

# ***Garrison Diversion Continues to Move Forward on Red River Valley Water Supply Project***

**By Kimberly Cook**

The Garrison Diversion Conservancy District (Garrison Diversion) works diligently to fulfill its mission of providing a reliable, high-quality, and affordable water supply to benefit the people of North Dakota. Part of this effort has been focused on the Red River Valley Water Supply Project (Project); a project designed to bring a much-needed supplemental water supply to eastern North Dakota.

The Project will provide a supplemental water supply to the meet the needs of the people and industries of the Red River Valley. The need for the project arises from the drought-prone Red River, which creates the border between North Dakota and Minnesota. Studies show a drought, similar to that of the 1930s, will likely repeat by the year 2050. In the 1930s, flows were at extreme lows, and sometimes at no-flow levels in the Red River. For example, in 1934, there were nearly five consecutive months of zero flow in the Red River at Fargo.

If a drought of this magnitude were to occur today, water supplies in the Red River Valley would not be sufficient. It would take 1,200 truckloads of water per day, or one truckload of water arriving every minute around the clock for five months to supply the basic household water needs of Fargo alone. As the population in the Red River Valley grows, a supplemental water supply is essential for the people of the Valley, as projected water supply shortages will become even greater in the future.

As it is designed, the Project would use the Garrison Diversion Unit Principal Supply Works, consisting of the Snake Creek Pumping Plant, Lake Audubon, and the McClusky Canal to bring Missouri River water to the Red River Valley. To comply with the Boundary Waters Treaty with Canada, a biota treatment plant would be built where the water is taken out of the McClusky Canal. From the biota treatment plant, the treated water would flow into a 123-mile pipeline and be released into the Sheyenne River, just above Lake Ashtabula. The water would then flow to



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and through the Sheyenne and Red River systems to the contracted water systems (end users).

After seven years of study, several Project milestones have been reached. In December 2007, the Final Environmental Impact Statement was released. The following December, the Bureau of Reclamation submitted the Comprehensive Report to Congress, that identified the selected alternative for the Project as the GDU Import to the Sheyenne River. In January, the Secretary of Interior signed a memorandum that stated the identified treatment of Missouri River water for the Project was adequate to meet the requirements of the Boundary Waters Treaty of 1909.

Agreements of Intent have been signed by 18 water systems in the Red River Valley. These agreements indicate the intent to enter into a water service contract for a supplemental water supply when the Project is completed.



A map of the proposed Red River Valley Water Supply Project. The selected alternative is the GDU Import to the Sheyenne River.

### **Funding from the State Water Commission**

The State Water Commission showed its continued commitment to the Project by approving \$4 million in grant funding to continue moving the Project forward.

These funds are for the following tasks:

- The Project’s operational plan
- Right-of-way acquisition services
- Landowner payments for right-of-way options
- Permitting and environmental services
- Pre-final design
- Financial planning

An experienced team of designers, environmental consultants and right-of-way agents has been mobilized to complete right-of-way acquisition, permitting and environmental services, operational planning, and preliminary design work.

### **Right-of-Way**

Currently, land agents are working to secure the right-of-way along the proposed pipeline route. There are approximately 264 parcels of land that are being negotiated with 173 landowners on the proposed right-of-way. The proposed pipeline is 123 miles long and runs through four counties – Sheridan, Wells, Foster, and Griggs.

Several steps have been taken to negotiate with

landowners along the proposed right-of-way. At the beginning of May, an informational packet was sent to the landowners describing the Project along with an Access Agreement to allow Garrison Diversion agents access to conduct archaeological, environmental, and geotechnical studies to further refine the 400-foot wide pipeline corridor. Following the studies, the initial 400-foot wide corridor was reduced to 150 feet, the size of the necessary easement.

In July, option agreements, along with detailed maps showing the location of the pipeline corridor on each parcel of property, were sent to landowners along the proposed right-of-way.

At this time, Garrison Diversion requested the option to purchase a permanent easement for the 150-foot wide corridor across the landowners’ properties. The permanent easement will not significantly affect current land use. To date, 69 percent (119 of 173) of landowners have signed option agreements.

### **Permitting and Environmental Services**

The Corps of Engineers has completed the field work required to collect data on historic properties, utility crossings, road crossings, and other activities that will



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require permits. The field work determines whether the pipeline will go over, under, around, or through various obstructions in the proposed path of the pipeline and can influence the final design of the pipeline. The next step is to complete the permit applications with the different entities involved. Permits are important in ensuring that all information is collected and accurate for the final pipeline design.

### ***Operational Plan***

The operational plan will answer questions about the timeliness of Project water releases from the Baldhill Dam, the amount of water released, and how the releases will be accounted for throughout the Project system. The plan will help determine the operation of the pipeline delivery system, account for gains and losses of water in the river systems, and develop a system to determine the amount of contracted water end users (water systems) intake to their treatment or delivery facilities.

A work group has been organized to gather input on issues that will affect the operational plan. The objectives of the work group are to help develop an overall plan for delivering water from the Project pipeline to and through the Sheyenne River and Red River systems to the contracted water systems.

The work group is represented by federal and state agencies, Garrison Diversion, Lake Agassiz Water Authority members, and local water systems. Federal agencies participating in the work group include the Bureau of Reclamation, the U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service. State agencies include the SWC, N.D. Department of Health, N.D. Game and Fish Department, and the Minnesota Department of Natural Resources.

### ***Preliminary Design***

Work has begun on engineering evaluations regarding the preliminary design of the system. The purpose of

preliminary design is to gather information regarding the site and installation conditions and to define the basic design parameters of the pipeline project so that the detailed design phase can proceed efficiently and without rework. The preliminary design will determine the type of pipe materials to be used, pipe size, final alignment of the pipeline, installation characteristics, and additional features to allow for efficient pipeline installation.

### ***Schedule***

In 2010, the Project will continue to move forward with operational planning, pre-final design, permitting and environmental efforts, and refining the financial plan. The Project is still waiting on authorization from Congress and for a Record of Decision from the Secretary of Interior. Garrison Diversion is working with the Congressional Delegation to move these efforts forward.

“Now is the time to get the Project done,” says Bruce Furness, former Fargo mayor and current chairman of the Lake Agassiz Water Authority. “Right now we’re in a wet cycle, but one of these days we will be in a dry cycle. We’ve been dry as recently as 1988. For 70 years the Red River Valley has been promised a solution to this problem, and now is the time to solve it.”

Though the majority of the Red River Valley experienced record flooding this spring, the Project continues to be important. Wet and dry cycles come and go, and the Project cannot wait until a severe drought occurs. After planning and preparations are complete, Project construction will take an additional three years.

“We are closer now than we have ever been to getting a solution to the water needs of the Red River Valley,” says Ken Vein, chairman of Garrison Diversion’s Public Relations and Red River Valley Committee. “We are confident that this is the right project to solve the water needs of the people of eastern North Dakota, so we will continue to push forward until the Project is completed.”