

Pembina River, Neche (Water Years 1903-2005) Max. Peak (4/27/97): 15.100 Lowest Daily Mean: 0 Annual Runoff: 169,800

Red River, Drayton (Water Years 1949-2005) Annual Mean: 4,465 Max. Peak (4/24/97): 124,000 Lowest Daily Mean (12/23/89): 110 Annual Runoff: 3.235.000

Goose River, Hillsboro (Water Years 1931-2005) Max. Peak (4/21/79): 14.800 Lowest Daily Mean: 0 Annual Runoff: 72,150

> Red River. Fargo (Water Years 1901-2005) Annual Mean: 694 Max. Peak (4/17/97): 28,000 Lowest Daily Mean: 0 Annual Runoff: 502.900

Maple River, Enderlin (Water Years 1956-2005) Annual Mean: 57 Max. Peak (6/30/75): 7,610 Lowest Daily Mean (12/7/63): 0.1 Annual Runoff: 41.600



COMMISSION MEETING MINUTES

The North Dakota State Water Commission (Commission) held a conference call meeting at the Governor's Office in Bismarck on July 29. The purpose of the meeting was to act on business related to the Northwest Area Water Supply (NAWS) Project.

In action items, the Commission:

• Authorized the State Engineer to execute an amendment to the Minot water service contract that will provide terms for an interim water supply to Minot, including an initial water rate.

• Authorized the State Engineer to execute an interim service contract with Minot to purchase water from the Minot Water Treatment Plant as an interim supply to NAWS. Because of a previously developed memorandum of understanding, the NAWS project can purchase water from Minot to provide water service to Berthold and Minot until water can be supplied from Lake Sakakawea.

• Authorized the State Engineer to execute a NAWS service contract with Berthold and an amendment that provides terms for the interim supply, including an initial water rate.

• Approved water rates of \$2.10 per 1,000 gallons for Berthold, and \$0.28 per 1,000 gallons for Minot.

The Commission also heard the preliminary details of a celebration that will be held on Aug. 18, to mark NAWS service to Berthold, with connections for Minot and North Prairie. The celebration will begin at 2:00 p.m. at the Sportsman Club in Berthold, and will continue with a ribbon cutting at 3:00 p.m. at the NAWS tank site.

Sheyenne Dam Restoration Complete

By Michael Noone

In July, the restoration of Sheyenne Dam was completed. The cooperative venture included eight cost-share partners, including the Eddy County Water Board, the Upper Sheyenne River Joint Water Resource Board, the Devils Lake Basin Joint Water Resource Board, the Southeast Cass Watershed District, Aggregate Industries, North Dakota Game and Fish, the U.S. Fish and Wildlife Service, and the Water Commission.

Sheyenne Dam, located just north of the town of Sheyenne along the Sheyenne River in Eddy County, is a low head dam originally constructed in the 1930s. The dam serves as a source of water for gravel washing for Aggregate Industries, and a recreational fishing spot. Built over 75 years ago, the structure's condition had worsened considerably, making its repair a priority for Eddy County.

An initial request for financial support for the dam's repair was

brought to the Upper Sheyenne River Board by Eddy County in 2004, because of a desire to maintain the structure for its flood control and reservoir capacity. The project's estimated \$96,000 cost represented a substantial burden to Eddy County, even with the Water Commission's potential 33 percent cost-share. As a result, the Upper Sheyenne River Board began identifying potential cost-share partners. Through this process, it was determined that the addition of a fish passage structure would make the project attractive to wildlife interests, without substantially increasing total project costs.

The Upper Sheyenne River Board voted to provide monetary and procedural assistance, and directed a great deal of energy toward identifying what eventually resulted in eight cost-share partners, while Eddy County worked with the Water Commission to ensure all required permits were in place.

Construction of the project began in February 2008 while the ground





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was frozen with the staging of 2,200 cubic-yards of rock (between 2-4 ft diameter) and another 500 cubicyards of pit run gravel to be used for the fish passage. The Water Commission's construction crew began the work in the summer of 2008, placing the gravel fill and rock, and replacing the concrete cap on the original structure.

There was some concern about a natural gas pipeline crossing the river in the location of the project. Working in cooperation with Williston Basin Interstate Pipeline Company, extra gravel was purchased to place over the pipeline to protect and add cover through the river channel. The pipeline company reimbursed the cost of the extra material.

While rain at the site was frequent in June and July, the flows in the river gradually receded as the project advanced. This allowed the project to be completed within five weeks.

Pete Larson, the Eddy County Water Board representative on the Upper Sheyenne River Board said, "I am very impressed with the job the State Water Commission crew did on this project. I think the people of the Sheyenne community can be confident that this structure will be sound for a long time. This was made possible by the cooperation and financial support of many entities, which were coordinated by the Upper Sheyenne Joint Water Resource Board and its chairman Ben Varnson."

The Sheyenne Dam restoration project is an excellent example of what joint water boards can accomplish, drawing upon many different partners, building a consensus, and developing projects that are beneficial to their basin. In the coming years, the Upper Sheyenne River Board is expected to replicate the process for several other dams in the basin.