



Final Report for

Technical Assistance and Education for the

Native American Nations

In Kansas, Nebraska and South Dakota

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**Technical Assistance and Education for the Native American Nations
In Kansas, Nebraska and South Dakota**

Submitted to
Midwest Technology Assistance Center
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by

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Introduction

American Indian tribes were sovereign nations prior to the U.S. Constitution. Relative to environmental issues, in order to validate sovereignty tribes must be able to command a working knowledge of their human and natural resources respective to technological advances. Many Great Plains tribes have developed regulatory expertise, experienced staff, and public support for many Clean Water Act programs as they have undergone the process of establishing viable environmental program. Presently, most Great Plains tribes are just beginning to develop similar expertise, experience, and public support related to the Safe Drinking Water Act and drinking water issues. This project was to help improve the capacity of five tribal colleges to provide drinking water related educational programs and technical assistance to their local communities. Accordingly, the University of Nebraska-Lincoln (UNL) collaborated with Haskell Indian Nations University and four other tribal colleges (all 1994 Land Grant Universities). This project helped the tribal colleges enhance their extension service capabilities.

Specific Objectives

The project had five specific objectives:

1. Finalize the contracts and agreements with the four Tribal Colleges that collaborated with the University of Nebraska-Lincoln and Haskell Indian Nations University. The four tribal colleges were Nebraska Indian Community College (Omaha and Santee Sioux Tribes), Sinte Gleska University (Rosebud Sioux Tribe), Ogalala Lakota College (Oglala Sioux Tribe), and Little Priest Tribal College (Winnebago Tribe).
2. Identify the most significant drinking water issues from communications with the appropriate tribal Department of Natural Resources (or equivalent tribal agency) for each of the partner colleges.
3. Prepare and hold an initial “Workshop Preparation Seminar” during which UNL and Haskell University will help the participants from the other tribal colleges prepare individualized workshops to be presented concerning drinking water issues.
4. Form of an advisory committee that will help identify the appropriate content for the workshops.
5. Present at least ten educational activities concerning drinking water issues to tribal members. Haskell University and the four other tribal colleges each presented at least two workshops at or near their college campus. The target audience was employees of tribal regulatory agencies, drinking water treatment and distribution personnel, tribal officials, tribal college students, secondary school teachers, and other interested tribal members.

A brief description of how each of the above five objectives was achieved is described subsequently.

Description of Project Planning

In order to achieve the first three project objectives, a significant effort was placed in planning the specifics of the project. During the late spring and early summer of 1999, the project Principal Investigators (Dvorak, Hay, and Welton) contacted faculty contacts at the other four tribal colleges to help them prepare for the project. The project Principal Investigators met on July 29th and created a draft schedule for the Workshop Preparation Seminar (attached). This “Workshop Preparation Seminar” was held on October 22-23. This meeting was attended by representatives of Ogalala Lakota College, Sinte Gleska University and Haskell Indian Nations University. It helped prepare the tribal college faculty to prepare the content for the educational activities that they

presented. During the summer of 1999, the University of Nebraska personnel have prepared additional material relating to municipal water distribution and supply systems for the seminar.

During the October 23rd meeting, the tribal faculty members ranked the topics of most interest to them. Rankings for the topics are the sum of the ranks assigned by the priorities of the TC's present (based on their perception of tribal needs and based on their conversations with tribal environmental agencies). Four points were awarded for a first priority, three for a second priority, two for a third priority and one for a fourth priority topic. The tally is given below.

<u>Rank</u>	<u>Topic</u>
8	Training for Utilities / Water resource departments on Safe Drinking Water Act
7	Youth Education on drinking water issues
6	Lab Tech Training (bacteria, nitrates, etc.)
4	Rapid Bio-assessment Protocols (RBP)
4	Surface Water / Ground Water interactions
3	Private Well contamination (nitrate, benzene, carbon tetrachloride, bacteria, etc.)
3	Well head / Source water protection (abandoned wells)
2	Stream Segments (Inventory of uses)
2	Drinking Water Operator Certification

The UNL PIs made a total of three trips to northern Nebraska during December 1999 to work with the faculty from Nebraska Indian Community College (NICC) and Little Priest Tribal College (LPTC) to bring them into then project. The trips involved meetings with both the tribal college faculty and members of the tribal Department of Natural Resources at each location.

Advisory Committee

The US Environmental Protection Agency (EPA) Regions, Indian Health Service (IHS), Bureau of Reclamation, and other agencies have on-going initiatives to provide tribes with education and technical assistance for some issues. In order to avoid duplicating these initiatives during this project, an advisory committee was formed, individually discussed issues with Dr. Bruce Dvorak, and met by conference call in October of 1999. From these conversations, it was learned that the best way this could dovetail with the efforts of the efforts of the other agencies would be to help local tribal colleges expand their ability to provide drinking water related educational programs and technical assistance to their local communities. Also, several educational resources were suggested by the advisory committee that were later used by the tribal colleges. The advisory committee consisted of the following individuals:

- Gary Carlson, US EPA, Region 8
- Kim Olson, US EPA Region 7
- Kent Smothers, Midwest Technology Assistance Center
- Wes Martel, Shoshone Business Council
- Woody Corbin, Mni Sose Intertribal Water Rights Coalition
- Ronald Eggers, Bureau of Reclamation
- Doug Jensen, Indian Health Services

Description of Activities

A total of eleven educational activities were completed for this project. The educational activity topics were selected by the Tribal Colleges are listed in Table 1. A brief description of each activity is given subsequently.

Table 1. Educational Activities Presented.

Workshop Topic	Date	Tribal College
Lab Technician Training (Horton, KS)	12/20/00	Haskell Indian Nations Univ.
Independent Study Courses	Fall '99	Oglala Lakota College
Lab Tech Training – Needs Assessment	1/26/00	Sinte Gleska University
Lab Tech Training – Needs Assessment	1/26/00	Oglala Lakota College
Lab Technical Training on Microbiological Techniques	3/27/00	Nebraska Indian Comm. College
Lab Technical Training on Pesticides	4/20/00	Little Priest Tribal College
Introduction to Public Health and Drinking Water and Drinking Water Regulations for the Native American Nations	4/22/00	Sinte Gleska University
Youth Education (Project WET Training for Teachers)	6/13/00	Sinte Gleska University
Youth Education (Project WET Training)	7/31/00	Haskell Indian Nations Univ.
Youth Education (Project WET Training)	10/24/00	Haskell Indian Nations Univ.
Youth Education (Project WET Training for Teachers)	11/15/00	Nebraska Indian Comm. College
Youth Education	12/13/00	Little Priest Tribal College

Lab technician training with HINU was accomplished on Monday, December 20, 1999, at the Kickapoo water treatment facility near Horton, KS. The training was provided by Tom Shuerman of UNL with help from Brenda Branden of Haskell. Water plant personnel present were Paul Cadue and Meryl, as well as Ron Heineken, who is the Environmental Director for the tribe. Jar testing to estimate lime and alum doses was the major focus of the workshop.

Fall 1999. Independent Study Courses. Mr. John Williams of Oglala Lakota College taught two individualized courses. One was for Micheal Catches, Sr. and Dusty Hankins concerning the White Clay Creek Clean-up on the Pine Ridge Indian Reservation; portions of this course related to drinking water issues. The project included extensive stream sampling. The second course was for Delinda Simmons concerning the Ogalala Sioux Tribe's Water Quality Program; this course was to familiarize her with the important elements of the program.

On January 26th, 2000, two training need assessment actives were performance. The first was at the Oglala Sioux Tribe Environmental Health Technical Team meeting, in Kyle, SD. Ten representatives from Oglala Lakota College, Tribal utilities departments and IHS were present. The second training needs assessment was done in Rosebud, SD at the RST Water Resources Office, with local college and Tribal personnel present. A wide range of potential training topics were discussed in both meetings. These topics included: drinking water and waste water operator certification training, public education on water conservation, computer training for treatment plant operators, water sampling training on the Pine Ridge bomb range, aseptic microbiological sample collection techniques, lab QA/QC training, and others.

A lab technical training on microbiological techniques was given at the Land Resources & E.P.A. office of the Santee Sioux Tribe of Nebraska on March 27th and 28th, 2000. The training was provided by Tom Shuerman of UNL. Students present included Felix Kitto and Eugene Saul, from the Santee Land Resources & E.P.A. office, and Mark Aldrige, from the Winnebago Tribe of

Nebraska Water Resources Department. Topics discussed included: QA/QC and how these methods might catch common lab errors, and the environmental significance of microbial water quality parameters. Demonstrations and lab practicals were done for membrane filtration and presence/absence testing for total coliforms and E-Coli.

The lab technical training on pesticides was provided before the end of April, 2000. This workshop was given to Mark Aldridge and a co-worker from the Winnebago Tribe of Nebraska, Water Resources Department through Little Priest Tribal College. The training was provided by Tom Shuerman of UNL. The workshop included: an overview of EPA lab certification, a discussion of common water contaminant units and conversion between those units, the environmental significance of pesticides other regulated water contaminants, and a comparison of colorimetric and spectrophotometric equipment used to analyze for common inorganic water contaminants.

April 24-26, 2000. Sinte Gleska University. Introduction to Public Health and Drinking Water and Drinking Water Regulations for the Native American Nations. Two members of the Rosebud Sioux Tribal Water Resources Office (Brian Dillon and Young Colombe) were sent to participate in a training session held at the Ramkota Conferencing Center in Rapid City, South Dakota. This session was put on by US EPA Region VIII (Contact person: Gary Carlson). A schedule of sessions is attached.

June 13, 2000. Sinte Gleska University. Project WET training for Teachers and tribal members in Rosebud area. Workshop was presented by Terry Lewis of the South Dakota Discovery Center in Pierre, South Dakota in conjunction with Sinte Gleska University. Attendance of 10 people. See Attachment E for a typical agenda and list of participants.

July 31, 2000. Haskell Indian Nations University. Held at Prairie Band Potawatomi; approximately 20 participants, high school thru adult ages; facilitated by Kansas Advisory Council on Environmental Education (KACEE); full Project WET activities. A total of **18** youth and adults attended. See Attachment D for an announcement.

October, 24th, 2000. Haskell Indian Nations University. held at Praire Band Potawatomi; approximately 12 participants, elementary age youth; facilitated by KACEE; Water Carnival activities (modification of Project WET) due to younger age of participants.

November 15, 2000. Nebraska Indian Community College. Project WET training. Workshop was held at in Macy, Nebraska. A total of 12 native americans who are undergoing teacher training attended. Nebraska Indian Community College in conjunction with the UNL Extension Service presented the workshop. See Attachment F for a program.

December 13, 2000. Little Priest Tribal College. Educational Activity for Youth concerning drinking water. Workshop was held at in Winnebago, Nebraska. A total of 18 native americans attended. Little Priest Tribal College in conjunction with the Midwest Assistance Program presented the activity. See Attachment G for a program.

December 16, 2000. Haskell Indian Nations University. To be held at Heart of America Indian Center; 30-50 participants anticipated, entire families; to be facilitated by KACEE; full Project Wet activities; this workshop was postponed to January 13, 2001, due to severe winter storm impacts (ice & snow) on Kansas City area during the week prior to 12/16 & likelihood of continued bad weather for the weekend.

Also, on Feb. 29, 2000, Dr. Bruce Dvorak, Brenda Branden, and Wendy Griswald gave a presentation on this project at the Midwest Workshop for Small Public Water Systems on February 29th in St. Louis, MO.

Disbursement of Grant Money to Tribal Colleges

The original MTAC grant (spring 1999) was awarded jointly to the University of Nebraska-Lincoln (UNL) and Haskell Indian Nations University. UNL was granted \$24,639 and the other \$25,000 was to go to Haskell Indian Nations University, both to help reimburse Haskell for their project costs and to give each of the other four tribal colleges funds to pay for their part of the project. During the early fall of 1999, events in the sponsored programs office at Haskell Indian Nations University lead to the need for another method of distributing the funds to the tribal colleges. These events at Haskell delayed getting funds to the other tribal colleges and the faculty at several colleges stopped working on the project for six months until MTAC, UNL and Haskell made arrangements to route these funds through UNL. Thus, UNL distributed the \$25,000 that was to pass to Haskell. The funds were distributed as listed in Table 2.

Table 2. Funds Distributed to Tribal Colleges.

Tribal College	Funds Distributed
Haskell Indian Nations Univ. ¹	\$5,500
Little Priest Tribal College	\$4,000
Nebraska Indian Comm. College	\$4,000
Oglala Lakota College	\$4,000
Sinte Gleska University	\$4,000
TOTALS	\$21,500

1 – Funds were sent through the Prairie Band Potawatomi due to problems in the Haskell Sponsored Programs office.

Table 2 outlines the funds directly distributed to the tribal colleges. UNL has spent over \$5,000 of the grant to directly cover the additional costs to cover materials for educational activities (purchased directly by UNL), travel by Tribal College staff directly reimbursed by UNL, and to cover the expenses of non-tribal college instructors (South Dakota Discovery Center and Midwest Assistance Program).

Attachments:

- A. Project Planning Gathering Agenda (October 23, 1999)
- B. Schedule: Introduction to Public Health and Drinking Water and Drinking Water Regulations for the Native American Nations.
- C. Primary Tribal College Contacts
- D. Project WET Training Announcement. July 31, 2000. Haskell Indian Nations University.
- E. Project WET Training Agenda. June 13, 2000. Sinte Gleska University
- F. Project WET Training Agenda. November 15, 2000. Nebraska Indian Community College.
- G. Education Event Agenda. December 13, 2000. Little Priest Tribal College.

Attachment A.
Project Planning Gathering Agenda (October 23, 1999)

Friday, Oct. 22

7:00-9:00 Introductions, Icebreaker and Project Wet Example Problem

Saturday, Oct. 23

8:30-9:00 Medicine Wheel [George Godfrey]

9:00-9:12 Intro. to Project and Goals for Day [Bruce Dvorak]

9:12-9:20 UNL Overview [UNL Personnel]

Break

9:30-9:45 Overview of Midwest Technical Assistance Center [Ken Smothers]

9:45-11:15 Overview of Tribal Drinking Water Issues and Concerns (15-min. presentations
by each Tribal College Faculty member)

Break

11:30-11:55 Project Wet Example

11:55-Noon Overview of Afternoon Session [Bruce Dvorak]

Noon-1:00 Lunch

1:00-1:10 Identify Priority Topics for discussion

1:10-3:00 Discuss Priority Topics [Moderator: Bill Welton]

Break

3:15-3:45 Identify Resources Needed for Creating Presentations [Moderator: DeLynn
Hay]

Break

4:00-4:15 Create Timeline for completion of Project [Moderator: Bruce Dvorak]

4:15-4:30 Talking Circle [Bill Welton]

Attachment B.
**Schedule: Introduction to Public Health and Drinking Water and Drinking Water
 Regulations for the Native American Nations.**

Day: Tuesday

8:30 - 9:00..... Introductions
 EPA /IHS Interagency Agreement
 Participant Introductions

9:00 - 10:00..... Introduction to Public Health and Drinking Water

10:00 - 10:15..... Break

10:15 - 12:00 The Public Water System Supervision Program

12:00 - 1:00..... Lunch

1:00 - 2:15..... Preventive Activities
 Plan Review and Design Standards
 Operator Training and Certification
 Technical Assistance
 Source Water Protection
 Sanitary Surveys
 Enforcement

2:15 - 3:00..... Break

2:30 - 3:15..... Source Water Protection

3:15 - 4:00..... Enforcement

4:00..... Wrap-up

Day: Wednesday

8:30 - 9:00..... Review
 The CFR

9:00 - 10:00..... The Total Coliform Rule

10:00 - 10:15..... Break

10:15 - 11:00..... The Lead and Copper Rule

11:00 - 12:00..... Rads, IOCs, SOCs, VOCs, and TTHMs
 Entry Points
 Distribution Samples
 Alternative Monitoring Requirements

12:00 - 1:00..... Lunch

1:00 - 1:45..... The Surface Water Treatment Rule
 Filtered

..... Unfiltered
 GWUDISW
 1:45 - 2:15..... The IESWTR
 2:15 - 3:00..... Break
 2:30 -4:00..... The IESWTR (continued)
 LT1
 Filter Backwash Rule
 LT2
 Composite Correction Program
 Alternative Treatment Technologies

Day: Thursday

8:30 - 10:00..... The Stage 1 D/DBPR
 10:00 - 10:15..... Break
 10:15 - 11:00..... The Stage 1 D/DBPR(continued)
 Stage 2 D/DBPR
 The Ground Water Rule
 Radon
 Arsenic
 11:00 - 12:00..... The CCR
 12:00 - 1:00..... Lunch
 1:00 - 3:00..... Sanitary Surveys
 3:00 - 3:15..... Break
 3:15 - 4:00..... Wrap-up
 Capacity Development
 SRF/Tribal Set-Aside Funding
 IHS Construction Funding
 Useful References

Attachment C.
Primary Tribal College Contacts

Haskell Indian Nations University:

Bill Welton
Natural and Social Sciences – Natural Resources
Haskell Indian Nations University
Lawrence, Kansas 66046
(785) 749-8409, e-mail: bwelton@ross1.cc.haskell.edu

Nebraska Indian Community College:

Shelly Avery
Nebraska Indian Community College
RR 2, Box 164
Niobrara, Neb 68760
(402-857-2434) e-mail: shavery@hotmail.com

Sinte Gleska University:

Ben Whiting (605-856-4964)
Sinte Gleska University
P.O. Box 490
Rosebud, South Dakota 57570

Ogalala Lakota College:

Leslie Henry, (605-455-2321 xt225) [fax: 605-455-2411]
Chair of Ag. Natural Resource Dept.
Oglala Lakota College
P.O. Box 490
Kyle, South Dakota 57752

Little Priest Tribal College:

Sharon Frenchman,
Director of Community Education
Little Priest Tribal College
PO Box 270
Winnebago, NE 68071
(402) 878-2380
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Attachment D

Project WET Training Announcement

July 31, 2000

Haskell Indian Nations University

Attachment E

Project WET Training Agenda

June 13, 2000

Sinte Gleska University

Attachment F

Project WET Training Agenda

November 15, 2000

Nebraska Indian Community College

Attachment G

Education Event Agenda

December 13, 2000

Little Priest Tribal College