

AUGUST 2005

INFORMATION BACKGROUND SHEET

FEASIBILITY STUDY SANTEE SIOUX NATION MUNICIPAL, RURAL, & INDUSTRIAL (MR&I) WATER SUPPLY SYSTEM

The Bureau of Reclamation and the Santee Sioux Nation (Nation) are evaluating the water supply needs of the Santee Sioux Reservation (Reservation) through the year 2050. A feasibility study will be conducted to determine the most effective method of developing a safe and adequate MR&I water supply system. This system would meet the collective water supply demands of all residents within the Reservation boundary. The study is authorized by Public Law 108-204 Sect. 125. The feasibility study is a detailed investigation to be used as a basis for seeking congressional authorization for constructing the project. Through the feasibility study process, proposed solutions, referred to as reasonable alternatives, are developed to meet the recognized needs, problems, and opportunities. From those alternatives a preferred plan will be developed.

PUBLIC MEETING

Reclamation and the Nation will be holding a public meeting on August 25, 2005, from 7:00-9:00 p.m. at the Santee Sioux Community Center, 104 North Veterans Memorial Drive, Santee, Nebraska. The purpose of the meeting is to present information about the feasibility study and the proposed reasonable alternatives. The National Environmental Policy Act (NEPA) requires that public scoping be conducted to ensure that all reasonable alternatives are identified and the National Historic Preservation Act (NHPA) requires that the views of the public regarding historic properties be sought and considered. Reclamation will ask the public to help identify issues, concerns, and resources associated with the reasonable alternatives currently proposed or with any other alternatives developed from public input. If you have questions concerning the meeting, or cannot attend but would like to provide input, contact Judy O'Sullivan, Public Involvement Specialist, Bureau of Reclamation, P.O. Box 1607, Grand Island, NE 68802, phone 308-389-5307, fax 308-389-4780, or josullivan@gp.usbr.gov.

NEEDS ASSESSMENT

As part of the planning process, Reclamation and the Nation completed a Needs Assessment, MR&I Water System, Santee Indian Reservation, Nebraska, March 2004 (Needs Assessment) document. The Needs Assessment identifies several reasonable alternatives to meet the future water supply needs of the Nation which are estimated to be approximately 500 gallons per minute. These reasonable alternatives will be further refined in the feasibility study. The Needs Assessment is available on the NKAO website at:

http://www.usbr.gov/gp/nkao/needs_assessment/index.html

SANTEE INDIAN RESERVATION

The Reservation lies in the north-central part of Knox County in northeastern Nebraska (as indicated on the map). The Reservation border is marked by Lewis and Clark Lake and the Missouri River to the north and the reservation boundaries to the east, west, and south, covering approximately 175 square miles. The resident population is centered in the Village of Santee (Village) in the northernmost portion of the Reservation.

The population on the Reservation is expected to increase because of the following:

- a. The Santee people living on the Reservation want to remain there;
- b. The expected return of Tribal members who are enrolled but not currently living on the Reservation;
- c. The relatively young population of the Reservation who will remain and raise families; and
- d. The future economic development proposed for the Reservation.

Employment on the Reservation is concentrated in the agricultural, service oriented, and administrative support sectors. Other sources of revenue are tourism, outdoor recreation, and casino gambling. Future economic growth is anticipated for agriculture and service industries as well as recreation and community based enterprises. Potential future development includes a small strip mall, an RV park, casino expansion, a hotel, and a golf course. The Nation would also like to establish light industry on the Reservation. An adequate supply of good quality water is essential for supporting local economic growth and for enhancing the quality of life on the Reservation.

CURRENT WATER SUPPLIES

Reservation water supplies are drawn almost entirely from the Bazile Creek well field near the western boundary of the Reservation. Findings from the U.S. Environmental Protection Agency (EPA) Title 106 Water Quality Management Program indicate that pesticides do not appear to be a problem for the Reservation's domestic groundwater supply. However, nitrate-nitrogen and total coliform bacteria appear to exceed EPA primary drinking water standards in a significant number of wells. Initial findings indicate that the contaminant source is related to septic system effluent or onsite confined animal feeding operations, rather than agricultural non-point source pollution. Poor quality water which is delivered to the Village, as well as cluster housing projects and rural areas of the Reservation, imposes economic constraints.

RESERVATION-WIDE WATER SUPPLY ALTERNATIVES

The Needs Assessment presents six reasonable alternatives to consider in meeting future water supply needs. Alternatives are included which draw water either from surface and groundwater sources or tie into existing rural water systems adjacent to the Reservation. The following alternatives will be discussed in more detail during the August 25th public meeting.

- 1. Well Field in the Southeast Corner of the Reservation** – Wells would be installed in an aquifer located in the southeast corner of the Reservation. Following chlorination and fluoridation, water would be pumped via a main pipeline to the vicinity of the existing tribal water treatment building. From there, booster pumps would lift the water to the Village. Distribution lines would branch off the main pipeline to convey water to rural residences on the Reservation.
- 2. Tribal Surface Water Treatment Plant at Bazile Creek** – Surface water would be directly diverted from Bazile Creek at a location south of the existing tribal water treatment building. Water would be treated by chemical and/or physical means. Water would then be delivered to the Village using an existing pipeline and to rural residences on the Reservation through a distribution system.
- 3. Tribal Surface Water Treatment Plant at the Missouri River** – Water would be diverted directly from the Missouri River in the vicinity of the Village “boat docks.” A new treatment plant would be constructed to treat the water which would then be distributed to the Village and rural residences on the Reservation.
- 4. Tribal Groundwater Treatment Plant in the Vicinity of the Existing Bazile Creek Well Field** – The existing well field would be expanded with the installation of additional wells. A new treatment plant would be constructed to treat the water which would then be conveyed to the Village through an existing pipeline with a distribution system installed to convey water to rural residences on the Reservation.
- 5. Connection to the Cedar-Knox Rural Water System** – A distribution system would be developed for the Reservation that connects to the existing Cedar-Knox Rural Water Authority delivery network. The water use at the existing treatment facility for Cedar-Knox is near capacity. It is anticipated that Cedar-Knox would need to construct a new facility to meet the demands of the Reservation.
- 6. Connection to the West Knox Rural Water System** – A distribution system would be developed for the Reservation that connects to the existing West Knox Rural Water System. The well supply and storage capacity of the West Knox system would need to be expanded to meet the demands of the Reservation.

FUTURE INFORMATION AND UPDATES

Comments from the August 25th public meeting, informational updates, and the status of the NEPA process will be posted on Reclamation's Nebraska-Kansas Area Office website at:

<http://www.usbr.gov/gp/nkao/>

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