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

by

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The contract with the University of Nebraska-Lincoln (UNL) was been signed and the project initiated in late May. The contract with Haskell Indian Nations University and the other four tribal colleges (TCs) is still being finalized. The four collaborating colleges are Nebraska Indian Community and Little Priest College in Nebraska, and Sinte Gleska University and Ogalala Lakota College in South Dakota. All are 1994 (Tribal) Land Grant Colleges. This project will help them enhance their extension service capabilities. A specific faculty member at each college has been identified to perform the project work. The proposed project schedule was delayed by approximately five months due to a combination of circumstances relating to difficulties with the project paperwork arriving around the start of the summer for the tribal colleges (many tribal college faculty are on nine month contracts).

During September and October of 1999, the PIs networked with the project's advisory committee concerning possible workshop topics and drinking water issues that the PIs should be aware of on each reservation. The advisory committee consists of:

- 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

On October 23, 1999, the faculty from UNL, Haskell Indian Nations University, Sinte Gleska University, and Ogalala Lakota College gathered in Lawrence, KS to plan for the project. The faculty initially discussed the project and the tribes represented. Overviews from three tribal colleges are given below.

Overview of Oglala Sioux Tribal drinking water concerns by John Williams of **Oglala Lakota College (OLC)**. The Pine Ridge reservation covers 4200 square miles in the South West corner of South Dakota. Approximately 10% receive drinking water on this reservation comes from

private wells, and 90% receive drinking water from small community systems. The existing drinking water is highly chlorinated and typically bad tasting. The Mni Wiconi pipeline system is under construction and will provide better quality drinking water. This project will be completed to the Pine Ridge in another 2 to 3 years. One problem is reaching the youth and sparking interest in the environment (water resources) before they are college-aged. One cause is the lack of natural resources/environmental education. Another problem is the high turnover in the drinking water (and waste water / environmental monitoring) jobs. As soon as people are trained, they typically leave for better paying jobs elsewhere. Some specific drinking water issues on the Pine Ridge reservation are groundwater contamination from ordinance as well as selenium and beryllium contamination from naturally occurring sources.

Overview of Kickapoo and Potawatomi Tribal drinking water concerns by Bill Welton of **Haskell Indian Nations University (HINC)**. The Kickapoo reservation covers about 8 square miles and drinking water is supplied from a tribal operated surface water treatment plant on the Delaware river, supplying their rural water system. The Kickapoo tribe has their own drinking water lab and state certified operators. Local concerns there include sample time turnaround (approximately 1 month) for the THM and other samples they cannot analyze locally and abandoned well closure. Another concern is VOC contamination of well water.

The Potawatomi reservation covers approximately 20 square miles and is provided drinking water by the local rural water district. Residents are interested in a secondary (backup) drinking water source, since Soldier Creek has periods of low flow during dry weather. Issues such as regulating animal confinement operations to stop ground and surface water contamination, as well as water rights and water supply concerns are important on both reservations.

Overview of Rosebud Sioux Tribal drinking water concerns by Ben Whiting of **Sinte Gleska University (SGU)**. Fecal Coliform contamination, Mni Wiconi RWS – 60/40 split between surface water (from the Missouri R. near Pierre) and ground water (wells in Ogalalla aquifer in the South) Projected population increase (11K in 1990 to 19K in 2020). Because of the Mni Wiconi project, the Rosebud Reservation will not have very many people receiving water from sources of questionable quality. A bigger issue is youth education and support and training of tribal lab personnel. Particularly further education concerning Quality Control and Quality Assurance sapling and paperwork.

The tribal faculty members ranked the topics discussed previously. 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). 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.

Rank	Topic
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. NICC is in Santee, NE on the Santee Sioux Reservation. The NICC faculty contact is Shelly Avery. LPTC is in Winnebago, NE on the Winnebago Reservation; the LPTC faculty contact is Ben Kitto. The trips involved meetings with both the tribal college faculty and members of the tribal Department of Natural Resources at each location.

The workshop topics were selected by the TCs are listed below.

Workshop Topic	Approx. Date	Tribal College
Lab Technician Training (Horton, KS)	12/99	HINC
Lab Tech Training – Needs Assessment	1/00	SGU and OLC (Combined)
Training for Utilities / Water resource departments on Safe Drinking Water Act	3/00	SGU and OLC (Combined)
Youth Education (Project WET Training for Teachers)	3/00	HINC
Youth Education (Project WET Training for Teachers)	4/00	SGU and OLC (Combined)
Lab Technical Training on Microbiological Techniques	2/00	NICC
Youth Education (Project WET Training for Teachers)	5/00	NICC
To Be Determined (target date for determination: 1/31/00)		LPTC
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