

About Angostura

Angostura EIS Activities

March 25-26, 1998: Cooperating Agency meeting was held in Rapid City to review baseline data bases for impact analysis in the EIS. 35 people representing federal and state agencies, tribes, and irrigation districts attended. Cooperating Agencies provided direction and guidance to the Angostura NEPA team on data bases and impact analysis.

May 12, 1998: Bureau of Reclamation approves grant agreement with Oglala Sioux Tribe pursuant to P.L. 93-638, Indian Self Determination and Education Assistance Act. Under this agreement, the Tribe collects and analyzes water quality, hydrology, riparian vegetation, fisheries, and cultural resource data within the Pine Ridge Reservation. This information will be used in the EIS for impact analysis of the four alternatives.

July 7-8, 1998: Angostura NEPA Team Meeting in Bismarck, ND. At this meeting, the team drafted and reviewed EIS Chapters 1, 2 & 3, and initiated the impact analysis for Chapter 4.

September 9, 1998: Oglala Sioux Tribe and SD Game, Fish & Parks assisted Reclamation in additional fish collections for tissue analysis. Fish were collected from the Cheyenne River below the dam and at the Red Shirt - Fairburn site. Additional fish collections are needed to supplement fish tissue data for bio-accumulation analysis of trace elements and pesticides.



Winter 1998/1999: The Angostura NEPA Team will utilize the winter months to complete a preliminary draft EIS. This PDEIS will then be reviewed by the cooperating agencies and tribes for their comments before a formal Draft EIS is published in the Federal Register. Once a DEIS is published, the NEPA team will conduct workshops and meetings for public comment. The following is a tentative schedule of upcoming NEPA activities:

March 1999
Distribute Preliminary Draft EIS to
Cooperating Agencies

April 1999
Cooperating Agency Meeting

June 1999
Publish Draft EIS

July 1999
Public Workshops-Meetings on DEIS

September 1999
Publish Final EIS and Record of Decision

The Angostura NEPA Team wishes everyone a happy holiday season and a prosperous new year. Our successes are a result of your cooperation and assistance. Please feel free to contact us with any questions or concerns that you may have.



DECEMBER 1998

About Angostura



Where Are We In The Process?

This is the second issue of About Angostura. Copies of the first newsletter issued October 1997 are available if you did not receive one. We are using this issue to update you on the revised alternatives for the Environmental Impact Statement (EIS) conducted by the Bureau of Reclamation (Reclamation) for management at Angostura Reservoir; our recent office move, articles on Indian Trust Assets (ITA) and cultural and paleontological resources, and a schedule of upcoming activities. Future issues of About Angostura will focus on hydrology, water quality, riparian vegetation, geographic information systems, and socio-economics.



Rapid City Field Office Opens, And Newell Field Office Closes

On August 31, 1998, Reclamation opened an office in Rapid City, SD, and closed its Field Office in Newell, SD. The Newell Field Office closed due to completion of the rehabilitation of the Belle Fourche irrigation district. The Rapid City Field Office (RCFO) was established because of Reclamation's expanding role in water management activities in western

South Dakota. The RCFO oversees the operation, maintenance and resource management of dams and reservoirs in South Dakota and eastern Wyoming. The RCFO staff of 11 persons are responsible for the management of Pactola, Deerfield, Angostura, Shadehill, Belle Fourche, and Keyhole reservoirs and Oahe Unit Lands. These reservoirs were authorized for multiple purposes, including flood control, irrigation, municipal water supply, recreation, and fish and wildlife. Reclamation customers include municipal water users and irrigation districts.

In addition, RCFO provides technical support and assistance to several Indian tribes and works closely with the Mni Sose Tribal Water Rights Coalition, located in Rapid City, on issues involving Trust Assets and project operations.

Reclamation staff located in Rapid City and Pierre provide oversight for the Mni Wiconi Rural Water project. This municipal, rural and industrial water project will eventually serve the Rosebud, Lower Brule and Pine Ridge Indian Reservations, rural residents, and communities in a nine county region of western South Dakota. Mni Wiconi is distinguished as being the largest MR&I project in SD. The Oglala Sioux Tribe is responsible for operation and maintenance of the Mni Wiconi core water line, on and off the Pine Ridge Indian Reservation.

The new RCFO is located at 515 9th Street, Room 101, Rapid City, SD, 57701. Please address your comments and questions to Kenneth Parr by phone at 605-394-9757, Ext. 3004, by FAX at 605-394-9346, or by E-mail, KPARR@GP.USBR.GOV.

Alternatives

Reclamation's EIS team originally developed seven alternative plans for renegotiating a waterservice contract with the Angostura Irrigation District and managing water resources at Angostura Reservoir (see October 1997 newsletter). The alternatives were designed to meet project purposes, resource needs, and the concerns of the public. These alternatives were:

- No Action
- Re-establishment of Natural Flows Below the Dam
- Adaptive Water Management
- Water Conservation
- Reservoir Recreation and Fisheries
- Pine Ridge Irrigation
- Hydropower

The EIS team, with help from the tribes, irrigation district, and state and federal agencies making up the study partners, have further defined (or combined) these alternatives. The result is that the upcoming EIS will analyze four alternatives in detail, while two others will be included in an Alternatives Considered But Eliminated from Detailed Study section. The revised alternatives are:

No Action Alternative

This alternative would include a renewed water service contract with the District to irrigate a maximum of 12,218 acres (about 10,000 acres in the average year). Application would continue at 2½ acre-feet of water/acre. Average diversion would be 41,800 acre-feet (af) per year. The contract would be for a maximum of 25 years, with the possibility of additional renewals. Rates charged for the water would be reviewed at least every five years, and the district would be responsible for operation and maintenance (O&M) costs of the Angostura Unit.

In this alternative all other water uses would be secondary to district irrigation. Recreation and fisheries in the reservoir and flow downstream to the Cheyenne River would depend on the volume of water flowing into the reservoir: Water levels in the reservoir would range from elevation 3163 feet to 3187.2 feet, average annual discharge to the river 60.2-68.4 cubic-feet/second (cfs), depending on whether irrigation were at the maximum or

the average.

Re-Establishment of Natural Flows Below the Dam Alternative

To recreate as nearly as possible natural flow in the river, the radial gates of the dam would be opened fully, with all flow into the reservoir allowed to pass through. The reservoir would be drawn down to the top of the spillway crest at elevation 3157.2 feet, which would cause the surface area to be cut in half. There would be no irrigation. Discharge from the reservoir would nearly double to 120.7 cfs, and the river would be prone to periodic flooding and drying up.

Congressional legislation would be required to re-authorize benefits from the reservoir.

Improved Efficiencies Alternative

This alternative, a combination of the original Adaptive Water Management and Water Conservation Alternatives, would increase water available for all uses by up to 8,000 af. It would improve the efficiency of the District's distribution system by lining canals and laterals, changing laterals to pipe, and other measures. It would also improve on-farm practices of individual irrigators by leveling fields, adding water measurement devices, irrigating by gated pipe or sprinkler, and other methods. Reclamation, the district, and the irrigators would fund the costs of this alternative.

An advisory committee—consisting of the tribes, the district, state agencies, Reclamation, and other interested parties—would determine how the extra water from the reservoir were to be used each year. The committee would meet for a period of five years, after which Reclamation would evaluate its effectiveness. Irrigation could range from a water supply of full allotment to some reduced amount. Recreation and fisheries in the reservoir and flow downstream to the river would likewise depend on the committee. Water levels would range from elevation 3163 feet to 3187.2 feet, while average annual discharge to the river would range from 68.9 cfs (maximum irrigated acreage) to 88.8 cfs (average acreage).

Assimilation of Information

This information will allow for an assessment of management concerns driven by Reclamation's responsibilities under federal laws and regulations. The impact of each alternative to significant cultural resource sites and properties of religious and cultural importance will be assessed. This will result in the identification of potential effects each alternative may have to known resources. This will also provide the necessary information for further management recommendations. Sensitive information such as the specific locations of cultural resource sites and information considered sensitive by tribal participants in this research shall not be released to the public.

Paleontological And Fossil Resources

Paleontological resources consist of the fossil remains of plants and animals, both invertebrate and vertebrate. Paleontological resources are not specifically protected by law the same way as cultural resources. Generally, paleontological resources are considered under the National Environmental Policy Act. The illegal collecting of paleontological resources on federal lands is addressed under laws concerning theft or destruction of federal property. Within the past few years a number of laws have been introduced into Congress that address paleontological resources, particularly vertebrate fossils. To date none have been enacted into law.

To date paleontological inventories in the Angostura EIS study area outside of Reclamation lands at Angostura Reservoir have not been done. In 1995 the remains of a mosasaur (*Platecarpus* sp.) were discovered at Angostura Reservoir, and the Museum of Geology, South Dakota School of Mines and Technology was contracted to evaluate the potential of these remains.

Reclamation also contracted with the Museum of Geology, South Dakota School of Mines and

Technology, to appraise the paleontological resources at the reservoir. The objective was to review the existing data base, to identify potentially significant paleontological locations, and field check locations with a high probability of occurrence. The geological strata that outcrop around the reservoir could then be evaluated as to their potential to produce significant fossils. Significance can be evaluated in terms of rarity, uniqueness or scientific importance.



Reclamation has approached the Museum of Geology to use this identical survey design for the Angostura EIS study area, which includes the reservoir and 275 downstream river miles on the Cheyenne River to the west boundary of the Cheyenne River Sioux Reservation, the first terraces immediately adjacent to the floodplain on each side of the river (terrace one). Following the identification of site sensitivity and evaluation of significance, Reclamation can proceed with an assessment of how the proposed alternatives identified in the Angostura EIS may affect paleontological and fossil resources.



Oglala Sioux Tribe assists Reclamation with cottonwood-riparian vegetation data collection.

government also has an interest, either through administration or direct control. The federal government acts in a fiduciary or trust capacity with respect to these properties, interests, or assets.

Reclamation's ITA policy was developed in response to the policy statement issued by former President Bush on June 14, 1991, that affirms the government-to-government relationship between federal agencies and tribal governments. President Clinton issued a memorandum on April 29, 1994, that further reaffirms this relationship. These policies and directives resulted in the Department of the Interior's "Departmental Responsibilities for Indian Trust Resources" (512 DIM Chapter 2). The Department of the Interior Manual (DIM) states:

It is the policy of the Department of the Interior to recognize and fulfill its legal obligations to identify, protect, and conserve the trust resources of federally recognized Indian tribes and tribal members, and to consult with tribes on a government-to-government basis whenever plans or actions affect tribal trust resources, trust assets, or tribal health and safety.

The concept of ITAs reflects the sovereignty of federally-recognized tribes and the government-to-government trust relationship between federal agencies, such as Reclamation, and these tribes and individual Indians. The sovereignty of tribes and this trust relationship have been established through treaties, court decisions, legislation, regulations, and policies. The government-to-government relationship implies that federally recognized tribes are to be respected as sovereign governments and that federal agencies have a trust responsibility to respect this sovereignty. One aspect in maintaining this respect is for federal agencies to ensure that their activities protect, promote, and enhance ITAs.

The purpose of the Reclamation ITA policy is to ensure that effects on Indian assets are considered in the planning and implementation of Reclamation actions. The DIM specifies that each bureau and office must identify any potential effects that their activities may have on ITAs. Any effect must be explicitly addressed in planning/decision documents, such as those prepared in association with the NEPA process. All categorical exclusions

(CECs), environmental assessments (EAs), environmental impacts statements (EISs), and resource management plans (RMPs) are to have separate sections that discuss ITAs and whether the proposed action(s) will have an impact on any asset(s). The process by which ITAs are addressed in environmental documents is specified in Reclamation's (draft) NEPA Handbook.

Tribal History and the Black Hills



The project area is situated within the historic homelands of the Teton Sioux tribes. Specifically, the project area is located in southwestern South Dakota, adjacent to the Black Hills, which have both historic and spiritual significance to the tribes. The Black Hills figure prominently in tribal histories and legends.

To understand whether ITAs will be affected by the proposed contract renewal, it is necessary to review briefly the legal history of the Black Hills with respect to the treaties with the Sioux Nation. The Black Hills, including the project area, were included in the Great Sioux Reservation established by the Ft. Laramie Treaty of 1868. This reservation was to be the permanent homeland of the Sioux Nation. Article 12 of the treaty stipulates that no treaty for the cession of any portion or part of the reservation is valid unless executed and signed by three-fourths of all adult male tribal members. This article became critical with respect to future events.



Oglala Sioux Tribe and Reclamation use electro-shocking equipment to collect fish for tissue analysis.

In 1874 gold was discovered in the Black Hills, resulting in a rush of settlers onto the reservation. Subsequently, Congress ratified the Act of February 28, 1877, otherwise known as the Manypenny Agreement. This agreement withdrew the Black Hills from the Great Sioux Reservation and extinguished any rights of tribal members to lands outside the reservation boundaries, thereby opening up the hills for settlement and development. The problem is that the agreement was not executed and signed by three-fourths of the adult male tribal members as required in Article 12 of the 1868 Ft. Laramie Treaty. The failure to comply with Article 12 became one of the primary contested points in future litigation over the validity of the Manypenny Agreement.

In 1889, Congress and the Sioux Nation signed an agreement that broke up the Great Sioux Reservation into smaller reservations: Cheyenne River, Standing Rock, Pine Ridge, Rosebud, and Lower Brule. These are the reservations where the Sioux in western South Dakota reside today.

Beginning with the passage of the Sioux Jurisdictional Act in 1920 the Sioux tribes began to file various petitions in the Court of Claims and, later, the Indian Claims Commission to address whether the Black Hills were taken illegally and without just compensation under the Manypenny Agreement. In 1979, the Court of Claims affirmed that the Black Hills were taken without just compensation to the Sioux Nation and was, therefore, seized illegally. The court awarded the tribes \$17.5 million plus 5 percent simple interest compounded annually from 1877. The Supreme Court affirmed this decision in 1980, awarding the tribes \$105 million for the gold that mining removed from the Black Hills prior to 1877.

The Sioux tribes, though, have refused to accept this decision, preferring the return of the Black Hills. Since the Supreme Court decision, individual tribes, such as the Oglala Sioux Tribe, have filed separate court actions and the Sioux tribes have tried to introduce legislation into Congress, such as the Bradley Bill in 1986, to have the hills returned. Although the Supreme Court has upheld a monetary award as compensation for the taking, the tribes still lay claim to the hills. They argue that the monies are not sufficient, that the only just compensation must also include a return of the hills. For a more detailed

history and discussion of the Black Hills issue, the reader is referred to Lazarus (1991) and the articles on the Black Hills claim in *Indian Country Today*, the week of April 27 to May 4, 1998.

Water Rights

States have jurisdiction over the appropriation and allocation of surface and ground water. Water rights in South Dakota is based on the appropriative system and the principle of prior appropriation - "first in time, first in right." The establishment of a right is determined by the date on which the water was diverted and put to beneficial use, such as irrigation or mining, and that user (appropriator) has the right to continue to take the same amount of water without interference by any later appropriator, so long as the senior appropriator continues to put the water to beneficial use.

Indian reserved water rights is an exception to this rule. The basis for Indian water rights stems from the Supreme Court decision of *Winters v. United States*, 207 U.S. 564 (1908), more commonly known as the Winters Doctrine. According to the Winters Doctrine, the establishment of an Indian reservation implies that sufficient water was reserved (set aside) to fulfill the purposes for which the reservation was created with the priority date being the date the reservation was established. As such Indian water rights constitute an ITA. Under the Winters Doctrine, the Oglala and Cheyenne River Sioux tribes have reserved rights to waters of the Cheyenne River since the establishment of the reservations probably predates any other appropriator. Although these rights have not yet been perfected, Reclamation still must consider and recognize the Winters Doctrine rights of the Oglala and Cheyenne River Sioux tribes in evaluating the alternatives in the Angostura EIS.



Recording data and sample preparation for the lab.

Cultural Resources

For the purpose of this study cultural resources are defined as archaeological, historical or architectural sites, buildings, structures, objects, and districts or properties of traditional religious and cultural importance to Native Americans. Cultural resources on public lands or those affected by federally funded or permitted projects are protected and governed by several federal laws, regulations, and guidelines. These specify that Reclamation is responsible for the identification, protection and management for cultural resources on public lands it administers as well as for activities on lands it funds, administers, or permits. The most important of these are:

- National Historic Preservation Act of 1966 as amended through 1992 (PL 89-665 and PL 102-575)
- Archeological and Historic Preservation Act of 1974 (PL 93-291)
- American Indian Religious Freedom Act (PL 95-341)
- Archaeological Resources Protection Act of 1979 (PL 96-95)
- Native American Graves Protection and Repatriation Act (P.L. 101-601)
- 36 CFR Part 60.4—National Register Criteria
- 36 CFR Part 79—Curation of Federally Owned and Administered Archeological Collections
- 36 CFR Part 800—Protection of Historic and Cultural Properties
- 43 CFR Part 7—Protection of Archeological Resources: Uniform Regulations
- 43 CFR Part 10—Native American Graves Protection and Repatriation Act Regulations (proposed rule)
- Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines (Federal Register, Vol 48, No. 190, 1983, pp. 44716 to 44740)
- Executive Order 11593—Protection and Enhancement of Cultural Environments

In September 1996 Reclamation completed the Angostura Resource Appraisal Study Report. This preliminary report provided an overview of cultural

resources sites and management concerns on Reclamation land at the reservoir and on the Angostura Irrigation District. Since the publication of the report the Angostura EIS study area has increased to include the reservoir and 275 downstream river miles on the Cheyenne River. The study area has been extended from the reservoir to the west boundary of the Cheyenne River Sioux Reservation. It was further designated to include the first terraces immediately adjacent to the floodplain on each side of the river (terrace one).

Research Methodology

The objective of the overview is to provide sufficient information to assess how the proposed alternatives identified in the Angostura EIS may affect cultural resource sites and properties of traditional religious and cultural importance to Native Americans. Given this objective, research is being conducted to:



- identify all cultural resource investigations to date in the study area;
- identify all known archaeological, historical or architectural sites, building, structures, objects, and districts or properties of traditional religious and cultural importance to Native Americans;
- identify the eligibility statutes of cultural resource sites for eligibility for listing on the National Register of Historic Places (NRHP).

Research concerned with the identification of properties of religious and cultural importance is being conducted on the Pine Ridge Reservation. The Oglala Sioux Tribe developed a series of research questions that focus on aspects of tribal concern. In summary these include information about changes in the quality of the river, riparian vegetation, and subsistence and recreational activities in the study area. This research is supported by many elderly tribal members of the Red Shirt Community where the research is taking place. Many have agreed to provide information through personal interviews.

Changing priority allocations in the reservoir would require Congressional legislation.

Reservoir Recreation and Fisheries Alternative

This alternative would aim toward keeping the reservoir's boat ramps usable and providing water levels to aid fish spawning, establishing beaches, and maintaining a large reservoir surface area. Irrigation, secondary to recreation and fisheries concerns, could range from the maximum acreage to zero. Water levels would range from elevation 3170 feet to 3187.2 feet, average annual discharge to the river 62.3-70.0 cfs, depending on whether irrigation were at the maximum or the average.

Reclamation would reallocate O&M costs for construction to include recreation and fish and wildlife benefits, and would reduce the district's share of O&M costs proportionally.

Congress would have to re-authorize Angostura for recreation and fish and wildlife benefits.

Alternatives Considered But Eliminated

The last two original alternatives were eliminated from detailed study in the EIS.

Pine Ridge Irrigation Alternative--This alternative would have irrigated 400 acres next to the river at Red Shirt, in addition to irrigation in the District. Water for recreation, fisheries, and flow in the river below the dam would have been secondary to irrigation. This alternative was eliminated at the request of the Oglala Sioux Tribe.

Hydropower Alternative--This alternative would install a powerplant at Angostura Dam or in the river below the dam for the benefit of the Cheyenne River Sioux Tribe. The original powerplant at the dam was dismantled in the 1970s because the water supply available for power production was

too low. After reviewing reservoir inflow since the 1970s, it was concluded that the water supply was still too low. The other possibility would be to build a low head dam on the river next to the Cheyenne River Reservation. Because of the low gradient of the river, however, a low head dam would back up the river into a lake several miles long, flooding riparian wildlife habitat. The dam would prevent fish movement upstream. These factors, combined with the high cost of a low head dam, rendered the alternative infeasible.

Indian Trust Assets



Throughout this EIS process, we have been informing the public about Reclamation's trust responsibilities to Native American tribes.

Under this water-service contract renewal EIS, Reclamation is required to consult with tribes to determine if our federal action(s) affect Indian Trust Assets. For those interested in or who want a better understanding of Reclamation's responsibility in this process, the following information prepared by Kimball Banks, Dakotas Area Office Native American affairs specialist, should be informative.

Indian Trust Assets (ITAs) are defined as "legal interests in property held in trust by the United States for Indian tribes or individuals." This definition comes from a policy directive on ITAs issued by the Commissioner of the Bureau of Reclamation on July 2, 1993. Examples of ITAs include lands, minerals, timber, hunting and fishing rights, water rights, and in stream flows. In general, this definition parallels that for "trust resources" in the implementing regulations for the Indian Self-Determination and Education Assistance Act, 25 CFR Part 900.6:

Trust resources means an interest in land, water, minerals, funds or other assets or property which is held by the United States in trust for an Indian tribe or an individual Indian or which is held by an Indian tribe or Indian subject to a restriction on alienation imposed by the United States."

ITAs are those properties, interests, or assets of an Indian tribe or individual Indian over which the federal