners Curt Hofstad, and Charles "Mac" Halcrow.

The Water Commission consists of the Governor as Chairman, the Commissioner of Agriculture as an ex-officio member, and seven other members who are appointed by the Governor to serve six-year terms. Other Governor appointed members on the Water Commission include Larry Hanson, Williston; Elmer Hillesland, Grand Forks; Jack Olin, Dickinson; Harley Swenson, Bismarck; and Robert Thompson, Page.

Office of SE Completes Ordinary High Water Mark Guidelines

By Patrick Fridgen

The Office of the State Engineer recently released a publication that will provide guidance for future ordinary high water mark delineations throughout the state. The Office of the State Engineer contracted with Houston Engineering Inc. to provide assistance with developing the guidelines.

One might ask, what is an ordinary high water mark, and why is it important?

To back up a bit, the Office of the State Engineer is authorized to manage the state's non-mineral interests in sovereign land as afforded in North Dakota Century Code §61-35-05. North Dakota's sovereign lands are those areas, including the beds and islands lying below the ordinary high water mark of navigable lakes and streams.

That is why delineation of the ordinary high water mark is a critical component of sovereign land management, because it identifies the specific areas in and around the state's navigable waters that are under the jurisdiction of the State Engineer. Another way of looking at it, is that the ordinary high water mark delineates the boundary between uplands owned by riparian landowners, and publicly owned sovereign land.

North Dakota's Administrative Code provides one definition of ordinary high water mark: "that line below which the action of the water is frequent enough either to prevent the growth of vegetation or to restrict its growth to predominantly wetland species. Islands in navigable streams and waters are considered to be below the ordinary high watermark in their entirety."

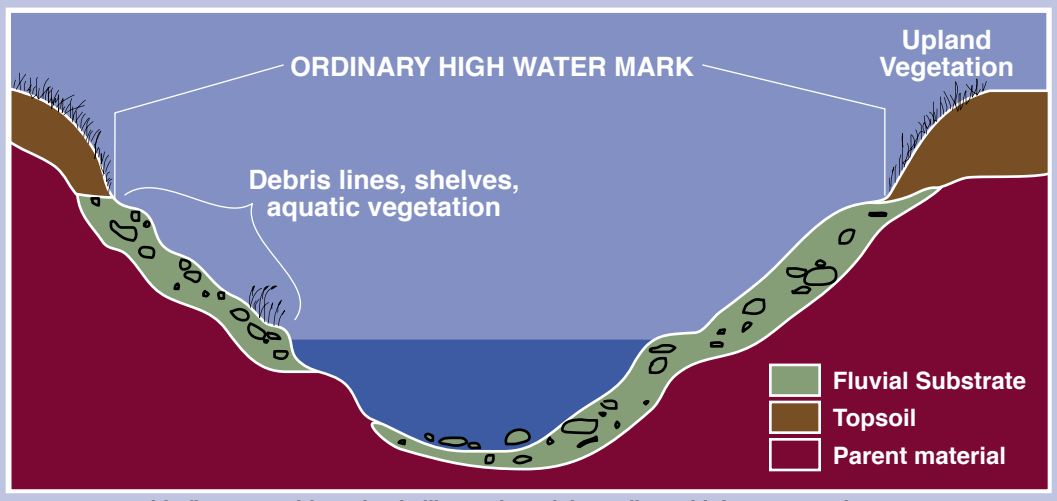
What can make ordinary high water mark delineations somewhat interesting, is that the mark is ambulatory. Meaning, it can move as a river meanders, or a lake rises. In the vast majority of instances, changes that occur to the location of an ordinary high water mark occur over the course of several years or decades. But, it is possible in some isolated instances for the line to move significantly over shorter periods of time.

The idea of developing ordinary high water mark delineation guidelines came out of recommendations from the state's recently completed sovereign land management planning process. Before the guidelines were developed, delineations were conducted within the requirements of past court decisions. However, during the course of the state's sovereign land planning process, it became apparent that in order for North Dakota to improve consistency and efficiency in making delineations, a specific set of standards or guidelines would be advantageous.

Because ordinary high water mark delineations must be made in consideration of hydrology, soils, vegetation, and other physical indicators (i.e. ice scars, erosion, mud/sediment/water stains, wrack, sediment deposition, etc); pertinent expertise in all of the aforementioned technical areas were required to develop the guidelines. Therefore, to bring additional professional expertise into the guideline development process, the Office of the State Engineer requested proposals, and ultimately hired Houston Engineering Inc. to assist with developing the guidelines.

The ordinary high water mark guidelines will generally be applied on a case by case basis. As the spring and summer of 2007 rapidly approaches, the Office of the State Engineer is looking at sovereign land areas throughout the state that have the most urgent need for ordinary high water mark delineations. The purpose of these delineations will be to more clearly define where private property ends, and state land begins.

Through this process, the interests of private property owners along our state's navigable waters will be protected. And, the general public will have a better understanding of what lands are available for their use.

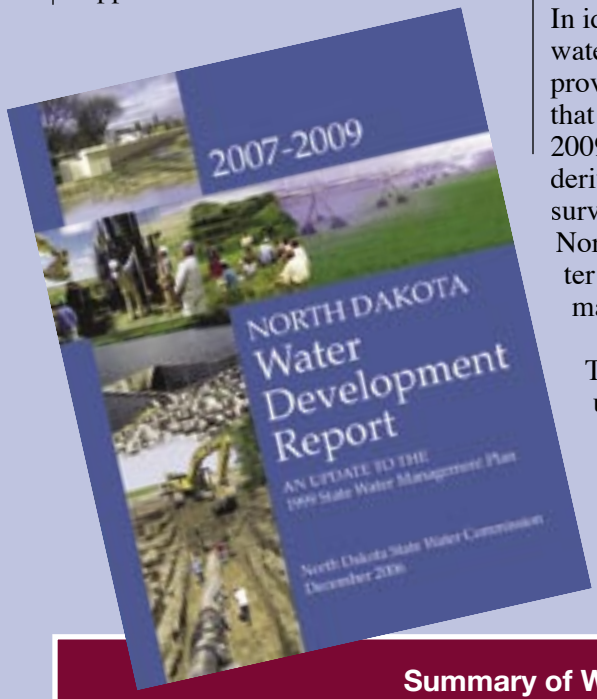


This figure provides a basic illustration of the ordinary high water mark concept.

Water Commission Publishes an Update to the State Water Plan

By Patrick Fridgen

The North Dakota State Water Commission recently published a 2007-2009 Water Development Report to serve as an update and supplement to the State Water Management Plan. The 2007 report provides up-to-date information regarding North Dakota's current and future water management project needs, and outlines the state's ability to fund those efforts.



In identifying North Dakota's future water project needs, the 2007 report provides an inventory of projects that may go forward in the 2007-2009 biennium. This project list is derived on a biennial basis from a survey of project sponsors across North Dakota, including cities, water boards, and major water project managers.

The Commission's new plan documents more than $277 million in total water project needs for the 2007-2009 biennium. Based on current cost-share policies, the state's share of that amount would be about $77 million (see table). Since the state cannot afford all of these project needs in the upcoming biennium, a list of priority projects was identified in cooperation with the North Dakota Water Coalition and the Governor's office.

To demonstrate the agency's ability to fund a portion of those project and program needs, the report also provides an explanation of the agency's estimated revenues for the 2007-2009 biennium. Among other things, the 2007 report also provides an updated version of the Water Commission's cost-share policies.

Copies of the 2007-2009 Water Development Report are available from the State Water Commission's Planning and Education Division by calling (701) 328-4989, or the document can be downloaded from the agency website at www.swc.nd.gov.

Summary of Water Development Needs, 2007-2009

PROJECT CATEGORY	FEDERAL COST	STATE COST	LOCAL COST	TOTAL COST
Flood Control	$ 14,050,000	$ 14,583,000	$ 12,583,000	$ 41,216,000
Irrigation	0	2,000,000	2,250,000	4,250,000
Snagging & Clearing	20,000	343,750	1,031,250	1,395,000
Water Supply	67,128,350	42,032,000	87,075,775	196,236,125
Studies & Planning	0	50,000	50,000	100,000
Rural Flood Control	0	2,128,500	4,106,500	6,235,000
Multi-Purpose	1,050,000	16,108,300	11,288,366	28,446,666
TOTAL	$82,248,350	$77,245,550	$118,384,891	$277,878,791

North Dakota State Water Commission
Dale L. Frink, State Engineer
900 East Boulevard Ave. • Bismarck, ND 58505
(701)328-2750 • http: //swc.nd.gov