

The Oxbow

FROM THE NORTH DAKOTA STATE WATER COMMISSION

Project WET provides watershed education

By Bill Sharff

A basin, a drainage, a watershed—all mean an area of land drained by a river and its tributaries to a common outlet. A watershed includes all of the land, people, air, plants and animals within its borders. And, although a watershed's boundaries are carved by nature and not by social or political forces, a watershed's well-being requires people with different perspectives, needs, and lifestyles to work together because of their common connection to a river and through its tributaries.

Every level of soil, plant, animal, and human life depends on the health of the watershed they inhabit. Actions by people affecting land and water resources happen every day. By show-

ing what a watershed is, whom it affects, and how it is affected, Project WET *Explore Your Watershed* science and social-based activities and programs seek to inspire teachers and students to keep water clean, use it wisely, and understand watersheds and their management. Project WET provides encouragement for teachers and students to make a positive difference through personal actions to improve the condition of their own and other watersheds.

Project WET educational materials and programs facilitate watershed education in North Dakota. Two four-graduate-credit Missouri River watershed education programs were completed in July 2003 and 2004, lasting six days each. In addition, a two-graduate-credit Devils Lake

watershed education program was completed in June 2004, which lasted three days. The focus of both programs was to delineate the varied contemporary watershed management issues and concerns of these geographic areas, through the use of hands-on activities, field investigations, tours, and professional presentations.

The Project WET watershed education programs seek to continue and expand watershed education by moving the Missouri River program further upstream to the Williston area. In alternate years, the Missouri River watershed education program will move to Bismarck. And, the Devils Lake watershed education program will be expanded to three credits. By moving watershed education programs around the state and providing more local/regional issues and concerns, additional educators can be reached that may not normally attend a program.

In future years, multi-credit watershed education programs will be developed for the Souris and James/Sheyenne River watersheds. Historically, single-credit watershed education programs have also been developed and implemented statewide.



Missouri River Institute participants learn about how water users share water resources in a watershed.



Missouri River, Devils Lake education programs a great success

By Bill Sharff

Fifty North Dakota K-12 educators came face to face with Devils Lake or Missouri River watershed issues while attending the Project WET "Discover Today's Devils

Lake" and "Missouri River Institute" watershed education programs this past summer. The two programs included 12 watershed issue segments; three watershed issue reports; three half-day environmental investigation segments; 11 field tours; navigation

of four major Project WET teacher curriculum guides; 18 hands-on activities; two environmental model demonstrations; and daily generation of idea pools, personal journaling, and program evaluations. A combined total of 39 resource professionals and scientists presented and lead discussions on a wide array of contemporary watershed issues.

Both programs put great emphasis on participant journaling. Each participant constructed and decorated their journals with materials that reflected Devils Lake or Missouri River issues and water uses. Each day participants were required to journal different concepts, and to consider how they could be integrated into their classroom.

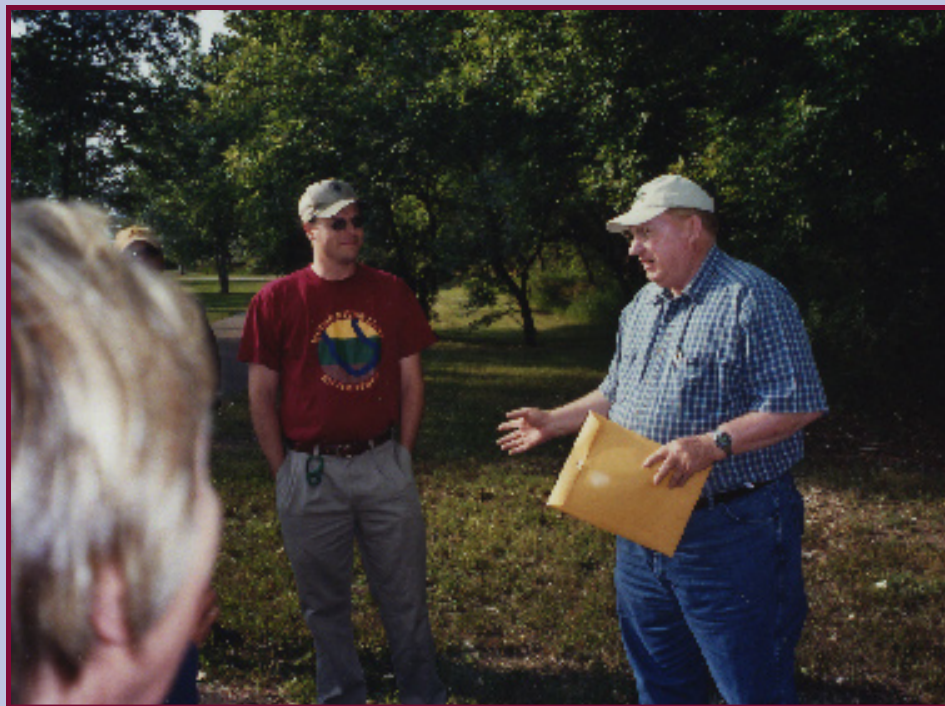
Feedback from participants was extremely positive. Jackie Gemar, grades 7-8 teacher from Minot, said "Wow! The Devils Lake Workshop greatly exceeded my expectations. I came to the workshop knowing very little about Devils Lake water issues



Joe Belford, Ramsey County Commissioner, discusses Devils Lake Watershed issues with workshop participants..

2004 PRESENTERS INCLUDE REPRESENTATIVES FROM:

U.S. Geological Survey
U.S. Department of the Interior
U.S. Fish and Wildlife Service
ND Game and Fish Department
ND Department of Health
ND Parks and Recreation
ND Forest Service
ND Historical Society
ND State Water Commission
ND Natural Resources Trust
City of Bismarck (Water Treatment, Forestry, Planning)
Western States Power Admin.
Garrison Dam
Leland Olds Power Plant
Tesoro Oil Refinery
Swenson Hagen and Co. Engineers
Spirit Lake Tribal Education
People to Save the Sheyenne River
Ramsey County Commission
Devils Lake Joint Water Board



Trent Bristol, ND Game and Fish Department, and Paul Blumhardt, Bismarck City Forester, discuss Missouri River woodland and forest issues..

and now I feel very knowledgeable and educated.”

Michael Holen, grades 10-12 teacher from Bismarck felt the workshop was, “Very educational for me. As a westerner, I did not have intimate details about the problems with Devils Lake. Thank you for making this program available to teachers in North Dakota.”

Maureen Anderson, fifth grade teacher from Washburn, commented, “The whole Missouri River Institute was an eye opener. I now realize that it takes a lot of compromise, communication, and discussion to get Missouri River issues resolved... I’m leaving the institute with a wealth of new knowledge.”

Loretta Haas, grades 7-12 teacher from Gackle, said “I thought of the Missouri as just a river running through the state, not a resource important to everyone in so many ways. This class gave me a great appreciation for the river and its watershed and lots of wonderful ideas to use in my classroom.”

Jerry Prouty, grades 9-12 teacher from Bismarck said, “I feel as if I have been living under a rock. I have learned so much about the river and its watershed I live next to. I’m now very inspired by the river and will use what I learned in my classes.”

The Devils Lake Workshop and Missouri River Institute were taught by several Project WET facilitators, including:

- Bill Sharff, Project WET Director, North Dakota State Water Commission
- Jim Collins, North Dakota Department of Health
- Angie Bartholomay, Science Teacher, Bottineau North Dakota
- Pam Hintz, Science Teacher, Elgin North Dakota

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by an EPA Section 319 Non-point Source Pollution grant, the State Water Commission, local county water resource districts, soil conservation districts, and local school districts.

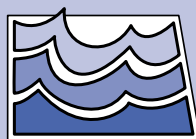
In addition, Missouri River Institute participants were able to observe a portion of Lake Sakakawea from pontoons donated by Captain Kits Marina of Pick City, North Dakota.



Missouri River Institute participants.



Devils Lake Workshop participants.



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