The Oxbow

FROM THE NORTH DAKOTA STATE WATER COMMISSION

SWC participating in flood hazard area restudy and remapping program

By Jeff Klein

Along with the rest of the nation, North Dakota is taking a more active role in the restudy and modernization of flood maps produced through the National Flood Insurance Program (NFIP). The NFIP is administered by the Federal Emergency Management Agency (FEMA), which has historically borne almost all of the responsibility to map the flood hazards of communities across the country. The NFIP has now undertaken an ambitious effort to modernize and digitize many of its flood maps, as well as to streamline its operations over the next five years. As part of this effort, new products and technical specifications have been developed and implemented by the NFIP.

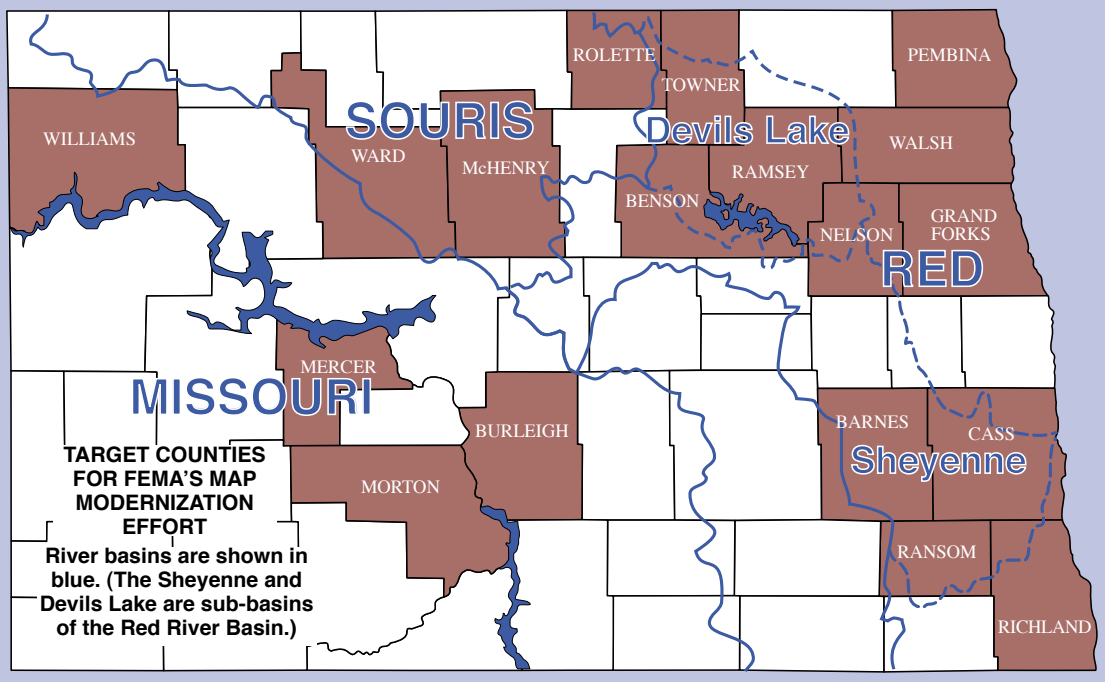
With this new Map Modernization effort, NFIP participating communities (cities, counties, townships, tribes) and the state have an opportunity to play a substantially larger role than they have in the past with flood hazard identification and mapping. In North Dakota, the North Dakota State Water Commission (SWC) has prepared a plan to participate in the Map Modernization effort, which outlines the SWC's role in the process. It is expected that the SWC will assume a management role in the restudy and remapping process, although the specific details are yet to be determined.

To help facilitate this partnership, the Cooperating Technical Partners (CTP) program was initiated a few years ago under the NFIP. The CTP is designed to broaden the involvement of states and communities by utilizing their resources in the flood mapping process and to enlist their ownership of the jointly created map product. The SWC will participate in the CTP as part of its role in the Map Modernization effort.

Nationwide, the NFIP Map Modernization criteria prioritize where money for studies and mapping would be best spent. This criteria considers:

- High population density
- High growth areas
- High risk areas (with a history of repetitive losses, claims, and disasters)
- Ability to leverage federal agency participation
- Ability to leverage cost sharing with local sponsors
- Potential quality of the end product
- Quick successes and early implementations
- Fits in with a comprehensive watershed approach
- Number of flood insurance policies
- Number of presidential flood disasters declared

For the most part, the 12 largest population centers in North Dakota rank the highest in the state, and will be addressed first for restudy and remapping. However, as a result of the number of flood disasters in the last decade, many of North Dakota's population centers have already been remapped under the old NFIP restudy and remapping process. The older



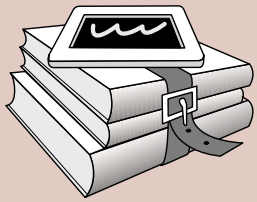
TARGET COUNTIES FOR FEMA'S MAP MODERNIZATION EFFORT
River basins are shown in blue. (The Sheyenne and Devils Lake are sub-basins of the Red River Basin.)

efforts that are still underway are being rolled into the new flood hazard identification and map digitizing approach.

County restudies and studies usually cover only cities and their surrounding areas or a specific river or watercourse. In no instance will an entire area of a county be completely restudied, studied, or remapped.

Using the five major watershed divisions, the target counties are:

Red: Richland, Cass, Grand Forks, Walsh, Pembina
Sheyenne: Barnes, Ransom, Richland, Cass
Devils Lake: Towner, Benson, Ramsey, Nelson
Missouri: Williams, Mercer, Morton, Burleigh
Souris: Ward, McHenry, Rolette

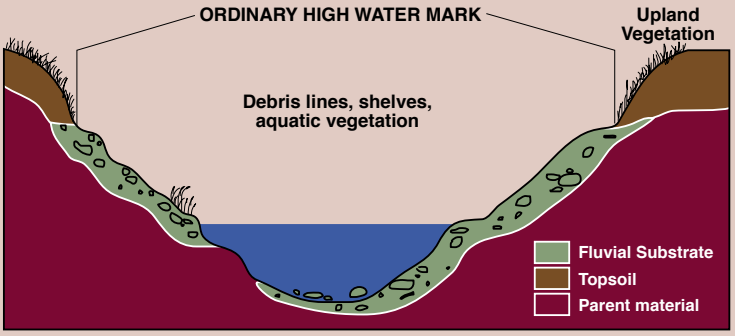


THE WATER PRIMER

When do I need a Sovereign Land Permit from the State Engineer?

By Patrick Fridgen

In the simplest of explanations, if you are going to build a project that lies partially or entirely below the ordinary high watermark of a navigable stream or water body, you will need to get a sovereign land permit from the Office of the State Engineer (SE) prior to construction.



Example projects could include, the construction of a permanent water intake for an industrial plant, pylons for electrical transmission lines crossing a stream or lake, the installation of rip-rap for stream bank erosion protection, or even the dredging of material from a streambed. In short, if you are planning to build or install anything in or around a navigable stream or water body, you will likely need a permit.

Some Definitions

Though the above explanation seems simple enough, it might also provoke a couple of other fair questions, such as – what is an ordinary high watermark, and what is a navigable waterway?

An ordinary high watermark, as defined in North Dakota Administrative Code (NDAC), is the imaginary line below which the action of water is frequent enough either to prevent the growth of vegetation or to restrict its growth to predominantly wetland species (see figure). In addition, any islands in navigable streams or waters are considered to be below the ordinary high watermark in their entirety.

A navigable stream or water, again as defined in NDAC, means any waters which were in fact navigable at time of statehood, specifically including the Missouri, Yellowstone, and James Rivers in their entirety, the Red River from Wahpeton to the Canadian border, the Bois De Sioux River from Wahpeton to the South Dakota border, Upper De Lacs Lake, Devils Lake, as well as thousands of other lakes and meandered water bodies.

The Permit Process

To acquire a sovereign land permit from the SE, an official application form must be filled out and submitted to the Office of the SE. After the application is received, it is reviewed by SE staff, and comments are then requested from a number of other local, state, and federal agencies. After all of the comments are received and reviewed, it is possible that a public meeting may be held - as deemed appropriate by the SE. The applicant is then issued a permit by the SE.

There are a number of exemptions for sovereign land permits, primarily related to boat docks, boat ramps, water intakes, and dredging/filling. But, they are too numerous to mention here. Since it is better to error on the safe side, you can request a free copy of the North Dakota Sovereign Land Management Statutes and Rules booklet from the Water Commission, or visit with SE staff, by calling 701-328-2752. Or, if you have Internet access, the booklet and application form are available on the State Water Commission website at http://www.swc.state.nd.us/permits/soverPermits.html.

COMMISSION MEETING MINUTES

The North Dakota State Water Commission (Commission), chaired by Lieutenant Governor Jack Dalrymple, acted on several items of business at their August 16, 2004, meeting in Bismarck.

In action items, the Commission:

• Approved the use of a $25 million line of credit from the Bank of North Dakota for interim funding until bonds authorized in Senate Bill 2022 of the 2003 Session Laws are issued.

• Approved a recommendation that the firm of RBC Dain Raucher be selected as the underwriter for the Commission's bond issues through the end of the current biennium - ending June 30, 2005.

• Approved reimbursement in the amount of $28,260 from the Reserve Fund for Replacement and Extraordinary Maintenance to the Southwest Water Authority for the replacement of the voltage regulators at the Richardton Pump Station electrical substation.

• Approved an amendment to the West Plains Electric Cooperative Service Agreement for the purpose of adding service to the Southwest Pipeline Project's Fryburg Booster Pump Station.

• Approved a Southwest Pipeline Project service contract with Lakeshore Estates. Lakeshore Estates is located north of Beulah on Lake Sakakawea. It consists of 98 lakeside lots, 61 of which are currently occupied. The water distribution system is also serving Dakota Waters Resort and the Outpost 1806 supper club, also north of Beulah on Lake Sakakawea.

• Approved a Southwest Pipeline Project service contract with the Theodore Roosevelt – Medora Foundation, for their campground in Medora on the west side of the Little Missouri River. Service to the campground was constructed as part of the Southwest Pipeline, Fryburg Service Area Phase I project.

• Approved a Southwest Pipeline Project service contract with Home on the Range. Home on the Range is a residential care facility for at-risk youth, located four miles northwest of Sentinel Butte.

• Approved a resolution authorizing the prepayment of water development revenue bonds for the Northwest Area Water Supply Project's Rugby Component.

• Approved a request from Pembina and Cavalier Counties to transfer funds in the amount of $147,801 from the Walhalla Drain #2, and Drain #3 projects, to the Buffalo Creek Channel Enhanced Drainage Capacity project; and to provide additional cost-share not to exceed $30,674.

• Approved an additional $250,000, at 50 percent cost-share, for the Wahpeton flood control project.

• Approved resolutions of appreciation to Brad Benson and Craig Odenbach, who both recently accepted positions outside of the State Water Commission. Both were recognized for their years of outstanding service at the Commission.

Ground broken for Maple River Dam

On September 15, a groundbreaking for the Maple River Dam project was held in Fargo due to adverse weather. Located about 10 miles northeast of Enderlin, the dam will be an earthen embankment 70 feet high by 1,200 feet long, with the ability to temporarily store 60,000 acre-feet of floodwater, before releasing it in a controlled manner after the flood peak passes.

By the fall of 2005, major construction on the project should be complete, with finishing work following in the spring of 2006. The Maple River Dam project is part of a larger, $74 million flood control plan that provides protection to areas along the Maple, Sheyenne, and Red Rivers.

Original Southwest Pipeline completed

A ceremony was held in Beach on October 8, to celebrate the completion of the final phase of the original Southwest Pipeline Project. Construction began on the raw water transmission lines in Mercer County in 1986. The recently completed phase provides good quality treated water to Medora, Sentinel Butte, and Beach. This phase of the main pipeline was nearly 43 miles in length, and provides water to 1,300 people. An additional 43 miles of water pipeline provides service to 70 rural users. While this phase completes the original project as presented to the legislature in 1983, expansions are planned for the future, particularly in Dunn, Mercer, and Oliver Counties.

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