

**U.S. DEPARTMENT OF COMMERCE  
National Telecommunications & Infrastructure Administration**

Evaluation of the  
Telecommunications and Information Infrastructure Assistance Program

**Case Study Report**

**Mni Sose Intertribal Water Rights Coalition  
95111**

**Rapid City, South Dakota  
(site visit in Billings, Montana)**

Site Visitors: Joan Michie and Debra Prescott

Dates of Visit: June 16-17, 1998

**TIIAP CASE STUDY**  
**Mni Sose Intertribal Water Rights Coalition**

**A. EXECUTIVE SUMMARY**

Prior to receiving a TIIAP grant, the Indian Tribes in the Missouri River Basin (Montana, Wyoming, North and South Dakota, Nebraska, Kansas, and Missouri) identified a series of problems they were encountering such as lack of access to telecommunications and the information infrastructure as well as limited resources to handle a variety of environmental and water resources issues. To address these problems, the Mini Sose Intertribal Water Rights Coalition applied for and received an FY 1995 TIIAP grant that had the following goals:

- Goal 1: To reduce disparities for 23 Missouri River Basin Indian Tribes in access to and use of the national information infrastructure by providing computer hardware and software to Tribal natural resource department personnel.
- Goal 2: To promote high levels of support from diverse members of the community.
- Goal 3: To support Tribal environmental offices that utilize the national information infrastructure to address environmental issues on their respective reservations.

The TIIAP project provided the necessary computer equipment and software to the participating Tribes to enable Tribal environmental staff members to access the Internet. In addition, the project provided training to participating Tribal environmental staff members on computer skills necessary to access information on the Internet and assistance in using it.

Each of the 26 member Tribes identified its dominant water-related problem. Examples of problems included polluted drinking water, illegal dumping, insufficient amount of water, abandoned wells, bacteria problems in water, and arsenic in the water. Each Tribe also identified the type of assistance it needed and the various agencies it would need to contact. The Tribes used the Internet to obtain some of this information and to determine which water problem should be given priority; the Coalition acted as a facilitator. Since completion of the TIIAP project, some of these problems have been resolved or are in the process of solution.

Many of the activities done under the TIIAP grant have continued or expanded. For example, the Coalition is developing profiles of each member Tribe. In addition, the Tribes are working on developing home pages that go beyond their current casino pages. For example, a guide to Tribal water codes is being developed. The Coalition took all the problem statements from member Tribes, looked for common elements, then developed a guidebook that is arranged according to these common problems. The Coalition is developing links to research institutions, government agencies, and state and local offices that have information about environment resources, land management, economics, programs, foundations, and a host of other Internet resources.

Now, when the Tribes decide that a water problem needs attention, they can use the Internet to verify and research the problems and bring in partners to address them. Tribes are developing relationships with state, regional, and national agencies. The Tribes feel they can go directly to the agencies rather than routing through the Coalition. Thus, they have gained access to information that is current and easy to obtain.

It is estimated that 3-5 people per Tribe had any computer knowledge prior to TIIAP. Many of the Tribes are now using the Internet for activities that go way beyond addressing water problems.

## **B. OVERVIEW**

### **Purpose and General Approach**

Prior to receiving a TIIAP grant, the Indian Tribes in the Missouri River Basin (Montana, Wyoming, North and South Dakota, Nebraska, Kansas, and Missouri) identified a series of problems they were encountering:

- They lacked access to and use of the national information infrastructure and, as a result, they lacked access to technical resources.
- Individually, Tribal governments did not have expertise or resources to develop the information infrastructure necessary to design and develop an economy.
- A steady supply of experts in the field was needed to help them acquire expertise to develop an information network.
- The Tribes had been placed in a passive role in water resource management and development, not because of apathy or lack of desire, but due to lack of technical expertise and financial resources necessary to fully participate and reap the benefits of this resource.
- Lack of wide-area networking had isolated the Tribes and placed them at a disadvantage in working with adverse interests. Much of the information they did have, particularly regarding legislative initiatives, was very dated.
- The Tribes had limited ability to access telecommunications and information infrastructure from their reservations because most calls are long distance, making them quite expensive, and the quantity and quality of phone lines on most reservations limits the speed of modems. In addition, US West had been divesting itself of many rural switches, so that reservations were being served by small companies with limited resources. Finally, use of technology is foreign to most members of the community.
- To prevent further developmental decline, the Tribes wanted accessibility to the information superhighway to develop their economies, improve their lives, and expand their opportunities.

To address these problems, the Mini Sose Intertribal Water Rights Coalition applied for and received an FY 1995 TIIAP grant that had the following goals:

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- Goal 2: To promote high levels of support from diverse members of the community.

- Goal 3: To support Tribal environmental offices that utilize the national information infrastructure to address environmental issues on their respective reservations.

As a part of the 18-month TIIAP project, they planned to bring the information superhighway to various Tribal headquarters through distributed servers. They originally planned to use FIDOnet to serve the Tribes by providing downloads of technical information, resource locations, intertribal problem resolutions, news groups, chat groups, and e-mail. They planned to use the connection to the information infrastructure to allow Tribes to more fully participate in government and draw on environmental resources that they could not access. This approach would also reduce the cost burden to Tribes by reducing the amount and duration of travel for meetings and seminars.

### **Description of Grant Recipient and Project Partners**

**Grant Recipient.** The Mni Sose Intertribal Water Rights Coalition, Inc. was chartered in 1993 to serve the Missouri River Basin Tribes in their pursuit of water rights, environmental issues, and hydropower quantification and related concerns along the Missouri River mainstem. The Coalition is a nonprofit intertribal organization. Originally membership consisted of 23 Tribes; currently 26 of the 28 eligible Tribes belong. The original member Tribes were:

- Assiniboine & Sioux Tribes of Fort Peck      Poplar, Montana
- Cheyenne River Sioux Tribe                      Eagle Butte, South Dakota
- Chippewa Cree Tribe                                Box Elder, Montana
- Crow Creek Sioux Tribe                          Fort Thompson, South Dakota
- Crow Tribe    Crow Agency, Montana
- Fort Belknap Tribe                                  Harlem, Montana
- Kickapoo Tribe in Kansas                        Horton, Kansas
- Lower Brule Sioux Tribe                          Lower Brule, South Dakota
- Northern Cheyenne Tribe                        Lame Deer, Montana
- Oglala Sioux Tribe                                 Pine Ridge, South Dakota
- Omaha Tribe                                         Walthill, Nebraska
- Ponca Tribe of Nebraska                         Niobrara, Nebraska
- Prairie Band of Potawatomi                      Mayetta, Kansas
- Rosebud Sioux Tribe                               Rosebud, South Dakota
- Sac & Fox Nation of Missouri                  Reserve, Kansas

- Santee Sioux Tribe Niobrara, Nebraska
- Sisseton-Wahpeton Sioux Tribe Agency Village, South Dakota
- Spirit Lake Tribe Fort Totten, North Dakota
- Standing Rock Sioux Tribe Fort Yates, North Dakota
- Three Affiliated Tribes New Town, North Dakota
- Turtle Mountain Band of Chippewa Belcourt, North Dakota
- Winnebago Tribe of Nebraska Winnebago, Nebraska
- Yankton Sioux Tribe Marty, South Dakota

Tribes who joined the Coalition while the TIIAP project was under way were:

- Eastern Shoshone Tribe Fort Washakie, Wyoming
- Flandreau Santee Sioux Tribe Flandreau, South Dakota
- Northern Arapaho Tribe Fort Washakie, Wyoming

The Coalition has 13 staff members, 6 of whom are permanent. Lawyers and scientists are available on an as-needed basis. The Coalition Projects Coordinator was on the TIIAP project for 60 percent of his time initially, but this dropped to 25-30 percent of his time as the project developed. The computer technician worked 40-50 percent on the TIIAP project. A consultant was used for training and technical services and another consultant evaluated the project. The project assistant, who worked 30 percent on the project, produced the newsletter, scheduled the training, and helped with correspondence with the Tribes. The receptionist, who also handles the reference library and does cataloging, worked 35 percent on the TIIAP project.

**Project Partners.** The project considers its partners to be the federal agencies with which they generally work. These agencies are:

- Bureau of Reclamation (BOR);
- Bureau of Land Management (BLM);
- Department of Interior (DOI);
- Environmental Protection Agency (EPA);
- US Geologic Survey (USGS);
- Bureau of Indian Affairs (BIA);

- Department of Energy (DOE);
- Army Corps of Engineers (ACOE); and
- Western Area Power Administration (WAPA).

These agencies were not specifically included in the information infrastructure part of this project, however, many of them were involved in the water rights issues that were addressed, in part, through the use of the information infrastructure.

## **Project Costs**

The total project cost was \$356,577, of which \$233,290 came from TIIAP. One source of the \$123,287 matching money was Eagle Staff, a private nonprofit organization that gives money to Tribes for economic development. Another source was the Bureau of Indian Affairs; once this money reaches the Tribes it is no longer considered federal money. Some of the matching money was a salary match for Tribal members attending 3-4 days of training and the quarterly meetings of the Board of Directors.

## **C. PROJECT CONTEXT**

### **Community Description**

The Missouri River Basin consists of 5.2 million square miles, which is one-fifth of the United States. Indian Tribes are scattered throughout this area. About 40 percent of the water in the Missouri River emanates and flows through Indian lands. The Tribes are generally in the more remote regions, far from the population and education centers, such as Billings, MT; Bismarck, ND; Cheyenne, WY; and Sioux City, SD. The population of the Indian Community of the Missouri River Basin is about 100,000.

The Indian reservations are governed by Tribal Councils, which usually consist of 7 members. However, there is some variation, with the Oglala Tribe having 21 members in its Council. The Tribes put together governing mechanisms through federal and private grants. The Tribes face jurisdictional problems and have to deal with multiple levels of government. For example, the Crow Nation has to deal with the county government as well as the Army Corps of Engineers, Bureau of Indian Affairs, and other federal agencies.

The Tribes are generally located in the poorest counties. There is a general lack of funds. Members are not taxed, so the Tribes do not have a steady source of funding. The Tribes do not have a funding infrastructure, so they are always looking for new sources of money. Money from the casinos gets earmarked for specific activities such as education or health.

Under the 1944 Flood Control Act, six dams were built on the Missouri River, all located on Indian lands. The dams stopped water from running on Indian land. The problem was taken to court, where it was decided that the Tribes had a right to water. All the dams produce hydroelectric power that is marketed by the government. The Tribes were promised part of the revenues, but this did not happen. In 1992, the situation began to change. Today, much legislation is being drafted on this issue.

The Tribes began to address water resource issues with one voice in 1988, when three Tribes got together. Around 1993, the Missouri River master manual came out. The Indians received only brief

mention in the manual, which mobilized the Tribes. The Mni Sose Intertribal Water Rights Coalition was formally organized in 1993. The Coalition consists of Indian Tribes living in the drainage area of the Missouri River. When the TIIAP project began, 23 of the 28 eligible Tribes belonged to the Coalition. Membership expanded to 26 by the time of the site visit. Some of the member Tribes were traditional enemies, so having them join the Coalition was a major achievement. The Coalition is not able to lobby; this must be done by the Tribes. The Coalition is considered an instrument of the Tribes.

### **Status of Telecommunications/Information Infrastructure Environment Prior to the TIIAP Project**

The schools were and still are several years behind the flow of information. Libraries are outdated. Tribal colleges are strapped for cash. The Tribes do not maintain large collections of technical materials.

In 1993, the Coalition was just beginning to use fax machines. Communication was done by newsletters and teleconferences. The Coalition did not always know if mailings were reaching the appropriate people. The people in the Tribe who had some knowledge of computer usage usually were not the ones who worked with the Coalition.

The Coalition was engaged in the development of a database related to legislative issues. It included federal mandates, Tribal information, and development programs that related directly to such issues as clean water, safe water, pollution, air quality, and waste management.

## **D. PROJECT IMPLEMENTATION**

### **Activities/Milestones That Occurred Prior to the TIIAP Grant Period**

The Coalition was spending inordinate amounts of time talking to the Tribes. They did not know if regular mailings were reaching the appropriate people. People came to meetings having never received crucial information, such as legislative initiatives. The Coalition needed a way to speed up delivery of information. It conducted a survey about computer usage that revealed a serious deficiency in use of computers as an information channel for Tribal members and communities.

### **Activities/Milestones That Occurred During the TIIAP Grant Period**

The project provided the necessary computer equipment and computer program software to the participating Tribes to enable Tribal environmental staff members to access the Internet. This was done through research and the use of a bid process. Research was conducted to identify the most efficient and advanced computer hardware, which would remain current during the operation of the program. During the research period, the computer industry announced the release of a 28.8 bps external modem, which was far superior to the then-standard 14 bps modem. It was decided that all Tribes would get the same equipment and software.

The project provided training to participating Tribal environmental staff members on computer skills necessary to access information on the Internet. The training was conducted through a series of sessions in Rapid City, SD. The two-day training session, conducted by a Rapid City-based Internet provider utilizing the Tribes' computer equipment, included hands-on practice in accessing the Internet and exercises in conducting research on the system. The project surveyed participating Tribes' communication organization to identify information flow within the Tribal government and to identify

appropriate Tribal personnel to include in the training along with the Tribal environmental staff to assure a broad base of Tribal staff with Internet training.

The project assisted participating Tribal environmental staff members in the utilization of the Internet to address Tribal environmental concerns. The project conducted a series of Tribal environmental meetings to identify a top priority environmental problem for each participating Tribe. The meeting focused on data collection for each Tribe. Data included each Tribes' governing structure, history, water resource management capability, and environmental problems and issues from which the Tribe had to select the most important. Problems identified included polluted drinking water, illegal dumping, insufficient amount of water, abandoned wells, bacteria problems in water, and arsenic in the water. A problem statement was developed and pertinent data were collected for each participating Tribe to utilize as baseline information source for the Tribe and participating agencies. The project presented the problem statement to the appropriate agencies to request their assistance and participation in addressing environmental problems on Indian lands. The agencies were requested to provide information on their respective programs available to the Tribes and to identify existing data banks on the Internet for distribution to the Tribes.

Specific activities at the beginning of the project included the following:

- Training and technical assistance were provided to Tribal leaders, Tribal natural resource staffs, and federal and state natural resource agencies about the Coalition project to access the national information infrastructure.
- Meetings with Tribal leaders and Tribal natural resource directors were conducted to review project goals and objectives. An overview of the Internet and examples of natural resource information housed on the Internet were provided. Tribal, state college, and university representatives were in attendance to assure Tribal leaders that the project would be accepted and utilized by local institutions of higher learning.
- Meetings to review program goals and objectives were conducted with federal and state natural resource agencies to develop partnerships. Agencies included the Indian Health Service, Bureau of Indian Affairs, Bureau of Reclamation, U.S. Park Service, U.S. Fish and Wildlife, U.S. Department of Agriculture, National Resource Conservation Service, and the South Dakota School of Mining and Technology to discuss the development of the project. The agencies reviewed the information entered into the network.
- Surveys of individual Tribes' computer capabilities, existing communication systems, appropriate Tribal contacts, and local Internet providers were conducted.
- Project staff initiated an ongoing process to digitize natural resource information to be catalogued in a reference library to be maintained by Coalition. Contents of the library included model Tribal water codes, model Tribal natural resource codes, and federal/state natural resource laws and statutes.
- A meeting with representatives from three colleges was conducted to enlist help from their institutions in the training and research phase of the program.
- Training materials were developed.
- FIDO node hardware interface was researched.

Later project activities followed:

- The Coalition let bids for computer hardware and allied equipment to be distributed to the 24 Missouri River Basin Tribes that were then participating in the project. Before the computers were distributed, Missouri River Basin Tribal representatives received 2 days of training from Black Hills Internet Services. The computers came with modems and CD-ROM along with 8 MB of RAM and 840MB hard disk space.
- Staff developed and conducted a computer distribution plan that included pilot testing the access plan with eight Tribes and then continued distribution to the remaining Tribes.
- Tribes received hands-on training in computer equipment operation and access methods.
- Training materials for conducting research using the National Information Infrastructure were developed.
- The Mni Sose newsletter, which described the project and the benefits resulting from access to NII, was published.
- An Internet directory of federal agency information sites was developed.
- An information network that includes Tribal natural resource departments and Tribal leaders and councils was developed.
- The Coalition conducted a workshop to identify the top priority environmental problem on each respective reservation and initiated a research plan with the Tribal representative to address and verify this problem.
- The project conducted a series of partnership-building meetings to utilize the participating agencies' human and fiscal resources to conduct environmental research by Missouri River Basin Tribes through accessing existing data banks and other informational sources.
- Presentations on Wide-Area Networking of Tribal Environmental Offices for Immediate Access Program goals were made to many federal and state agencies and foundations.
- The project monitored the level of participation through sign-on criteria. Early usage monitoring allowed the Coalition to effectively monitor the results of training sessions and modify as work progressed within each Tribal office. (This monitoring has not been maintained since the project ended.)
- The project began the development of a resource manual to support computer activity and Coalition web page access.

## **Steps Taken to Sustain Project Activities Beyond the TIIAP Grant Period**

The project staff have not explored funding alternatives. They rely almost completely on federal dollars.

## **Activities/Milestones That Occurred Following the TIIAP Grant Period**

- The Coalition is developing profiles of each member Tribe. They are trying to catalog information about the Tribes such as their history, government structure, and demographics. The profile will also include information about environmental problems.
- The Coalition took all the problem statements from member Tribes and looked for common elements. They developed a guidebook that is arranged according to these common problems. Resources in the guidebook are listed by office rather than specific people, so it does not become dated too quickly. The Coalition will update the guidebook annually or biannually. The guidebook is structured to make it easy for people to find resources for dealing with specific environmental problems.
- A guide to Tribal water codes is being developed.
- The Tribes are working on developing home pages that go beyond their current casino pages.
- The Coalition is developing links to research institutions, government agencies, and state and local offices that have information about environment resources, land management, economics, programs, foundations, and a host of other Internet resources.

## **Issues/Problems**

In many parts of the region served by the Coalition, the telephone lines are old. New lines are needed in some areas in order to use a modem. Telephone companies do not appear to be interested in installing them perhaps because there is not enough profit potential in these geographically isolated areas.

Internet service providers (ISPs) are not always available in areas where the Tribes are located. The Tribes were encouraged to utilize commercial online providers such as AOL and CompuServe. The Tribes were provided AT&T software on CD-ROM when local or nearby ISPs were not available.

Power outages due to snowstorms and electrical storms sometimes hinder Tribal representatives from continuous participation.

Two Tribal staff attempted hardware and software installations without sufficient knowledge of computer operations, resulting in malfunction in either the computer itself or the modem.

The Coalition had to learn applications before they could provide guidance to the Tribes. They always had to stay one step ahead.

For most Tribes in the area, the Tribal leadership changes every 2 years. Responsibilities throughout the Tribe may change as the result of a leadership change. For example, the person who had environmental knowledge and was trained on the computer skills necessary to access information on the

Internet might be switched to some other department such as housing. Consequently, the new people in environmental positions may need to be trained.

## **E. PROJECT ACCOMPLISHMENTS AND IMPACT**

### **Technology-Related Accomplishments**

The Coalition was able to bring the Internet to Tribal headquarters located in isolated and remote communities. Furthermore, the Coalition was able to reduce some long distance costs in daytime hours and even more in the evenings.

In addition to bringing telecommunications access to its Tribal membership throughout the Missouri River Basin, the Coalition provided hardware, trained staff in the use of the Internet, and established a number of local communications services as well as links to major information services throughout the seven-state area.

### **Impact of Project on Direct End Users**

Once Tribes decide what water problems need attention, they can use the Internet to verify and research the problems. They can then bring in partners to address the problems. Tribes are developing relationships with state, regional, and national agencies, which they can go to directly rather than routing through the Coalition. Thus, they have gained access to information that is current and easy to obtain.

It is estimated that 3-5 people per Tribe had any computer knowledge prior to TIIAP. Many of the Tribes are now using the Internet for activities that go way beyond addressing water problems. The Tribes are tracking legislative initiatives. They can access government agencies and download documents. They are searching for information on the Internet rather than having to make a long trip to library. Other specific uses of the Internet follow:

- Prior to computerization Tribes were isolated units confined to the reservation; now they can go outside of the reservation to get information. Also, they can come together collectively on an issue.
- The Tribes can now find information they did not know existed before.
- The Standing Rock Sioux and Cheyenne River Sioux Tribes worked together to protect cultural sites. They were able to get police protection and stop people from looting.
- One Tribe reported using the Internet to seek out industry interested in relocating to South Dakota. They have had a few inquiries, but nothing has panned out so far. They will be very selective in their decision.
- One Tribe learned about the availability of federal excess property over the Internet. They applied for and received a \$400,000 piece of health equipment. They were the only applicant for the equipment.

Many of the Tribes have increased the number of computers since getting the first one from TIIAP money. They have also had to get more phone lines to support fax, phone, and the Internet. For example,

prior to TIIAP, the Flandreau Santee Sioux Tribe had 6-7 people who were using computers; now about 50-60 people use them. The TIIAP activities spurred the Tribe to put computers in every department for a total of about 23 computers. For the Crow Tribe, the computer obtained through the TIIAP project was the only one with access to the Internet for the first year of the project; now the Tribe has 15 terminals with Internet access.

Some Tribal members are getting Internet access in their homes now that the phenomenon has caught on. A Yankton Sioux Tribe member went on for an MS in Computer Science.

Many Tribes are engaged in developing their own web-pages, logos, profiles, and information services that go way beyond providing information about their casino. This gives the Tribes, especially the smaller and lesser known ones, with the opportunity to increase their exposure. It is a way to let people outside the reservation know what is happening with the Tribe. It allows the Tribes to educate the world about their day-to-day struggles. It is a tool to educate people and garner public support. It has given the Tribes an opportunity to correct images about them. It is clear that the Tribes have looked upon their access to the Internet as an opportunity to present new or corrected information about themselves and all Indian peoples.

The Chippewa Cree Tribe has developed a 2-year computer information systems program at its Tribal college. It also is working on GIS with a local community college.

### **Impact of the Project on Other Beneficiaries and/or the Overall Community**

Additional Tribal members are beginning to get interested in the Internet. They go to the Tribal offices wanting to conduct Internet searches. The Tribes accommodate them and provide basic information to get them started. Moreover, the Coalition was able to train an active user base in the Missouri River Basin Tribal governmental and technical communities, who were able to train still other Tribal members.

### **Impact of the Project on Grant Recipients and Project Partners**

Through meetings with Tribes about environmental problems, the Coalition was able to develop a resource directory. Problems that were common across Tribes are the main sections of the directory. The directory details what Tribes can expect from individual agencies.

Each of the 26 member Tribes identified its dominant water-related problem. Each also identified the type of assistance it needed and the various agencies it would need to contact. The Tribes used the Internet to obtain some of this information and to determine which water problem should be given priority; the Coalition acted as a facilitator. Since completion of the TIIAP project, some of these problems have been resolved or are in the process of solution.

Assiniboine & Sioux Tribes The groundwater used as a source for drinking water may be a health hazard due to oil and gas drilling. The Tribes joined with the state to build a new water system.

Cheyenne River Sioux Tribe The land contains an old gold mine where arsenic had been used. Consequently, there is heavy metal run off. The Superfund to handle this problem has now been reopened.

Chippewa Cree Tribe	The Tribe did not have enough water on the reservation to take care of its needs. The Tribal claim was settled on April 1, 1998. The Tribe kept track of the proposed legislation through the Internet.
Crow Creek Sioux Tribe	The water and sewer system had been built in 1950 with no room to expand. The system has been refurbished and a water distribution system has been built.
Flandreau Santee Sioux Tribe	The Tribe did not have a natural resource department when the project began, but one has now been established.
Fort Belknap	The gold mine has now been closed.
Yankton Sioux Tribe	An aboveground storage tank and shop floor drains release petroleum products which have contaminated the Marty Indian School Campus. The site has now been abandoned and a new school will be built.

The Coalition's newsletters and updates for the Tribes are now posted on the Web. Before the grant, everything had to be mailed. The Coalition estimates that an annual savings of \$36,000 per year will be attained from not having to mail updates, newsletters, and large documents. Many costs associated with duplicating and disseminating have been reduced.

The Coalition website was developed in mid-1997 after the TIIAP project was completed. In late 1997, the total number of hits on the website was 2,500. At the time of the site visit in June 1998, there had been 4,500 hits.

Closer, more meaningful relationships with federal agencies and state organizations have resulted from the project. For example, the Army Corps of Engineers (ACOE) is planning a draw down of the river near the Lower Brule Sioux Tribe. The last time this happened, 3 years ago, the ACOE did not ask for Tribal input. This time they are in touch every day.

Tribes report getting four phone or e-mail contacts per day from agencies. Additional agencies have asked the Coalition to link to them.

The Tribes also have gained a sense of independence. They can now obtain some information themselves rather than going through the Coalition.

### **Project Goals Not Met**

The original plan was to maintain a bulletin board under the project. The Coalition would do research and then post the information on the bulletin board. It was decided that this was not realistic when dealing with 26 Tribes. It was decided to put the information on the Internet instead. With more ISPs coming into the area, it became more feasible.

It was originally proposed to establish a system between the Tribes utilizing a FIDOnet System with access to the Internet through the Coalition. This arrangement appeared to be cumbersome and difficult for Tribal staff members. During this period the providers of the Internet services were expanding and were less costly. It was then decided to establish Tribal access to the Internet directly with

the individual Tribes and have the Internet support all the program's activities through a website. Through this adjustment, with the Coalition's FIDOnet being utilized as a primary source of information, the Tribal accessors soon shifted to searching out data and information in other areas.

The Coalition's belief in the FIDOnet as an information storage exchange outlet proved to be an error. An internal BBS, it was thought, provided a timesaving device that would provide relevant information related to Tribal issues, concerns, legislative issues, and intra-Tribal processes. The initial plan called for daily updating and continual increments of data that, in turn, would be made available on a 24-basis to the Coalition's Tribal membership. Four issues resulted in the adjustment of the electronic organization of the program:

- Tribal computer end-users preferred to explore the pathways of information sources and acquisition for themselves.
- The Coalition staff could not match the amount of research the Tribes could conduct given a membership (at that time) of 23 while Coalition staff consisted of one person.
- The Coalition staff member accepted other employment soon after the program onset and the MniSose Coalition could not maintain its FIDOnet program as it had been designed.
- Given the Tribal membership's disinterest in the BBS operation, (only five members accessed the FIDOnet), it did not seem worthwhile to devote further serious attention to the process. Tribal members preferred e-mail access to the Coalition instead of BBS access to its database.

## **Impact of TIIAP Support on the Initiative**

TIIAP money allowed the Coalition to purchase standard equipment for all Tribes

Through the TIIAP project, the Mni Sose Coalition's telecommunications effort provided a valuable indirect benefit of fostering greater cooperation and sharing of technology among Tribal organizations.

The funding provided by the TIIAP program enabled 23 Indian Tribes to create the wide-area network they needed to pursue goals of economic development, acquisition and protection of water resources, and access to and communications with federal resources and data centers.

## **F. EVALUATION AND DISSEMINATION**

### **Evaluation**

The project had a detailed evaluation plan that included arrangements for establishing an evaluation team. The evaluation team met periodically with program personnel to assess program activities and progress. Each quarterly report contained a report from the evaluation team. Team members provided recommendations and advice to program personnel to improve program services.

At the close of the project, 23 Tribes of the Missouri River Basin had official e-mail addresses. A self-reporting survey revealed that:

- On average, 15 e-mail messages are exchanged daily by Tribal offices.
- Each Tribe has approximately 40 bookmarks containing no less than 10 research-oriented links.
- The distributed computers are linking to the Internet for approximately 70 minutes each day (8:00am-4:00pm).
- Each computer has experienced approximately 10 hours of downtime due to computer malfunction, line cut-out, ISP interruption, or modem failure to contact the Internet computer system.
- Daily workloads inhibit routine Internet explorations.
- Each computer end user has required additional training in e-mail processing, using Internet browsers, downloading procedures, and computer operations.
- Thirty percent of end users misplaced the manuals on computer software and/or the Internet initially provided.
- Approximately 60 percent of the end users use the computers for other functions such as word-processing, spreadsheets, and other computer applications other than Internet for approximately 60 percent of the computer's total operational time.
- Approximately one-third of the end users who attended the original training sessions have secured additional training from other sources.
- Approximately 40 percent of those who attended the original training sessions have trained or assisted in the training of other people to use the computer and access the Internet.
- At least half of the end users have changed e-mail addresses and/or ISP data lines at least once since the program began.
- Almost two-thirds of those who attended the original training sessions now use commercially provided 800 access lines to Internet.
- Approximately 30 percent of those who attended the original training sessions have been replaced by alternate personnel with varying degrees of computer skills.

## **Dissemination**

The Coalition web page is one dissemination mechanism. E-mail messages and newsletters are used to inform the Tribes. Regular meetings with Tribal leaders are also held.

## **G. LESSONS LEARNED**

- The training sessions with Tribal representatives were video taped. A copy was sent to each Tribe, so that they could use the tape to provide further training to staff.
- Groups should monitor or set time limits for staying online. The Coalition received calls from administrators complaining about staff who spent too much time on the Internet. Staff need to learn to focus searches.
- The project could have done more to make e-mail more user friendly. (Software called POW WOW was used.)
- The Coalition felt it could have done a better job of organizing the website.
- The project went directly to training on how to use Internet. They skipped basic computer how-to's that should have been addressed first.
- One can't be completely prepared for the advance and decline of technology itself. Staff initially thought they could count on the life of technology being 2 years.
- Environmental problems are very complex. Solving them is more of a process than a product. Actual solutions are years down the road.
- Partnerships are needed to solve environmental problems.
- Incredible diplomacy is necessary. Don't oppose what's going on, but work toward consensus building.
- The Coalition spent much of its project time providing technical support, training on computer operations and software application, and generally fixing service provider problems for its Tribal membership. While a reasonable amount of time had been projected toward this activity, the Coalition had not realistically estimated how often it would be called upon for support/training and services to the end users. In some cases the Coalition staff had to travel some distance to assist in the installation of the hardware (computer and modems) and connecting to telephone exchanges or data lines, or service providers.
- The Coalition would have benefited from an end user skills/competency evaluation prior to implementing the program. While many of the intended users originally indicated they had "some" computer experience, it would have benefited the Coalition to have explored "some" to a larger extent. In addition, a pre-program exploration might have warned the Coalition about the number of ISPs available in the Missouri River Basin area, how many digital telephone lines would be available, and a precise state of the telecommunications infrastructure in the project area before the program was initiated.

## **H. FUTURE PLANS**

The project director thinks the Tribes could benefit from distance learning applications. Distance learning is a fast-growing plan shared by a number of Tribes, especially those located in remote or isolated areas of the Missouri River Basin. The Tribes are envisioning high-speed video/audio/data lines

between various campuses to serve Tribal youth and nontraditional students who do not have easy access to traditional learning delivery systems.

Tribal profiles are being put up on the Web.

They plan to provide Tribal end-users with many levels of technical support and ongoing training, and assist Tribes to effectively link with intervention services, child protection agencies, medical services, and intertribal agencies to share information, pool resources, and work cooperatively.