NORTH DAKOTA PROJECT WET (WATER EDUCATION FOR TEACHERS) WATER QUALITY/NON-POINT FOR SOURCE POLLUTION EDUCATION PROGRAM FOR TEACHERS AND YOUTH

FY 2009 NPS Project Implementation Plan

July 1, 2009 - June 30, 2011

Prepared by:

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October 2008

1.01 PROJECT SUMMARY SHEET

PROJECT TITLE NAME: NORTH DAKOTA PROJECT WET (WATER EDUCATION FOR TEACHERS) WATER QUALITY/NON-POINT SOURCE POLLUTION EDUCATION PROGRAM FOR NORTH DAKOTA TEACHERS AND YOUTH

NAME AND ADDRESS, TELEPHONE AND E-MAIL OF LEAD PROJECT SPONSOR/SUBGRANTEE:

NORTH DAKOTA SATE WATER COMMMISSION 900 East Boulevard, Department 770 Bismarck, ND 58505-0850 701-328-4833 bsharff@nd.gov

| STATE CONTACT PERSON: Bill Sharff | | TITLE: Project Director | | |
|---|---|--|--|--|
| PHONE : (701) 328-4833 FAX : | 701-328-3696 | EMAIL: bsharff@ | nd.gov | |
| STATE: North Dakota | | WATERSHED: S | tatewide | |
| HYDROLOGIC UNIT CODE: NA | | HIGH PRIORITY (YES/NO): NO | WATERSHED: | |
| TMDL UNDER DEVELOPMENT: I | PENDING | _ IMPLEMENTATI | ION | |
| PROJECT TYPES | WATERBOD | Y TYPES | NPS CATEGORY | |
| [] STAFFING & SUPPORT [] WATERSHED [] GROUNDWATER [X] I&E | [] GROUNDV [] LAKES/RE [] RIVERS [] STREAMS [] WETLAND [] OTHER | SERVOIRS | [] AGRICULTURE [] URBAN RUNOFF [] SILVICULTURE [] CONSTRUCTION [] RESOURCE EXTRACTION [] STOWAGE/LAND DISPOSAL [] HYDRO [] OTHER | |
| PROJECT: STATEWIDE X LATI SUMMARIZATION OF MAJOR GO the Project WET water quality/NPS knowledge, understanding and appresources and solutions to those imestablished: 1) Develop and delive pollution water science and water e outdoor-ready teaching aids; 2) Proinformation and education tools, se wise stewardship of North Dakota's | pollution progra pollution progra reciation of NPS pacts. The folk r indoor and out ducation progra ovide balanced N rvices, program | owing overall goal ham: To increase K-18 pollution impacts to be subjected by the subjected | as been established for 2 educator and youth to North Dakota water als have also been and non-point source lination of classroom and quality resource erials; and 3) Promote the | |

and natural environments within the watersheds of North Dakota through enhancement of water quality/NPS pollution education programs.

PROJECT DESCRIPTION:

Project WET (Water Education for Teachers) is a supplemental and interdisciplinary water science and water education program for K-12 formal and non-formal educators and for K-12 students. Project WET is delivered to K-12 educators though instructional institutes, workshops, seminars, and inservice and preservice opportunities. K-12 students receive water science and education programs directly though education events such as youth camps, youth water festivals and community water or environmental awareness/action events.

First developed and implemented in North Dakota in 1984 as the WET Program, North Dakota Project WET incorporates the national water science and education program, Project WET USA. Project WET facilitates and promotes the learning, awareness, knowledge, exploration and stewardship of North Dakota water resources, and how water interacts with both the human and natural environments within the watersheds of North Dakota. Programs are carried out through the development of indoor and outdoor educational experiences and the dissemination of classroom-ready teaching aids.

Project WET educational programs, resources and materials address a wide range of water resource issues and topics and water-related disciplines, take into consideration the various learning styles of educators and youth, and are designed to "fit" into existing subjects and curriculum. Other characteristics of Project WET programs include hands-on, self-contained, easy to use, non-biased, and address age-appropriate critical thinking and problem-solving skills.

A more comprehensive description of the Project can be found in the Appendix under PROJECT DESCRIPTION COMPONENTS

Project WET Resources and Materials:

The Project WET USA K-12 Curriculum and Activity Guide provides 91 hands-on, interactive and innovative water and watershed activities that incorporate a variety of formats, such as large and small group learning, whole body activities, and laboratory investigations, local and global topics and involvement in community service projects. While people's relationships to water is the major guide theme, the guide is divided into seven thematic areas including water's chemical and physical properties, quantity and quality issues, aquatic wildlife, eosystems and management strategies.

Project WET USA provides to educators the opportunity to investigate specific water topics on a more in-depth basis. There are many educators guides available that can be used to supplement the Project WET K-12 Curriculum and Activity Guide. Each of these guides also have a topic-related KIDS (Kids in Discovery Series) upper elementary/lower middle school student activity booklet, usually 16 pages each. Many of the educator guides contain a 75- to 100-page resource/reference section related to the guide topic and 15 to 40 activities. The format of the activities in the guides is modeled after the format of the Project WET K-12 Curriculum and Activity Guide. Some contain detailed planning and reference charts. Many of the educational guides are a part of the Discover A Watershed series. The 16-page student booklets are all a part of the KIDS in Discovery series. The following educator guides and KIDS in Discovery series are pertinent to and used by North Dakota Project WET:

Educator Guides

- Discover the Missouri River Watershed Guide
- WOW! Wonders of Wetlands Guide
- Conserve Water and Water Watchers Guides
- Watershed Manager Guide
- Healthy Water, Healthy People Guide and Field Monitoring Manual

Kids in Discovery Series Booklets

- Missouri River
- Celebrate Wetlands
- Conserve Water
- Watershed Protection
- Healthy Water, Healthy People
- Native Waters Along the Missouri River
- Explore Oceans
- The Water Story
- Big Rivers
- Every Water Drop Counts
- Discover Ground Water and Springs
- Stormwater
- Fish and Fishing
- On the Water Route of Lewis and Clark
- Red River of the North

The North Dakota Project WET program offers a variety of water resource education materials. The following highlights the most important of these resources:

- North Dakota Project WET Facilitator Handbook
- North Dakota Make A Splash with your own Water Festival Guide
- North Dakota Water Resource and Reference Guide
- North Dakota Project WET Guide Correlation Document to ND Content Standards
- North Dakota Water Resource Map and major watershed maps
- North Dakota Environmental Trading Card Series (currently trees, macroinvertebrates, fish and soils)
- North Dakota Glacial Drift Aguifer Map
- North Dakota Liquid Treasure Water History Trunk
- Marsh World Guide
- EnviroScape Watershed Water Pollution Trunk
- •Series of nine elementary and middle school water resource posters
- Other environmental posters
- Wide array of observational, chemical, physical and biological water quality investigation materials.

Project WET Programs for K-12 Educators:

Inservice (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): One or two hour inservice sessions are preferred although special three or four hour topic or thematic sessions can be completed.

University Preservice (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Length and program variable and usually negotiated with university or college. Should be six hours in length. Can be voluntary or mandatory depending on institution faculty. Preservice training can be completed by university/college faculty or by a Project WET facilitator.

Six-Hour Non Credit Workshop (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Generally the minimum length workshop for participants to receive Project WET USA and North Dakota curriculum and activity guides and other water education materials.

15-Hour Credit Workshop (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): One Semester graduate credit available through Minot State University, UND or NDSU. Credit workshop options currently available include: Project WET Project WET/Watershed Manager; Project WET/WOW! Wonders of Wetlands; Project WET/Service Learning; Project WET/Water Festival; Project WET/Healthy Water, Healthy People; Project WET/Missouri River; Project WET/Red River; and Project WET/Conserve Water. Many other options available using these combinations.

Summer Institutes (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Project WET offers intensive summer watershed institutes for educators (July of each summer). The watershed institutes which offer three credits are Discover Today's Devils Lake; James and Sheyenne Rivers; Mouse River; and Northwestern ND Missouri River watershed. The four credit watershed institutes are Discover Today's Missouri River; Southwestern ND Missouri River Watershed and the Red River.

Project WET Programs for K-12 Youth:

Water Festivals/Celebrations (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Water festivals/celebrations can be part-day to four day hands-on events to educate youth (usually grade three, four or five) about the importance of water in their lives. Most events include hands-on Project WET and other classroom-ready water related activities, demonstrations and exhibits. Large events can include contests, games and teacher resource area and entertainment. Major festivals currently held are in Bismarck, Dickinson, Fargo and Grand Forks. Mandan is planned in 2009.

Youth Camps/Youth Events (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Project WET sponsors or participates in youth camps and youth events that promote water science and water resource education. Project WET involvement can be a indoor/outdoor part-day to multi-day program to educate youth about the importance of water. Other organization sponsors can include boy and girl scouts, church-sponsored youth programs, 4-H youth programs, science center, museums, environmental learning centers, zoos, soil conservation district Eco-ed programs, and state park youth programs.

Family and Community Centered Program (80% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Project WET participates in many family and community centered events. Often, family and community programs are developed with youth water festivals, community art/craft shows, youth and community exhibitions, community recognition events, local historical events,

youth camps, local, county and/or state fairs and many other events. They can also be developed as a stand alone program to educate the general public about water resource issues.

Water Action/Community Service Learning Projects (90% Directly Related to NPS Pollution/Solutions and Water Quality Education; 100% Directly Related to Water Education): Community action/service learning projects get teachers/students involved in tackling water-related problems or issues, or that aim at improving an environmental setting. Projects can take place at home, in the school, in the community and on the farm (anywhere in a local watershed).

FY 2009 319 funds requested: (Base) $\frac{174,258}{0}$; (Incremental) $\frac{0}{0}$. Match $\frac{116,172}{0}$. Other Federal Funds: $\frac{0}{0}$. 319 Funded Fulltime personnel: $\frac{1}{0}$.

Total Project Cost:\$290,430

2.0 STATEMENT OF NEED

During the period July 1, 1993-July 31, 2008 Project WET completed seventeen instructional multi-credit institutes serving 594 K-12 educators, sixty-seven single credit workshops serving 938 K-12 educators and thirty-five preservice workshops serving 718 preservice educators. There were also 224 inservice sessions completed during the same time period with 3,136 K-12 educators attending. Total K-12 educators served from July 1, 1993 – July 31, 2008 was 5,386.

During the period of July 1, 1993 – July 31, 2008 approximately 35,350 K-6 grade students attended 62 Project WET sponsored water festivals, 52,450 K-12 students attended 420 youth camps, environmental youth events and community youth education events where Project WET was involved. About 1,800 youth have participated in 62 youth action/service learning programs and projects in their local communities with Project WET involvement.

During the period July 1, 1993 – July 31, 2008 nearly 10,000 individuals (families and children) have been involved in 46 Project WET sponsored family and community centered water or environmental education events. Total Project WET services to K-12 educators, preservice teachers, K-12 students and adults/families during the period of July 1, 1993-July 31, 2008 were provided to about 104,986 individuals in 930 programs, projects or events. Project WET was also involved in about 480 additional educational events during the period July 1, 1993 – July 31, 2008. These events included booths, exhibits, presentations and water/environmental meetings.

Based upon discussions and evaluations from many of the above program participants that have been provided to Project WET during the period July 1, 1993 – July 31, 2008, nearly 100% of the educators and youth expressed the continued need for K-12 educator and youth water education and in particular water quality education in North Dakota. Project WET program participants realized that water quality education is critical to all aspects of their lives.

The North Dakota Department of Health has identified the Project WET water quality/NPS pollution program as an integral component to its State I/E Strategy for Youth Education. The following table outlines the programs it includes and how Project WET fits this strategy:

| Program | Primary Grade Level | Primary Audience |
|------------------|---------------------|-----------------------------------|
| Project WET | K-12 | Teachers and Students |
| Project Trees | K-6 | Students and Teachers |
| Statewide Eco Ed | 6-8 | Students, Teachers and Chaperones |
| ND Envirothon | 9-12 | Students, Teachers/Advisors |

These programs are not limited to a specific grade level, but a majority of their programming is presented to the grade level(s) noted in the table.

Each program serves a separate audience yet builds on the previous program. By using individual programs as building blocks, NPS educational materials are provided to more students over the entire span of their education. The State I/E Strategy provides hands-on education, which allows students to become confident in their abilities to understand, appreciate and become more aware of solutions to environmental problems.

Project WET provides the base of the "pyramid" upon which water quality/NPS pollution education is implemented in North Dakota for the targeted ages. Project WET is a statewide service provider and is the only hands-on water quality/NPS pollution education program that provides comprehensive curriculum, resources and materials for formal and nonformal K-12 educators and K-12 youth in North Dakota (see Project Description).

- **2.1** Project WET targets the following youth groups or those groups or individuals that work with youth:
 - K-12 public and private classroom teachers
 - Preschool and daycare educators
 - Youth organization leaders (i.e. 4-H, scouts, bible, etc.)
 - Preservice faculty and students
 - Resource agency educators and specialists
 - Natural resource program educators, environmental learning center staff and park interpreters
 - Home school educators
 - Corporate community educators
 - Zoo educational staff
 - Museum, nature and science center staff
 - K-12 students (all situations, groups, organizations and functions)
 - · Adults, general public

Project WET believes that through the efforts of the ND education and water resource management communities, the ND state Project WET office, and the ND Project WET facilitator network, educators and young people will be stimulated to appreciate and become aware of and knowledgeable about their water resources and the importance of water quality/NPS pollution impacts and solutions to those impacts. This in turn will promote wise water stewardship and increase the chance of educators and youth becoming involved in a variety of water quality/NPS pollution action projects in their homes, schools

and communities. There then will be a much better chance that this commitment will stay with them throughout their lives.

3.0 PROJECT DESCRIPTION

- **3.1 Project Goals:** The overall goal of the Project WET water quality/nonpoint source pollution education program is: To increase K-12 educator and youth knowledge, understanding and appreciation of NPS pollution impacts to North Dakota water resources and solutions to those impacts. The following action subgoals have also been established.
 - To facilitate and promote the learning and exploration of North Dakota's water quality/NPS pollution issues and problems through the development and delivery of indoor and outdoor water quality and non-point source pollution water science and water education programs; and
 - 2) To provide balanced water quality/NPS pollution resource information and classroom and outdoor ready education tools, services, programs and resource materials needed for teachers and youth to make informed decisions about future North Dakota water quality/NPS pollution management and impact solutions; and
 - 3) To promote the wise stewardship of North Dakota's water resources and their interaction with both the human and natural environments within the watersheds of North Dakota through enhancement of water quality/NPS pollution education programs.

In order to meet these goals, the Project WET water quality/NPS program provides hands-on, classroom and outdoor-ready NPS pollution/water quality education programs to K-12 formal and nonformal educators, K-12 youth, youth organization leaders, resource agency educators, natural resource program personnel and community residents through the educational materials, resources and K-12 educator and K-12 youth programs detailed in the Project Description.

- 3.2 <u>Objectives/Tasks</u>: Specific objectives and underlying tasks for the FY 2009 NPS Pollution Project Implementation Plan (PIP) for the period of July 1, 2009 June 30, 2011 are defined in this section.
 - <u>Objective 1</u>. Provide Project WET management and support systems to develop and deliver effective NPS pollution/water quality and water education/water science programs (\$180,730).
 - **Task 1.** Employ a Project Director and incorporate other non-state employees (Project WET facilitators) to provide necessary management and direction for implementation and delivery of project objectives/tasks (salary, fringe, travel/per diem for Project director). Includes travel/per diem for non-state employees (Project WET facilitators). Includes costs associated with Project WET Director for development and implementation of Project including personal involvement in delivery of programs. Costs also include travel/per diem for Project WET facilitators to deliver project programs.

Product: Personnel for ongoing program development, management and implementation of project.

Cost: \$ 167,990

Task 2. Maintain cost of support services to project objectives/tasks directed toward targeted teachers and youth (miscellaneous supplies, postage, printing, and equipment, etc.).

Product: Provision of necessary support to augment Project WET NPS pollution/solutions and water quality educational resources, services and materials to teachers and youth.

Cost: \$6,240

Task 3. Support the cost of service contracts with Project WET NPS pollution education providers and consultants (statewide teacher center network, contract for chemistry kits/water boots).

Product: Mechanisms to promote, access and implement Project WET NPS pollution/water quality educational resources, materials and programs.

Cost: \$6,500

Objective 2.

Maintain classroom-ready teaching aids in support of Project WET educational efforts (\$22,500).

Task 4. Maintain six Project WET NPS pollution/solutions and water quality educational trunks (EnviroScape Environmental series).

Product: Teacher/youth use of trunks with interactive participation.

Cost: \$ 500

Task 5. Maintain Project WET water quality and NPS pollution/solutions hands-on curriculum and other NPS pollution/water education materials and resources (Project WET guides and other Project WET supplemental materials; other water quality resource education curriculum and NPS pollution/water quality materials) for K-12 formal and nonformal educators and youth.

Product: Hands-on minds-on curriculum and supplemental, easy to use, balanced and interactive NPS pollution and water quality resource and water science education materials and resources for K-12 formal and nonformal educators and youth.

Cost: \$20,000

Task 6. Purchase new and maintain existing indoor/outdoor water quality training and education resources (water quality chemical, biological, physical monitoring resources, hip/boot/chest waders, other appropriate NPS pollution and water quality equipment, materials and resources that enhance NPS pollution/solutions and water quality education).

Product: Methods to educate and monitor NPS pollution/solutions and water quality for all types of water resource environments.

Cost: \$ 2,000

Objective 3.

Complete water quality/NPS pollution/solutions educational opportunities for 20,110 K-12 formal and non-formal educators, youth and adults to expand their knowledge and understanding of water quality/NPS pollution/solutions resource issues in North Dakota (\$75,200).

Task 7. Provide and complete varying level non-credit and credit facilitator led Project WET water quality/NPS pollution/solutions educational programs (in-service and preservice) for 550 formal and non-formal K-12 educators (includes stipend but does not include travel/per diem costs of non-state employees – Project WET facilitators).

Product: 550 formal and non-formal K-12 educators who gain a knowledge, appreciation and understanding of ND water quality/NPS pollution/solutions resource issues.

Cost: \$13,000

Task 8. Provide funds to selected organizations to promote, develop, and complete ten community/area-wide NPS pollution/solutions water quality water education festivals for 9,000 various age youth (Make A Splash with Project WET festivals).

Product: Completion of ten high-profile and balanced educational community/area-wide NPS pollution/solutions water quality water education festivals for 9,000 middle and upper elementary youth and their teachers, thereby increasing appreciation, knowledge and understanding of ND water quality/NPS pollution/solutions issues.

Cost: \$20,000

Task 9. Provide and complete varying level water quality/NPS pollution/solutions education programs for 8,000 K-12 youth at camps, school water education programs, other water festivals and other K-12 and adult NPS pollution and water quality

environmental community education events (includes stipend but does not include travel/per diem of non state employees – Project WET facilitators). Costs provide funding to only pay Project WET facilitators a stipend to help develop and complete these programs. Costs do not include any funding for Project WET Director.

Product: Completion of Project WET water quality/NPS pollution programs for 8,000 K-12 youth at youth camps, school water education programs, water festivals and other youth/adult NPS pollution and water quality environmental community education events.

Cost: \$ 15,200

Task 10. Develop and implement a total of two Discover Today's Watershed Institutes for 60 formal and nonformal K-12 educators with three or four graduate credits for each institute (includes stipend but does not include travel/per diem for non-state employees – Project WET facilitators). Costs provide funding to only pay Project WET facilitators a stipend to help complete these institutes. Costs do not include any funding for Project WET Director.

Product: 60 educators who gain an in-depth knowledge, appreciation and understanding of contemporary North Dakota watershed and water quality and NPS pollution/solutions issues.

Cost: \$ 24,000

Task 11. Maintain two statewide water education poster contests for 2,500 grade 6 youth with the theme of "Help Prevent Runoff Pollution."

Product: 2,500 grade 6 students who receive an opportunity to develop fine art skills while depicting their understanding of NPS pollution/solutions and water quality issues.

Cost: \$3,000

Objective 4.

Maintain the Project WET facilitator network of 30-35 formal and nonformal educators who help promote and enable Project WET water quality/NPS pollution/solutions educational resources, materials and opportunities to be delivered statewide to teachers and youth (\$8,500).

Task 12. Maintain Project WET water quality/NPS pollution/solutions facilitator network of 30-35 formal and nonformal educators, recognition and incentive programs for facilitators.

Product: Methods to maintain existing facilitator network of 30 -35 active facilitators and materials to recognize and provide incentives to the Project WET facilitator network.

Cost: \$4,500

Task 13. Complete one statewide facilitator leadership training workshop for 10 additional K-12 formal and nonformal educators.

Product: 10 additional motivated and trained K-12 formal and nonformal educators to promote and deliver Project WET NPS pollution educational resources, materials and programs across North Dakota.

Cost: \$4,000

Objective 5.

Provide a method of ongoing Project WET water quality/NPS pollution/solutions program monitoring, evaluation, oversight and direction through four Advisory Committee meetings and through evaluation of Project accomplishments, objectives, task outputs and benefits. Current Project WET Advisory Committee Members and their representative schools are listed under PROJECT EVALUATION AND MONITORING PLAN ROLES AND RESPONSIBILITIES Number 1 – Project WET Advisory Committee in the APPENDIX (\$3,500).

Task 14. Complete four Project WET Advisory Committee meetings to monitor and evaluate along with provide oversight and direction for Project WET water quality/NPS/pollution programs.

Product: Method to monitor, evaluate and provide direction to Project WET water quality/NPS pollution objectives/tasks through four Project WET Advisory Committee meetings.

Cost: \$ 2,000

Task 15. Complete various methods to track and measure (evaluate) Project objectives, task outputs, benefits and accomplishments.

Product:

Methods to monitor and evaluate progress toward accomplishment of Project objectives, task outputs and benefits. Specific methods that will be used to track and measure progress and benefits to Project targeted groups is defined in Section 5.1 EVALUATION AND MONITORING PLAN.

Cost: \$1,500

3.3 MILESTONE TABLE FOR PROJECT WET WATER QUALITY/NPS POLLUTION EDUCATION PROGRAM FOR TEACHERS AND YOUTH

July 1, 2009– June 30, 2011

| | RESPONSIBLE | | YEAR 1 | YEAR 2 |
|---|--|--|---------------------------|----------------------|
| PROJECT OJECTIVE AND TASKS | ORGANIZATIONS | OUTPUT | July 1/09 June 30/10 | July 1/10 June 30/11 |
| OBJECTIVE 1: MAINTAIN PROJECT WET MANAGEMENT AND SUPPORT SYSTEMS. Task 1: Employ a Project Director. a. Salary/Fringe b. Travel/Per Diem (includes non- state employees = facilitators) | NDSWC/Project Director | Project Staff and Project Facilitators | Ongoing – July 1, 2009 – | June 30, 2011 |
| Task 2: Maintain cost of support services. a. Office Equipment/Supplies b. Postage/Printing c. Miscellaneous Supplies | NDSWC/Project Director | Project Support Services | Ongoing - July 1, 2009 - | June 30, 2011 |
| Task 3: Support the cost of service contracts. a. Statewide Teacher Center b. Chemistry kits/water boots | NDSWC/Project Director; Involved Contractees | Mechanisms to Implement Project Services through Contracts | Ongoing – July 1, 2009, - | June 30, 2011 |
| OBJECTIVE 2: MAINTAIN CLASSROOM – READY TEACHING AIDS. Task 4: Maintain Six Project WET NPS pollution/ water quality trunks/exhibits (EnviroScape). | NDSWC/Project Director | Use and Maintenance of Project Trunk/Exhibits | Ongoing – July 1, 2009 – | June 30, 2011 |
| Task 5: Maintain Project WET NPS pollution/water quality curriculum/educational materials. a. National Project WET Activity Guides b. National Project WET supplemental water education materials c. Other water quality/NPS pollution education materials | NDSWC/Project Director | Purchase and Maintenance of Project NPS Pollution and Water Quality Educational Materials and Resources | Ongoing – July 1, 2009 – | June 30, 2011 |

| | RESPONSIBLE | O. I. III III III III III III III III II | | AR 1 | | AR 2 |
|--|---|---|-------------|----------------------------------|---------------|------------|
| PROJECT OJECTIVE AND TASKS | ORGANIZATIONS | OUTPUT | July 1/09 | June 30/10 | July 1/10 | June 30/11 |
| and curriculum | | | | | | |
| | | | | | | |
| Task 6: Purchase new and maintain existing indoor/outdoor water quality/NPS pollution education and training resources. a. Repair and restock existing water quality test kits. b. Repair and replace hip boots/chest waders. c. Purchase other NPS Pollution/water quality education/training resources. | NDSWC/Project Director; Contracted Project WET Facilitator | Purchase and Maintenance of NPS pollution/ Water Quality Indoor/Outdoor Materials and Resources | Ongoing – J | July 1, 2009 – . | June 30, 2011 | |
| OBJECTIVE 3: COMPLETE EDUCATIONAL OPPORTUNITIES FOR 20,110 K-12 FORMAL AND NON-FORMAL EDUCATORS, YOUTH AND | | | Ongoing – J | July 1, 2009 – . | June 30, 2011 | |
| ADULTS. Task 7: Provide and complete varying level credit/non-credit educational programs for 550 formal and non-formal K-12 educators. a. 1 hour and variable hour inservice for 250 educators b. 6 hour non/credit preservice workshops for 75 educators c. Fifteen 15 hour credit workshops involving 225 educators | ND SWC/Project Director and Facilitators; Other Agencies, Organizations and Individuals | 550 Knowledgeable Educators and Students on NPS Pollution/Solution Quality Resources and Water Resource Issues | | | | |
| Task 8: Provide funds to selected organizations to develop and complete ten NPS pollution and water quality festivals (Make a Splash with Project WET) involving 9,000 third, fourth and fifth graders. | NDSWC/Project Director and Facilitators; Involved Organizations | Completion of Selected NPS Pollution/Water Quality Festivals for 9,000 students. | | 2010 and April October 2009 a | | /October |
| Task 9: Provide and complete varying level NPS/pollution water quality education programs for 8,000 K-12 youth and adults at camps/school programs, other youth water education events and at public water education events. | NDSWC/Project Director and Facilitators; Other Involved Agencies and Organizations | 8,000 Knowledgeable K- 12 Students on NPS Pollution and Water Quality Issues | Ongoing – J | July 1, 2009 – . | June 30, 2011 | |

| | RESPONSIBLE | | YEAR 1 | | | AR 2 |
|---|--|--|---------------------|----------|---------------|------------|
| PROJECT OJECTIVE AND TASKS | ORGANIZATIONS | OUTPUT | July 1/09 June 3 | 30/10 | July 1/10 | June 30/11 |
| Task 10: Develop and implement two Discover Today's Watershed Institutes for 60 formal and non-formal K-12 educators (three or four graduate credits each). | NDSWC Project WET Director and Facilitators; Other Involved Agencies, Individuals and Organizations | In-depth Understanding of Contemporary ND Watershed, Nonpoint Source Pollution and Water Quality Issues and Concerns for 60 educators | July 2009 – July 20 | | | |
| Task 11: Develop and implement two statewide NPS pollution/ water quality education poster contests involving 2,500 grade 6 youth with theme of "Help Prevent Runoff Pollution" | NDSWC/Project WET Director; KNDC; Grade Six Teachers and Youth | 2,500 Grade 6 Student Understanding of NPS Pollution/Water Quality Impacts | January/April 2010 |) – Janu | ary/April 201 | 1 |
| OBECTIVE 4: MAINTAIN FACILITATOR NETWORK AND RECOGNITION AND INCENTIVE SUPPORT SYSTEM OF 30-35 PROJECT WET FACILITATORS. Task 12: Maintain facilitator network of 30-35 educators, and facilitator recognition and incentive programs. a. Facilitator recognition and incentive programs b. Attend Project WET promotional meetings/conferences | NDSWC/Project Director and Facilitators; Other Involved Agencies and Organizations | 30-35 Motivated and Trained Project WET Facilitators to Complete Project Objectives/Tasks; Informed K-12 Educators and Interested Others | Ongoing - July 1, 2 | 2009 – J | une 30, 2011 | |
| Task 13: Complete one statewide facilitator leadership training workshop for 10 additional K-12 formal and non-formal educators. | NDSWC/Project Director and WET Facilitators | Additional 10 Motivated and Trained Project WET Facilitators to Complete Project Objectives/Tasks | February 2011 | | | |

| | RESPONSIBLE | | YEAR 1 | YEAR 2 | |
|--|-----------------------|--------------------|-------------------------|-------------------------|--|
| PROJECT OJECTIVE AND TASKS | ORGANIZATIONS | OUTPUT | July 1/09 June 30/10 | July 1/10 June 30/11 | |
| OBJECTIVE 5: PROVIDE A METHOD FOR | | | | | |
| ONGOING MONITORING, EVALUATION, | | | | | |
| OVERSIGHT AND DIRECTION THROUGH FOUR | | | | | |
| PROJECT WET ADVISORY COMMITTEE | | | | | |
| MEETINGS AND THROUGH EVALUATION OF | | | | | |
| PROJECT ACCOMPLISHMENTS, OBJECTIVES, | | | | | |
| TASK OUTPUTS, AND BENEFITS. | | | | | |
| | | | | | |
| Task 14: Conduct four meetings of Project | NDSWC/Project | Method to Assess | Periodic as Needed | Periodic as Needed | |
| WET Advisory Committee (see Appendix for | Director and Advisory | and Evaluate | | | |
| current Advisory Committee members). | Committee Members | Project Objectives | July 1, 2009 – June 30, | July 1, 2009 – June 30, | |
| | | and Tasks through | 2011 | 2011 | |
| | | four meetings | | | |
| | NDSWC/Project | Methods to Track | Periodic as Needed | Periodic as Needed | |
| | Director; Project | and Measure | | | |
| Task 15: Complete various methods to track | Facilitators; Project | Project and | July 1, 2009 – June 30, | July 1, 2009 – June 30, | |
| and measure (evaluate) Project objectives, task | Program Participants; | Objectives Tasks | 2011 | 2011 | |
| outputs, benefits and accomplishments (see Section | and Participating | through Formal | | | |
| 5.1 for specific methods and Appendix for examples). | Organizations | Evaluation | | | |
| | | Techniques | | | |

3.4 North Dakota Project WET, which was developed and implemented in 1984 by the ND State Water Commission, was the first Project WET program in the United States/world. North Dakota Project WET, through the ND State Water Commission, has a proven history of developing and implementing comprehensive water quality/NPS pollution programs for K-12 youth and adults. Project WET is the only statewide program in North Dakota which produces, uses and delivers hands-on NPS pollution/solutions and water quality education programs to K-12 educators and youth. A comprehensive listing of the history of Project WET can be found in the Appendix under HISTORY OF PROJECT WET.

4.0 COORDINATION PLAN

- 4.1 The North Dakota State Water Commission (NDSWC), 900 East Boulevard Avenue, Bismarck, ND 58505 is the lead sponsor of the North Dakota Project WET NPS Pollution/Water Quality Program. The NDSWC operates in pursuit of three main goals:
 - To regulate the use of water resources for the future welfare and prosperity of the people of North Dakota;
 - To develop the use of water resources for the future welfare and prosperity of the people of North Dakota; and
 - To educate the public regarding the nature and occurrence of North Dakota's water resources.

The 1983 water management plan public planning process determined that the North Dakota general public, as well as teachers and youth, knew very little about North Dakota statewide, watershed or local community water resource issues. As a result, a general adult and teacher water education program was initiated in 1984. During the period of 1985 through 1989 Project WET was developed and implemented by the NDSWC using North Dakota water education materials and resources. The NDSWC's Project WET North Dakota gained national attention and recognition and soon became a model for other states wanting to develop hands-on water resource education curriculum. In 1989, the NDSWC's Project WET program was pilot tested in Arizona, Idaho and Montana. This successful pilot test was the basis for the development of the National Project WET Program. The NDSWC began a far reaching enhancement and expansion of its Project WET program in 1993 through the Section 319 Nonpoint Source Pollution Program of the Environmental Protection Agency. The NDSWC has a demonstrated and proven record of developing and implementing innovative water and water quality/NPS pollution programs in North Dakota since 1993.

The NDSWC is the only sponsoring organization for the administration, management and implementation of the Project WET Water Quality/NPS Pollution Program for Teachers and Youth in North Dakota. There are no other entities, either through formal or informal agreements that sponsor the Project WET program.

Project WET North Dakota is funded partly with a Section 319 EPA Nonpoint Source Pollution Grant administered through the North Dakota Department of Health (NDDH) and sanctioned by the ND Nonpoint Source Task Force (NDNPSTF). A Section 319 NPS Pollution Project Implementation Plan (PIP) is submitted to both the NDDH and the NDNPSTF on a biennial basis. The NDSWC and the NDDH enter into a formal contract on a biennial basis which formalizes the pass through of Section 319 NPS Pollution EPA funds and delineates the responsibilities of each organization in the delivery of the Project WET program. North Dakota Project WET is also funded through state general

or trust funds, fees charged to educators attending graduate credit programs and non-federal match.

- 4.2 Since 1984 North Dakota Project WET has had the support of local water, environmental, and education organizations. The North Dakota Water Resource Districts and North Dakota Water Users Associations have been instrumental in providing time, energy and, in certain instances, financial support to Project WET. Since 1993 the ND Water Education Foundation has supported the water education programs of Project WET with collaborative discussions. The local nine teacher learning centers (now completed through the statewide teacher center network) in North Dakota have provided their support of Project WET by helping promote its educational opportunities to K-12 educators statewide. The ND Department of Public Instruction and the ND Educational Standards and Practices Board have provided support through alignment of Project WET credit programs with current K-12 educator continuing education requirements (eq. No Child Left Behind). The institutions of higher education, which provide graduate credit for Project WET workshops and institutes, have also aligned Project WET credit opportunities in the core subject areas to meet K-12 educator certification standards. Teacher education associations and organizations (NDEA, NDSTA, NDGA) have supported Project WET through ongoing invitations for Project WET to provide educational displays and presentations at association/organization meetings. Local school districts have requested Project WET educational opportunities to be presented at their schools. Natural resource agencies (USGS, SCD's, NDSU Extension Service, etc.) have asked Project WET to complete collaborative educational programs. Various other community and/or natural resource organizations have expressed their desire for Project WET to be involved in their environmental education efforts (Dakota Zoo, River Keepers, Dakota Science Center, Bismarck Public School system, Morton County Soil Conservation District, Gateway to Science, Turtle Mountain Environmental Learning Center, Sully's Hill Natural Resources Program, etc.).
- 4.3 The ND State Water Commission's Project WET Program has a long history of coordination, cooperation, networking and interfacing with a wide array of local, state and federal water and natural resource related agencies, organizations, associations and programs in North Dakota, and many at the national level. Project WET has also been connected closely with the educational and environmental education community in North Dakota. The success of Project WET has been dependent upon this cooperative spirit. It has long been realized that the State Water Commission's Project WET Program, in carrying out it's mission of water quality/NPS Pollution education for K-12 educators and youth, must aggressively pursue coordinated resources, expertise and active participation of a wide array of educational, water and natural resource and environmental education entities.

Educational: Project WET fosters formal and informal communication and networking with a host of educational linkages. An agreement with the statewide ND Teacher Center Network is executed every year. This agreement provides for the promotion of Project WET educational opportunities in local school districts statewide. Project WET communicates on a regular basis with the Minot State University, NDSU and UND continuing education departments regarding course proposal, cost and credit requirements for each of the institutions. The majority of Project WET formal educator offerings are accredited through these departments in their respective institutions. Project WET networks with the ND Department of Public Instruction and the ND Educational Standards and Practices Board to make sure its water education credit

offerings meet current ND and national education standards that benefit ND formal K-12 educators. Project WET collaborates with the education departments and promotes water education programs for preservice teachers at four ND colleges and universities. Project WET has built linkages with the ND Education Association, the ND Science Teachers Association, the ND Home Educator's Association, the ND Geographic Alliance, the ND Reading Association, the ND Principals Association and the ND Superintendents Association. Promotional displays and educational presentations have been completed at many of these association annual conferences since the late 1980's. Project WET has participated in the annual State Science Fair (since 1996) by providing awards for the best water quality/NPS Pollution projects in the junior and senior student divisions.

Water and Natural Resources: Project WET continues to interface, collaborate and network with the ND water and natural resource community. Project WET involves all of the following agencies or organizations at various times in developing and completing its educational programs for K-12 educators and youth. Included are the ND State Water Commission, the ND Water Resource Districts and Water Users Associations, the ND Water Education Foundation, the ND Soil Conservation Districts Association, the ND Department of Health, the US Geological Survey, the US Bureau of Reclamation, the US Fish and Wildlife Service, the US Natural Resources Conservation Service, the US Army Corps of Engineers, the ND Forest Service, the ND Parks and Recreation Department, the Historical Society of ND, the ND Game and Fish Department and the ND Soil Conservation Districts..

Business and Industry: Project WET in North Dakota collaborates and networks with a wide variety of private and public business and industry in the development and implementation of the summer watershed institutes. Through contacts and tours, each summer institute expose Project WET NPS pollution/water quality goals and programs to energy, irrigation, agricultural processing and other ND industries. The Project WET director meets with the managers and public relations staff of these industries to promote water quality/NPS pollution education for teachers and students. Water quality/NPS pollution and water use in action is a very important educational component of Project WET. Each institute introduces as many as three to seven new industries/businesses to teachers attending the institute.

Environmental Education: Project WET continues to collaborate and network with the environmental education organizations in ND. One of the most important is the Coalition for Conservation and Environmental Education (C²E²). Project WET has been involved with this organization since it was initiated in 1995. All meetings have been attended and Project WET has been involved in helping complete all publications, resources and projects produced or initiated through C²E². Project WET routinely collaborates with the coordinators of Project Learning Tree (PLT), Project WILD and Project Food, Land and People (FLP) and other major natural resource/environmental education programs in ND to support the education of K-12 educators and youth. Project WET continues to collaborate and network with the Turtle Mountain Environmental Learning Center and Sully's Hill Natural Resource Program. Project WET has been involved in the non-profit organization Keep North Dakota Clean (KNDC) Project since 1998. Project WET has helped sponsor their statewide environmental youth (grades 1-8) poster contest by sponsoring grade level six which has a NPS pollution/water quality theme. Project WET has jointly coordinated water education programs with the girl and boy scout organizations in North Dakota as well as 4-H youth including youth leaders in all of these organizations. Project WET has been involved in the planning and implementation of the Red River and You watershed education program sponsored by the Red River Basin Commission from 2002-2007. Project WET has been involved with the ND Soil Conservation Districts Eco-Ed youth environmental education program since 1996 having presented the water quality/NPS pollution section at over 155 of these events. Project WET has been involved with the planning and implementation of the ND Envirothon since 1999 and serves on its logistics and steering committee and helps develop the water quality/NPS pollution (Aquatics) component of this program. Project WET has attended most of the Project WET USA national conferences since they were initiated in 1995. This involvement has provided an opportunity to network with and learn from the other state Project WET programs and how they implement water quality/NPS pollution water education in their respective states. Project WET was involved in the development of the first Earth Day celebration in Bismarck in 2008.

Project WET Advisory Committee: The Project WET Advisory Committee has an important role in ongoing monitoring and evaluation of Project WET water quality/NPS pollution education activities. The Project director networks and collaborates with this Committee on an ongoing basis. All Advisory Committee members are Project WET facilitators and are actively involved in ongoing monitoring and evaluation through personal participation in Project WET programming. Monitoring and evaluation through the Advisory Committee is completed through e-mail, mail, the telephone and regular meetings.

Project Wet water quality/NPS pollution programming described in this plan are reviewed by the Advisory Committee. The Advisory Committee can recommend changes in planned programming as a result of their review. The Project director has final overall responsibility in direction of planned programming.

The primary role of the Advisory Committee is to:

- Assist in determination of program and resource needs and the monitoring and evaluation of Project WET and its overall programs, activities and accomplishments;
- Provide consultation and technical assistance in the implementation, maintenance, direction and future of Project WET;
- Assist in coordinating and networking Project WET with the educational and water communities at all levels and with other water related and environmental education providers and programs; and
- Assist in stimulating school, teacher and youth, natural and water resource and public leader interest in Project WET.

Current Project WET Advisory Committee members are:

Angie Bartholomay
Kim Belgarde
Virginia Deitz
CaraLee Keiser
Pam Hintz
Christine Laney
Ila LaChapelle

Bottineau High School
Fargo Elementary School
Walhalla High School

Project WET is the only hands-on statewide water science and water quality/NPS pollution education program operating in North Dakota for K-12 formal/nonformal educators K-12 students and general adult population. It is the only statewide water quality/NPS pollution education program that produces and uses comprehensive water quality education programs, resources and materials in all potential settings of K-12 educators and youth. Project WET is the only statewide hands-on water quality education program in ND that directs its entire program to water education. Project WET is involved in and collaborates with all other Information/Education 319 NPS pollution funded programs in North Dakota as part of the State I/E Strategy. Project WET has a unique water quality education program and unique placement in the water quality/NPS pollution education program in North Dakota. There are no other similar 319 NPS pollution funded programs in North Dakota. Therefore, there is no duplication or replication of 319 NPS pollution funding.

5.0 EVALUATION AND MONITORING PLAN

5.1 The State Water Commission's WET Program utilizes a variety of organizations which aid in monitoring and evaluating the extent of success in meeting the goals, objectives and tasks as delineated in this plan. These include: 1) the Project WET Advisory Committee; 2) The ND Department of Health and the Non-point Source Pollution Task Force; 3) teachers and youth involved in utilizing and/or attending Project WET water quality/NPS initiatives; 4) water related agencies, organizations and/or associations directly and indirectly participating in Project WET water quality/NPS initiatives; 5) schools and higher education institutions sponsoring programs and/or credit; 6) Project WET facilitators; 7) the Project WET director through the 319 Non-point Source Pollution Project Implementation Plan; 8) the ND State Water Commission; and 9) the ND State Legislature. A description of the roles and responsibilities of these entities can be found in the Appendix As PROJECT EVALUATION AND MONITORING PLAN ROLES AND RESPONSIBILITIES. A description of the cumulative successes and accomplishments of the Project can be found in the Appendix as CUMULATIVE PROGRESS (July 1, 2007 – July 31, 2008).

The following depicts specific methods that will be used to track and measure progress and benefits to targeted groups served by the Project. Described will be specific actions/measures (what, when, where, and how) that will be used to evaluate and monitor progress toward accomplishment of task outputs and objective endpoints. The Project will use questionnaires/surveys and audience feedback to: 1) track the degree to which teachers are satisfied with training received and their planned use of Project resources, materials and training in the classroom; 2) evaluate planned changes in student and teacher understanding of learning taken; and 3) document participant numbers and satisfaction with the program.

Since the start of the Project WET NPS Pollution/Water Quality Program for Teachers and Youth in 1993, exit surveys have been provided to all educators that have completed a one, two, three and four credit graduate level workshop or institute. These surveys have provided objective information and evaluation on teacher learning obtained from all educational components instructed, the educational quality and usefulness of materials and resources provided, the quality of the instructors, the quality and usefulness of the methods and techniques of instruction, the overall value of the workshop/institute to their school curriculum standards and grade and subject levels taught and their planned use of materials in their classroom with students. These exit

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surveys will be continued and results will be incorporated into the annual report for the NPS Pollution grant.

Additionally, Project WET will begin to have all non-credit six hour program participants complete an exit survey with results also incorporated into the annual report for the NPS Pollution grant.

Some youth programs (water festivals, eco ed programs, environmental festivals, Earth Day, etc.) that the Project WET NPS pollution/water quality program is involved in, but is not the primary organizer, generally complete exit surveys of the various groups involved in the program (ie. teachers, youth, volunteers, presenters, etc.). Of course, for any Project WET NPS Pollution/water quality youth programs that are organized and completed through just Project WET, all participants will be required to complete an exit survey which assess learning and basic understanding of learned program components. These survey results will be incorporated into the annual report for the NPS Pollution grant.

A COMPILATION OF THE EXIT QUESTIONNAIRES/SURVEYS CURRENTLY USED WITH THE PROJECT APPEARS IN THE APPENDIX UNDER PROJECT EVALUATION METHODS. The following summarizes the various methods found in the above referenced Appendix.

- single credit teacher workshop exit survey and teacher activity incorporation plan/report
- multiple credit summer watershed institute exit survey
- water festival presenter evaluation (exit survey)
- water festival teacher evaluation (exit survey)
- example of a page from a student water festival evaluation/journal
- Minot State University, North Dakota State University and University of North Dakota exit survey from single and multiple teacher credit program

MONITORING AND EVALUATION TABLE FOR PROJECT WET WATER QUALITY NPS POLLUTION EDUCATION PROGRAM FOR TEACHERS AND YOUTH

July 1, 2009– June 30, 2011

| | RESPONSIBLE | ORGANIZATIONS | | | |
|---|---|-------------------------|--|--|--|
| PROJECT OJECTIVE AND TASKS | MONITORING | EVALUATION | TIME PERIOD | METHOD | |
| OBJECTIVE 1: MAINTAIN PROJECT WET MANAGEMENT AND SUPPORT SYSTEMS. Task 1: Employ a Project Director. a. Salary/Fringe b. Travel/Per Diem (includes non-state employees = facilitators) | NDSWC/Project Director | NDSWC/Project Director | Ongoing – July 1, 2009 – June 30, 2011 | Meetings; Reports | |
| Task 2: Maintain cost of support services. a. Office Equipment/Supplies b. Postage/Printing c. Miscellaneous Supplies | NDSWC/Project Director | NDSWC/ Project Director | Ongoing – July 1, 2009 – June 30, 2011 | Financial Request; Reports | |
| Task 3: Support the cost of service contracts. a. Statewide Teacher Center b. Chemistry kits/water boots | NDSWC/Project Director; Involved Contractees | NDSWC/Project Director | Ongoing – July 1, 2009 – June 30, 2011 | Financial Request; Reports | |
| OBJECTIVE 2: MAINTAIN CLASSROOM – READY TEACHING AIDS. Task 4: Maintain Six Project WET NPS pollution/ water quality trunks/exhibits (EnviroScape). | Project Director | Project Director | Ongoing – July 1, 2009 – June 30, 2011 | Periodic Visual Inspection; Financial Requests | |
| Task 5: Maintain Project WET NPS pollution/water quality curriculum/educational materials. a. National Project WET Activity Guides b. National Project WET supplemental water education materials | Project Director | Project Director | Ongoing – July 1, 2009 – June 30, 2011 | Periodic Visual Inspection; Resource/Material Research; Financial Requests | |

| | RESPONSIBLE | ORGANIZATIONS | | |
|---|--|--|---|--|
| PROJECT OJECTIVE AND TASKS | MONITORING | EVALUATION | TIME PERIOD | METHOD |
| c. Other water quality/NPS pollution education materials and curriculum | | | | |
| Task 6: Purchase new and maintain existing indoor/outdoor water quality/NPS pollution education and training resources. a. Repair and restock existing water quality test kits. b. Repair and replace hip boots/chest waders. c. Purchase other NPS Pollution/ water quality education/training resources. | Project Director; Contracted Project WET Facilitator | Project Director; Contracted Project WET Facilitator | Ongoing – July 1, 2009 – June 30, 2011 | Periodic Visual Inspections; Financial Requests; Resource/Materials Research |
| OBJECTIVE 3: COMPLETE EDUCATIONAL OPPORTUNITIES FOR 20,110 K-12 FORMAL AND NON-FORMAL EDUCATORS, YOUTH AND ADULTS. Task 7: Provide and complete varying level credit/non-credit educational programs for 550 formal and non-formal K-12 educators. a. 1 hour and variable hour inservice for 250 educators b. 6 hour non/credit preservice workshops for 75 educators c. Fifteen 15 hour credit workshops involving 225 educators | Project Director and Facilitators; Other Agencies, Organizations and Individuals | Project Director and Facilitators; Other Agencies, Organizations and Individuals | Ongoing – July 1, 2009 – June 30, 2011 (during and upon completion of a specific event) | a. Informal Verbal Feedback from Participants b. Formal Exit Surveys by Participants from University Faculty c. Formal Exit Surveys by Participants from Project WET/ Universities |

| PROJECT O JECTIVE AND TAKE | RESPONSIBLE | ORGANIZATIONS | | | |
|--|--|--|---|--|--|
| PROJECT OJECTIVE AND TASKS | MONITORING | EVALUATION | TIME PERIOD | METHOD | |
| Task 8: Provide funds to selected organizations to develop and complete ten NPS pollution and water quality festivals (Make a Splash with Project WET) involving 9,000 third, fourth and fifth graders. | Project Director and Involved Organizations | Involved Organizations | Fall – 2009-2010; Spring - 2010 - 2011 | Formal Exit Surveys from Presenters, Volunteers and Teachers; Formal Journal Feedback from Students | |
| Task 9: Provide and complete varying level NPS/pollution water quality education programs for 8,000 K-12 youth and adults at camps/school programs, other youth water education events and at public water education events. | Project Director and Facilitators; Other Involved Agencies and Organizations | Project Director; Facilitators; Other Involved Agencies and Organizations | Ongoing – July 1, 2009 – June 30, 2011 (during and upon completion of a specific event) | Informal Verbal Feedback and/or Formal Exit Surveys from Participants through other Involved Agencies and Organizations and Project WET Facilitators | |
| Task 10: Develop and implement two Discover Today's Watershed Institutes for 60 formal and non-formal K-12 educators (three or four graduate credits each). | Project Director and Facilitators | Project Director and Participants | July 2009; July 2010 | Formal Exit Surveys by Participants | |
| Task 11: Develop and implement two statewide NPS pollution/ water quality education poster contests involving 2,500 grade 6 youth with theme of "Help Prevent Runoff Pollution" | Project Director | Project Director | January – April 2010; January - April 2011 | Informal Feedback from Teachers and Students; Evaluation of Task Accomplishment | |
| OBECTIVE 4: MAINTAIN FACILITATOR NETWORK AND RECOGNITION AND INCENTIVE SUPPORT SYSTEM OF 30-35 PROJECT WET FACILITATORS. Task 12: Maintain facilitator network of 30-35educators, and facilitator recognition and incentive programs. a. Facilitator recognition and incentive programs b. Attend Project WET promotional meetings/conferences | Project Director | Project Director | Ongoing – July 1, 2009 – June 30, 2011 | Evaluation of Task Accomplishment | |

| PROJECT O JECTIVE AND TACKS | RESPONSIBLE ORGANIZATIONS | | | |
|--|---|---|--|--|
| PROJECT OJECTIVE AND TASKS | MONITORING | EVALUATION | TIME PERIOD | METHOD |
| Task 13: Complete one statewide facilitator leadership training workshop for 10 additional K-12 formal and nonformal educators. | Project Director | Project Director | February 2011 | Formal Exit Survey by Participants |
| OBJECTIVE 5: PROVIDE A METHOD FOR ONGOING MONITORING, EVALUATION, OVERSIGHT AND DIRECTION THROUGH FOUR PROJECT WET ADVISORY COMMITTEE MEETINGS AND THROUGH EVALUATION OF PROJECT ACCOMPLISHMENTS, OBJECTIVES, TASK OUTPUTS, AND BENEFITS. Task 14: Conduct four meetings of Project WET Advisory Committee (see Appendix for current Advisory Committee members). | Project Director and Advisory Committee Members | Project Director | Periodic as Needed July 1, 2009 – June 30, 2011 | Evaluation of Task Accomplishment |
| Task 15: Complete various methods to track and measure (evaluate) Project objectives, task outputs, benefits and accomplishments (see Section 5.1 for specific methods and Appendix for examples). | Project Director; Project Facilitators; Project Program Participants; and Participating Organizations; Project Advisory Committee | Project Director; Project Facilitators; Project Program Participants; and Participating Organizations: Project Advisory Committee | Periodic as Needed; Upon Completion of Program or Event July 1, 2009 – June 30, 2011 | Formal Exit Surveys; Financial Requests; Reports; Periodic Visual Inspections; Resource/Materials Research; Informal Verbal Feedback; Task Accomplishment Evaluation |

6.0 PART ONE

BUDGET TABLE FOR NORTH DAKOTA PROJECT WET WATER QUALITY/NPS POLLUTION EDUCATION PROGRAM FOR TEACHERS AND YOUTH July 1, 2009 – June 30, 2011

| PROJECT YEAR | JULY 1, 2009 – JUNE 30, | JULY 1, 2010 – JUNE 30, | July 1, 2009 – June 30, 2011 |
|---|-------------------------|-------------------------|------------------------------|
| | 2010 | 2011 | TOTAL |
| EPA SECTION 319 FY 2009 FUNDS REQUESTED | \$87,129 | \$87,129 | \$174,258 |
| EPA SECTION 319 FY 2009 MATCH FUNDS SECURED FOR FUND REQUEST a. State General Funds b. Non-Federal Funds c. Outside Project Fees TOTAL | \$39,586 | \$39,586 | \$79,172 |
| | \$10,000 | \$10,000 | \$20,000 |
| | \$8,500 | \$8,500 | \$17,000 |
| | \$58,086 | \$58086 | \$116,172 |
| TOTAL PROJECT COSTS EPA SECTION 319 FY 2009 FUNDS REQUESTED | \$145,215 | \$145,215 | \$290,430 |

6.0 PART TWO BUDGET TABLE FOR PROJECT WET WATER QUALITY/NPS POLLUTION EDUCATION PROGRAM FOR TEACHERS AND YOUTH

July 1, 2009 – June 30, 2011

| PROJECT OBJECTIVES AND TASKS | FEDERAL 3 | 19 FUNDS | MATCHING | FUNDS | TOTAL FUNDS |
|--|-----------|----------|----------|----------|-------------|
| | 09-10 | 10-11 | 09-10 | 10-11 | 09-11 |
| OBJECTIVE 1: PROJECT WET | \$54,219 | \$54,219 | \$36,146 | \$36,146 | \$180,730 |
| MANAGEMENT AND SUPPORT | | | | | |
| SYSTEMS. | | | | | |
| Task 1: Employ a Project Director | 50,397 | 50,397 | 33,598 | 33,598 | 167,990 |
| a. Salary/Fringe | 42,480 | 42,480 | 28,320 | 28,320 | 141,600 |
| b. Travel/Per Diem (including | 7,917 | 7,917 | 5,278 | 5,278 | 26,390 |
| non-state employees = | | | | | |
| facilitators) | | | | | |
| Task 2: Maintain cost of support | 1,872 | 1,872 | 1,248 | 1,248 | 6,240 |
| services. | | | | | |
| a. Office Equipment/Supplies | 360 | 360 | 240 | 240 | 1,200 |
| b. Postage/Printing | 972 | 972 | 648 | 648 | 3,240 |
| c. Miscellaneous Supplies | 540 | 540 | 360 | 360 | 1,800 |
| Task 3: Support the cost of service | 1,950 | 1,950 | 1,300 | 1,300 | 6,500 |
| contracts. | | | | | |
| a. Statewide Teacher Network | 1,350 | 1,350 | 900 | 900 | 4,500 |
| b. Chemistry kits/water boots | 600 | 600 | 400 | 400 | 2,000 |
| | | | | | |

| PROJECT OBJECTIVES AND TASKS | FEDERAL 319 FUNDS | | MATCHIN | TOTAL FUNDS | |
|---|-------------------|---------|---------|-------------|----------|
| | 09-10 10-11 | | 09-10 | 09-11 | |
| OBJECTIVE 2: MAINTAIN | \$6,750 | \$6,750 | \$4,500 | \$4,500 | \$22,500 |
| CLASSROOM – READY TEACHING | | | | | |
| AIDS | | | | | |
| Task 4: Maintain Six Project WET | 140 | 140 | 110 | 110 | 500 |
| Trunks (EnviroScape). | | | | | |
| Task 5: Maintain Project WET | 6,000 | 6,000 | 4,000 | 4,000 | 20,000 |
| curriculum/educational materials. | | | | | |
| a. National Project WET | 1,350 | 1,350 | 900 | 900 | 4,500 |
| Activity guide | | | | | |
| b. National Project WET | 4,350 | 4,350 | 2,900 | 2,900 | 14,500 |
| supplemental water | | | | | |
| education materials | | | | | |
| c. Other water quality/NPS | 300 | 300 | 200 | 200 | 1,000 |
| Pollution education materials | | | | | |
| Task 6: Purchase new and maintain | 600 | 600 | 400 | 400 | 2,000 |
| existing indoor/outdoor water quality/ | | | | | _,,,, |
| NPS Pollution education and training | | | | | |
| resources. | | | | | |
| a. Repair and restock existing | 300 | 300 | 200 | 200 | 1,000 |
| water quality test kits | | | | | · |
| b. Repair and replace hip/boot | 90 | 90 | 60 | 60 | 300 |
| chest waders | | | | | |
| c. Purchase other water | 210 | 210 | 140 | 140 | 700 |
| quality/NPS pollution | | | | | |
| education/training resources | | | | | |

| | FEDERAL 319 | | MATCHIN | TOTAL FUNDS | |
|---|-------------|----------|----------|-------------|----------|
| PROJECT OBJECTIVES AND TASKS | 09-10 | 10-11 | 09-10 | 10-11 | 09-11 |
| OBJECTIVE 3:COMPLETE EDUCATIONAL OPPORTUNITIES FOR 20,110 K-12 FORMAL AND NON- FORMAL EDUCATORS, YOUTH AND ADULTS | \$22,560 | \$22,560 | \$15,040 | \$15,040 | \$75,200 |
| Task 7: Provide and complete varying level credit/non-credit educational programs for 550 formal and nonformal educators. | 3,900 | 3,900 | 2,600 | 2,600 | 13,000 |
| a. 1 hour and variable hour inservice for 250 educators | 600 | 600 | 400 | 400 | 2,000 |
| b. 6 hour non-credit preservice workshops for 75 educators | 150 | 150 | 100 | 100 | 500 |
| c. Fifteen 15 hour credit workshops involving 225 educators | 3,150 | 3,150 | 2,100 | 2,100 | 10,500 |
| Task 8: Provide funds to selected organizations to develop and complete ten water quality and NPS Pollution festivals (Make A Splash with Project WET) involving 9,000 third, fourth and fifth graders. | 6,000 | 6,000 | 4,000 | 4,000 | 20,000 |
| Task 9: Provide and complete varying level NPS Pollution and water quality education programs for 8,000 K-12 youth and adults at camps/school programs, other youth water education events and public water education events. | 4,560 | 4,560 | 3,040 | 3,040 | 15,200 |

| PROJECT OBJECTIVES AND TASK | FEDERAL 319 FUNDS | | MATCHIN | TOTAL FUNDS | |
|---|-------------------|-------|---------|-------------|---------|
| | 09-10 | 10-11 | 09-10 | 10-11 | 09-11 |
| Task 10: Develop and implement two Discover Today's Watershed Institutes for 60 K-12 formal and nonformal educators (three or four graduate credits each). | 7,200 | 7,200 | 4,800 | 4,800 | 24,000 |
| Task 11: Develop and implement two statewide NPS Pollution/water quality education poster contests involving 2,500 grade 6 youth with theme of "Help Prevent Runoff Pollution." | \$900 | \$900 | \$600 | \$600 | \$3,000 |
| OBJECTIVE 4: MAINTAIN FACILITATOR NETWORK AND PROMOTIONAL SUPPORT SYSTEM OF 30-35 PROJECT WET FACILITATORS. | 2,550 | 2,550 | 1,700 | 1,700 | 8,500 |
| Task 12: Maintain facilitator network of 30-35 educators and facilitator recognition and incentive programs. | 1,350 | 1,350 | 900 | 900 | 4,500 |
| a. Facilitator recognition and incentive programs. | 600 | 600 | 400 | 400 | 2,000 |
| b. Attend Project WET promotional meetings/conferences. | 750 | 750 | 500 | 500 | 2,500 |
| Task 13: Complete one statewide facilitator leadership training for an additional 10 K-12 formal and nonformal educators. | 1,200 | 1,200 | 800 | 800 | 4,000 |

| PROJECT OBJECTIVES AND TASKS | FE | FEDERAL 319 FUNDS | | TCHING FUNDS | TOTAL FUNDS | |
|------------------------------|-------|-------------------|-------|--------------|-------------|--|
| | 09-10 | 10-11 | 09-10 | 10-11 | 09-11 | |

| OBJECTIVE 5: PROVIDE A METHOD FOR ONGOING MONITORING, EVALUATION, OVERSIGHT AND DIRECTION THROUGH FOUR PROJECT WET ADVISORY/ COMMITTEE MEETINGS. | \$1,050 | \$1,050 | \$700 | \$700 | \$3,500 |
|--|------------|------------|------------|------------|----------------|
| Task 14: Conduct four meetings of Project WET Advisory Committee (see Appendix for current Advisory Committee members). | 600 450 | 600 450 | 400 300 | 400 300 | 2,000 1,500 |
| Task 15: Complete various methods to track and measure (evaluate) Project objectives, task outputs, benefits and accomplishments (see Section 5.1 for specific methods and Appendix for examples). | | | | | |
| TOTAL FUNDING | \$87,129 | \$87,129 | \$58,086 | \$58,086 | \$290,430 |

APPENDIX

PROJECT DESCRIPTION COMPONENTS

Educational Resources and Materials (Overall 80% Directly related to NPS Pollution/Solutions and Water Quality Issues through Educator Curriculum and Activity Guides, KIDS Youth Activity Booklets, Educational Trunks and Water Quality Monitoring Equipment).

The centerpiece of the Project WET curriculum program is the Project WET K-12 Curriculum and Activity Guide which includes over 90 hands-on, active and innovative water and watershed activities that incorporate a variety of formats, such as large and small group learning, whole body activities, laboratory investigations, local and global topics, and involvement in community service projects. For more in-depth investigation of specific topics, North Dakota Project WET provides resource/curriculum guides that supplement the Project WET guide. Some guides include an extensive resource and reference section and all include hands-on activities. The format of the activities within each guide is modeled after the Project WET Guide. Current guides available are Discover A Watershed- Missouri River guide (thirty-six science-based, multidisciplinary, and hands-on activities including an extensive background section pertaining to the Missouri River watershed for grades 6-12); WOW! The Wonders of Wetlands guide (forty cross referenced and hands-on multi-disciplinary activities and an extensive background section pertaining to wetlands for grades K-12); the Conserve Water and Water Watchers Guides (thirtyfive hands-on, science -based and multi-disciplinary activities and ten real life case studies for grades 6-12); Healthy Water/Healthy People Water Quality Guide and Field Monitoring Manual (25 hands-on, multi-disciplinary and science-based water quality activities and eleven water quality monitoring parameters for grades 6-12); and a Watershed Managers Guide(fifteen handson science-based and multi-disciplinary activities which deliberate real world watershed management challenges for grades 6-12). Project WET also offers storybooks on the Rainstick and on Spring Water; and fun-filled Kids in Discovery (KIDS) activity booklets for youth on water conservation, water resources, stormwater, watershed protection, wetlands, water-every drop counts, oceans, big rivers, Red River of the North, groundwater and springs, Missouri River, water use, water quality, Lewis and Clark, fishing, Native waters and many others. The KIDS activity booklets are each colorful, 16 pages and include hands-on investigations, demonstrations, science experiments, science education and games and stories for grades 3-7.

In addition to the Project WET K-12 Curriculum and Activity Guide, the special topic-focused "water curriculum and activity guides" and youth activity booklets, North Dakota Project WET offers educators and youth water resource trunk programs (water pollution, water history), and water resource and reference materials. Project WET also offers supplemental water resource education posters, North Dakota water resource and specialized watershed maps, and supportive publications. Topics covered through Project WET include atmospheric, surface and groundwater, water quality and quantity, watershed and water management, and water use, protection and conservation. A supplemental North Dakota activity guide, the "K-12 Wetland Discovery Guide, "a North Dakota Water Resource and Reference Folder, a comprehensive guide on how to develop and complete a youth water festival/celebration, a Project WET Facilitator Handbook, a series of environmental education trading cards and a wide array of

observational, chemical, physical and biological water quality investigation materials are also offered through Project WET. Correlated to Objective 2, Task 5.

Education Programs for K-12 Formal and Nonformal Educators (Overall 80% Directly Related to NPS Pollution/Solutions and Water Quality Issues through Educator Training at Various Lengths and Intensity of Programming).

Project WET programs are designed to help youth learn how to think, not just what to think. Programs provide a means for teachers and youth to grasp fundamental concepts related to water resources, water quality, watersheds, NPS pollution and the environment. Through Project WET programs, teachers and youth obtain skills for acquiring knowledge, test and apply that knowledge, and evaluate the results of their actions.

Project WET programs are disseminated to K-12 formal and non-formal educators through a variety of types of educational options. These options vary from one – two hour inservice sessions to single credit workshops to five and six day three and four graduate credit intensive summer watershed institutes. The predominance of graduate credit offerings is partly a product of the history of continuing education policies by the state universities and colleges, local school boards and school administration, the State Department of Public Instruction, the Educational Standards and Practices Board and the needs of educators.

The major Project WET educational program options for K-12 formal and nonformal educators are:

Inservice: (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): One – two hour inservices are preferred although special three-four hour topic or thematic workshops or programs can be completed. No university credit is available. Depending upon school CEU's (Continuing Education Unit) inservice credit may be available. Intended to introduce practicing educators to the Project WET curriculum/activity guides, KIDs water quality/NPS pollution activity booklets and water quality testing materials. Correlated to Objective 3 Task 7

University Preservice (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Length and program variable and usually negotiated with university or college. Should be six hours in length to provide Project WET K-12 Curriculum Guide, KIDS (Kids in Discovery Series booklets) and North Dakota Activity Guides (water resource posters, brochures, flyers can be made available). Credit is inherent through university or college as a required or extra program option for preservice teachers. Intended to provide preservice educators with a basic understanding of Project WET curriculum/activity guides, KIDS water quality/NPS pollution activity booklets and water quality testing materials. Correlated to Objective 3, Task 7.

Six Hour Noncredit Workshop (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Generally the minimum length workshop for participants to receive national Project WET and North Dakota curriculum and activity guides, posters and other water quality/NPS education materials. No university credit is available. Depending upon school administration, recertification inservice credit may be available to formal educators. Intended to

provide practicing educators with basic understanding of Project WET curriculum/activity guides, KIDS water quality/NPS pollution activity booklets and water quality testing materials. Correlated to Objective 3, Task 7.

Fifteen-Hour Credit Workshop (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): One semester graduate credit available through Minot State University, UND or NDSU. Participants receive appropriate national Project WET and North Dakota curriculum and activity guides, reference and resource materials, posters, water resource maps and other education materials. Nine different credit workshop options are available: Project WET/Watershed Management; Project WET/Missouri River; Project WET/Water Celebration; Project WET/Water Quality (Healthy Water, Healthy People); Project WET/Wetlands; Project WET; Project WET/Service Learning; Project WET/Conserve Water Workshop; and Project WET/Red River Workshop. Many variations of the above options are also available based upon request of educators. Intended to provide practicing educators with a more in-depth understanding of North Dakota water quality/NPS pollution issues and solutions through Project WET curriculum/activity guides, KIDs youth activity booklets and water quality testing materials. Correlated to Objective 3, Task 7.

Summer Watershed Institutes (45 or 60 Hour Three or Four Credit Institute) (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Project WET offers five-day intensive summer institutes for educators and youth leaders (July of each summer). These programs each (Discover Today's Devils Lake, Northwestern ND Missouri River, James and Sheyenne Rivers and Mouse River, Institution) offer three graduate credits while the Discover Today's Missouri River, Southwestern ND Missouri River Watershed and the Red River Watershed Institutes offer four graduates credits all through Minot State University, UND and NDSU. Educators and youth leaders receive appropriate national Project WET and North Dakota curriculum and activity guides, reference and resource materials, posters and other educational materials as indicated on Project WET annual credit options flyer. Intensive water quality/NPS pollution/solutions presentations, tours investigations, hands-on activities and model demonstrations are included these institutes.

Intended to provide a basic but in-depth understanding and knowledge of watershed dynamics and management in relationship to water quality and NPS pollution/solutions and how water is used and treated in a watershed. Correlated to Objective 3, Task 10.

Educational Programs for K-12 Youth and Adults (Overall 80% Directly Related to NPS Pollution/Solutions and Water Quality Issues):

Project WET NPS pollution/water quality programs are disseminated directly to K-12 youth thorough a variety of types of educational options. The four primary types of options are: water festivals/celebrations; youth camps/events; youth service or action projects; and the youth technology and career exploration program. Project WET sponsorship or facilitation of K-12 youth NPS Pollution/Solutions and Water Quality Issues in the past eleven years has seen a very high growth. Thousands of youth every year hear the water quality/NPS pollution education message through these programs.

Water Festivals/Celebrations (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Water festivals/celebrations can be part day to four-day events to educate youth (could include adults in the form of a Family Exploration Night) about the importance of keeping our water clean, protecting our water against NPS pollution and other water quality issues and problems in their lives. The particular length, type of program and grade levels of youth targeted to attend is tailored to meet the needs of the local sponsoring schools and organizations (usually fourth or fifth grade youth, but can be any combination of grade school youth). Water festivals/celebrations can be held indoors and/or outdoors depending upon the timing and setting of the planned event. They can involve less than one hundred to nearly two thousand youth. Most events include hands-on Project WET and other classroom ready NPS pollution and other water-related activities, demonstrations and exhibits. Large events can also include contests, games, a teacher resource area and NPS pollution related entertainment. Large or small, the purpose of a water festival or celebration is to expose youth to a wide variety of NPS pollution and water quality and watershed pollution issues. Generally targeted to elementary school youth, these NPS/pollution water quality education events can involve a single school, community-wide schools and/or area wide or regional schools. The amount of planning and organizational time as well as financial commitment needed to complete a water festival or celebration depends upon the goals of the sponsoring school(s) or organizations(s) and can vary from low to high cost. Project WET is collaborating with an increasing number of potential sponsors to complete this type of NPS pollution water education program. North Dakota Project WET has produced "Make a Splash with Your Own Water Festival" water festival guide for any school or organization that would like to develop and complete a NPS pollution water quality festival.

ND Project WET contracts with local sponsoring organizations to provide some of the funding to offset costs associated with contacting school administrators and educators within school systems, recruiting presenters, volunteers and exhibitors, developing schedules and appropriate NPS pollution/water quality hands-on activities and in promoting the water festival. The Make a Splash with Project WET and other non-funded water festivals is a critical component of the Project WET NPS Pollution grant. As such, Project WET is interested in working with a local sponsoring organization to expand this program to Minot. The intent of the festivals is to educate North Dakota youth on NPS pollution/solutions, watershed and other water quality issues. Correlated to Objective 3, Task 8.

Youth Camps/Youth Events (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Project WET participates in youth camps and youth events that promote their education in NPS pollution/solutions and water quality issues. Project WET involvement can be indoor/outdoor part-day to multi-day programs to inform and educate youth about the importance of water quality. Programs are generally tailored to meet the needs of the sponsoring youth organization in terms of length, intensity and diversity of topics covered. These organizations can include boy and girl scouts, church sponsored youth programs, 4-H youth programs, science centers, museums, environmental learning centers, zoos, soil conservation district Eco-Ed programs, state park youth programs, community public sponsored youth programs and any type of youth gathering or function. As with water festivals/celebrations, youth camp or youth event programs include Project WET and other hands-on classroom ready activities, exhibit areas demonstrations, contests and games focused on NPS pollution/solutions and water quality issues.

Youth are exposed to selected activities that best meet the needs of the age group and organization.

Youth programs are generally attended by specific targeted youth through sponsoring organization enrollment and/or invitation. Youth camp/event NPS pollution/solutions and water quality issues education programs vary in length of time and content depending upon sponsoring organization goals and participating presenters. Correlated to Objective 3, Task 9.

Family Community Centered Programs (80% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Project WET participants in family and community centered events. These events can be sponsored by governmental agencies, environmental organizations, science centers, zoos, schools and school PTO's, community public organizations, state parks, natural resource organizations, water resource management/delivery agencies and organizations, youth organizations, community clubs, university college events, and any other group interested in promoting NPS pollution/solutions and water quality issues education. Often family and community programs are developed with youth water festivals, community art/craft shows, youth and community exhibitions, community recognition events, local historical events, youth camps, local, county and/or state fairs and many other events. Or they can be developed as a stand alone program to educate the general public about NPS pollution/solutions and water quality issues. Correlated to Objective 3, Task 9.

Water Actions – Community Service Learning Projects (90% Directly Related to NPS Pollution/Solutions and Water Quality Issues): Project WET works with K-12 educators and youth to develop and complete NPS pollution/solutions and water quality related community action/service learning projects. A Project WET Service Learning credit workshop is available for K-12 educators. These projects get teachers/youth involved in tackling problems or issues, or that aim at improving an environmental setting. They are often most successful when they are focused on the local community. An action project can be simple or complex and can fit into variety of educational settings. Many educators find that action education blends well with their regular teaching duties, while other educators choose to make it the basis for after-school sessions.

Action learning is also effective in nonformal settings. Nature centers, community water-related infrastructure and industry, zoos, scouting and 4-H programs, bible camps, community parks, public schools and science centers all have strong potential for action projects. Community action and service learning projects related to water can include water quality issues education, best management practices education, water festivals, family/community centered education programs, community group presentations, trail work, litter patrols, developing a school environmental club, designating and protecting environmentally sensitive areas, implementing water conservation practices, riparian restoration projects, cleaning up a river, storm drain stenciling projects, fund-raising for cleaning up a water resource, influencing laws and regulations that affect NPS pollution and water quality issues, monitoring lakes, rivers, streams and watersheds, replanting vegetation along waterways, cultural/historical designation of waterways, designing and developing a school nature site, assessing the total health of a watershed and its waterways and many others. Projects can take place at home, in school, in the community, on the farm or anywhere in a local watershed. Correlated to Objective 3, Task 9

PROJECT EVALUATION AND MONITORING PLAN ROLES AND RESPONSIBILITIES

1) Project WET Advisory Committee: The Project WET Advisory Committee has an important role in ongoing monitoring and evaluation of Project WET water quality/NPS pollution education activities. The project director networks and collaborates with this Committee on an ongoing basis. All Advisory Committee members are Project WET facilitators and are actively involved in ongoing monitoring and evaluation through personal participation in Project WET programming. Monitoring and evaluation through the Advisory Committee is completed through e-mail, mail, the telephone and the annual meeting.

Project WET water quality/NPS pollution programming described in this plan are reviewed by the Advisory Committee. The Advisory Committee can recommend changes in planned programming as a result of their review. The Project director has final overall responsibility in direction of planned programming.

The primary objectives of the Advisory Committee are to:

- Assist in determination of program and resource needs and the monitoring and evaluation of Project WET and its overall programs, activities and accomplishments;
- Provide consultation and technical assistance in the implementation, maintenance, direction and future of Project WET;
- Assist in coordinating and networking Project WET with the educational and water communities at all levels and with other water related and environmental education providers and programs; and
- Assist in stimulating school, teacher and youth, natural and water resource and public leader interest in Project WET.

Current Project WT Advisory Committee members are:

Angie Bartholomay
Kim Belgarde
Virginia Deitz
Fargo Elementary School
CaraLee Heiser
Dickinson Middle School
Pam Hintz
Elgin Public School
Christine Laney
Private Non-profit, Fargo
Walhalla High School

2) ND Department of Health (NDDH)/Non-Point Source Task Force (NPSTF): The NDDH has a mandated role in the monitoring and evaluation of all Project WET water quality/NPS pollution goals, objectives and tasks. As the lead agency responsible for the pass through of funds from the EPA to the NDSWC, the NDDH is responsible to assure that all EPA requirements are met by the NDSWC as a recipient of Section 319 NPS pollution funds. Some of these requirements include: 1)

daily/monthly tracking of time and work duties allocated to the project; 2) completion and submittal of all annual and final project progress reports; 3) completion and submittal of quarterly Requests for Reimbursement for Section 319 federal funds; 4) signatory to and approval of biennial contract for project between the NDDH and the NDSWC; and 5) completion and submittal of any changes in project objectives and tasks along with monitoring overall project accomplishment. The NDDH must also provide EPA with reports on the progress of Project WET in meeting its stated project goals, objectives and tasks.

- 3) Teachers and Youth: All Project WET graduate credit educational offerings provide teachers an opportunity to evaluate (on-site) educational offerings in which they participate in. A formal evaluation questionnaire is provided to each participant that includes an evaluation of the reasons for attending, the most effective course components, an evaluation of the instructor(s)/facilitator(s), suggestions for improvements and course relevance to local and statewide educational standards. Separate evaluations are developed for the Project WET summer watershed institutes. Teachers also evaluate their satisfaction with Make A Splash water festivals and their effectiveness in increasing youth learning on water quality/NPS pollution water issues provided through the festivals. Youth participating in these festivals and other jointly sponsored educational offerings are also given an opportunity to evaluate their own learning attained and the program itself. All water festival evaluations completed by teachers, presenters/volunteers, and students are developed by the sponsoring organizations.
- 4) Water Related Agencies, Organizations and Associations: Project WET provides an annual listing of its educational offerings and collaborative meetings to all water resource districts with an invitation to provide comments on this listing. All water resource districts and soil conservation districts also receive brochures and flyers on the Project WET program and credit educational offerings. Opportunity is provided for these organizations to make comments on the direction and effectiveness of Project WET.
- 5) Schools and Institutions: School districts that sponsor/host a Project WET educator credit or youth program are given an opportunity to informally evaluate/comment on the program and its effectiveness/contribution to teacher/student learning.
 - Minot State University, UND and NDSU all have developed their own evaluation forms to provide their respective institutions with a formal method to look at all Project WET educator credit offerings and their effectiveness in meeting educator learning standards. These and other institutions have invited Project WET to be a part of their preservice educational methods classes. This gives their students an opportunity to evaluate student learning and the effectiveness of the Project WET program taken.
- 6) **Project WET Facilitators:** All Project WET facilitators are involved in ongoing monitoring and evaluation as part of their participation in and utilization of Project

WET educational offerings and materials. There are ongoing discussions through email, mail and telephone correspondence regarding the progress of Project WET in meeting the objectives and tasks described in the PIP. All members of the Project WET Advisory are also Project WET Facilitators. This provides an opportunity for these facilitators to have a major impact on overall Project WET effectiveness. Several facilitators participate in the facilitator leadership training workshop.

- 7) **Project WET Director:** The Project WET director is responsible for ongoing monitoring of the Project Implementation Plan (PIP) and for directing the overall monitoring and evaluation components described above. The director also completes an annual and final progress report as a requirement for the EPA. The Project WET director monitors the 319 NPS pollution grant monthly and quarterly expenditures. The Project WET director also submits an annual progress report to Project WET USA as its contribution for an overall national Project WET USA progress report.
- 8) ND State Water Commission: Ongoing meetings are held between the NDSWC Planning and Education Division director and the Project WET director regarding the current status of Project WET, the NPS pollution grant and what program changes, deletions and/or additions should or could take place. The Project WET director completes a report each month to the Planning and Education Division director on accomplishments of Project WET toward meeting the 319 NPS pollution grant objectives, tasks and projects that will be accomplished in the following month. The Project WET director completes a brief annual report to the NDSWC on Project WET program accomplishments and overall numbers of educators, youth and adults who receive its services. The Planning and Education Division director meets weekly with the State Engineer and other NDSWC department heads to discuss division (including Project WET) status and accomplishments. The State Engineer, as chief administrator for the NDSWC, signs all contracts between the NDSWC (Project WET) and the NDDH regarding the 319 NPS pollution grant as well as quarterly Requests for Reimbursement. The State Engineer also determines the general fund match to the 319 NPS pollution grant.
- 9) State Legislature: Project WET uses a general fund allocation, determined on a biennial basis, as part of the matching funds to the 319 NPS grant. Every biennium, the NDSWC prepares a budget request to the Governor's Office and to the ND State Legislature. The Project WET general fund is a part of this request. The state legislature process includes a review of the Project WET general fund request and the effectiveness of its programs.

HISTORY OF NORTH DAKOTA PROJECT WET

The following briefly outlines the development of Project WET in North Dakota. Only the first event of a particular program is stated. Most programs, thereinafter, have been incorporated as ongoing events unless otherwise stated as a last event.

- Developed in 1984 by the ND State Water Commission as a result of 1983 state water planning process.
- Initial programs provided through Project WET workshops at 4-H camp near Washburn and several local/state offerings (1984 1985).
- Initial ND educational curriculum development (1986 1987).
- \bullet Project WET credit workshops expand using ND curriculum materials and water resource information (1986 1987).
- Major expansion of Project WET workshops, usually taken for university graduate credit (1987).
- Development of supplemental educational material (groundwater flow model, liquid treasure trunk (1987 1989).
- Project WET credit workshops continue to mature and expand. ND curriculum materials continue to expand (1989 1992).
- North Dakota Project WET collaborates in development of Project WET USA (1992).
- North Dakota Project WET receives funding through Section 319 EPA non-point source pollution grant for development and implementation of comprehensive NPS pollution and water quality education program; credit workshops continue (1993).
- Project WET finalizes major traveling trunk program in groundwater; develops additional ND curriculum materials; expands efforts to coordinate with other water/natural resource agencies; develops Project WET facilitator network; continued credit workshops and summer institutes (1993 1994).
- Initial and expanding coordination with ND Water Education Foundation; first Summer Water Quality Institute for Teachers; Project WET Advisory Committee is established; first Project WET facilitator leadership training workshop; first watershed water pollution trunk programs (1994).
- Expansion of relationship with Project WET USA including using new supplemental products and materials; Project WET USA K-12 Curriculum and Activity Guide produced; WOW: Wonders of Wetlands Educator's Guide produced; continued credit workshops; first Summer Water Quality Program for Students; expansion of traveling trunk educational materials; expanded facilitator leadership training workshop; expansion of EPA Section 319 nonpoint source pollution grant; ND Wetlands K-12 Discovery Guide produced; first Project WET USA Coordinator's Conference (1995).
- First and last credit Summer Water Quality Program for Students; first water festival in Grand Forks; first regular credit and non credit workshops with the new Project WET K-12 Curriculum and Activity guide; expansion of Project WET promotional items; first Project WET involvement in Coalition for Conservation and Environmental Education; second major EPA Section 319 non-point source pollution grant; major name change for Project WET to include Explore Your Watershed; first Project WET Facilitator of the

Year awards; first EETAP grant funds; first Project WET USA KIDS (Kids in Discovery Series – Water Story) (1996).

- Continued expansion of Project WET USA supplemental water education materials; first Project WET water festivals/celebrations across state; first community involvement Project WET programs; first Project WET involvement in Eco-Ed and other youth camps and youth learning situations (scouts, 4-H, bible); first Project WET/WOW! Wonders of Wetlands graduate credit workshop and non-credit youth programs; first Explore Your Watershed promotional materials and program delivery; first use of ND water resource map; third major EPA Section 319 non-point source pollution grant (1997).
- Continued expansion of Project WET USA supplemental water education materials; first water celebration graduate credit workshops; continued expansion of direct services to youth water education programs; first implementation of Project WET facilitator system of awards and benefits program; fourth major EPA Section 319 non-point source pollution grant (1998).
- Continued expansion of Project WET USA supplemental water education materials; first Lewis and Clark Big Muddy Missouri River Cultural History Institute; first major water festival in Fargo-Moorhead area; first Project WET involvement in ND Envirothon; first Project WET involvement in Keep North Dakota Clean poster contest (water theme) (1999).
- Continued expansion of Project WET USA educational materials and resources; WOW! Wonders of Wetlands, Conserve Water and Lewis and Clark one credit workshop format developed; Project WET Guide Correlation Document to ND Content Standards developed and published; first ND Envirothon completed; first Make a Splash with Project WET water festival held in Dickinson; Project WET USA Conserve Water Guide produced; fifth major EPA Section 319 non-point source pollution grant (2000).
- Continued expansion of Project WET USA KIDS (Kids in Discovery Series nine total); first Lewis and Clark one credit workshop; first Lewis and Clark festival; first Make a Splash with Project WET multiple water festivals in Dickinson, Fargo and Grand Forks, first four credit Lewis and Clark Institute (2001).
- •First three completed Make A Splash with Project WET water festivals; last Summer Water Quality Institute; Project WET USA Healthy Water, Healthy People Guide and Field Monitoring Guide manual produced; development of Discover the Missouri River Watershed Institute, last Lewis and Clark Institute; continued expansion of Project WET USA KIDS (11 total); continued expansion of variety of credit one topic workshops to include Healthy Water, Healthy People and Red River; Project WET USA Watershed Manager Guide produced; sixth major EPA Section 319 non-point source pollution grant (2002).
- First four credit Discover Today's Missouri River Watershed Institute; continued expansion of KIDS activity booklets (13 total); major expansion in community Project WET programs (2003).
- Project WET USA Missouri River Watershed Guide produced; seventh major EPA Section 319 non-point source pollution grant; first Discover Today's Devils Lake Institute; first Bismarck Make A Splash water festival (2004).
- First Northwestern Missouri River Watershed Institute; continued expansion of Project WET one credit workshops to include Watershed Manager and Missouri River; continued expansion of KIDS activity booklets (15 total) (2005).

- First James and Sheyenne Rivers Watershed Institute; eighth major EPA Section 319 non-point source pollution grant; North Dakota Project WET publication on water festivals (2006).
- First Mouse River Watershed Institute (2007).
- First Southwestern ND Missouri River Watershed Institute; seventh Project WET Facilitator Leadership Training Workshop; publication of Project WET Facilitator Handbook; first Mandan Make A Splash water festival; ninth major EPA Section 319 non-point source pollution grant; first Project WET/Service Learning credit Workshop; second Project WET Guide Correlation Document produced (2008).

PROJECT WET CUMULATIVE SUCCESSESS - SEPTEMBER 1, 2006 – October 31, 2008

Project WET was involved in the following meetings, educational events, conferences workshops and institutes to help promote, advertise and disseminate information on its programs, actually deliver its educational materials to teachers and students, to develop major new educational curriculum or to enhance teacher use of existing curriculum. This includes set-up, helping set-up and/or attending curriculum development or enhancement projects, information and education or promotional meetings and conferences during this time period.

| September 14, 2006 | Grant County Eco-Ed, Heart Butte Dam, 72 grade six youth |
|-----------------------|--|
| September 21-22, 2006 | Dickinson Area Make A Splash Water Festival, Dickinson, 491 grade five youth |
| September 21, 2006 | Dickinson Make A Splash Water Family Night, 622 Adults and Youth |
| September 28-29, 2006 | Grand Forks Area Make A Splash Water Festival, Grand Forks, 645 grade four youth |
| October 18-19, 2006 | NDEA Conference, Grand Forks (booth and four sessions), 46 K-12 Educators |
| November 8, 2006 | KNDC Board Meeting, Bismarck |
| November 21, 2006 | C ² E ² Meeting, Bismarck |
| December 6-7, 2006 | Annual Joint ND Water Resource Conference, Bismarck |
| January 15, 2007 | Project WET Teacher Inservice, Minot, 28 K-12 Teachers |
| January 22-24, 2007 | Project WET Watershed Manager/Missouri River Credit |
| , | Workshop, Fargo, 12 K-12 Teachers |
| February 20-27, 2007 | Agri-International, Bismarck, 1,965 Grade 4 youth |
| March 12-13, 2007 | International Water Conference, Grand Forks |
| March 14, 2007 | Gateway to Science Environmental Festival, Bismarck, |
| , | 1,067 grade five youth |
| March 20, 2007 | ND Envirothon Meeting, Crystal Springs Bible Camp |
| March 22, 2007 | KNDC Poster Contest Meeting, Bismarck |
| March 23-24, 2007 | ND Science Teachers Convention, Bismarck (booth and 4 |
| , | sessions), 56 K-12 Teachers |
| March 29-30, 2007 | ND State Science Fair, Fargo, Project WET Awards |
| | Program |
| April 4, 2007 | C^2E^2 Meeting, Bismarck |
| April 10-13, 2007 | Red River Make A Splash Water Festival, Fargo, 1,573 |
| • | grades 3 and 4 youth |
| April 18, 2007 | ND Envirothon Meeting, Crystal Springs Bible Camp |
| April 20, 2007 | KNDC Poster Awards Meeting, Washburn, 68 grades 1-8 |
| 1 | youth |
| May 8, 2007 | Conservation Day at Dakota Zoo, Bismarck, 565 grade |
| • | five youth |
| May 9-12, 2007 | ND Envirothon State Competition, Crystal Springs Bible Camp, 102 grades 9-12 youth |
| | Camp, 102 grades 7-12 youth |

| May 17-18, 2007 | Bismarck Make A Splash Water Festival, Bismarck, 746 |
|---------------------------------------|---|
| June 4-8, 2007 | grade three youth Fargo Public Library Water Education Program, 516 |
| June 7-10, 2007 | grades 2-6 youth Project WET USA National Conference, Tuscon, Arizona |
| June 13-14, 2007 | Yunker Farm Water Education Program, Fargo, 236 |
| June 13 14, 2007 | grades 1-4 youth |
| June 15, 2007 | Midwest Kidfest, Fargo, 175 K-6 youth |
| June 25-26, 2007 | Ten Years After the Flood, Red River Credit Workshop, |
| 20, 2001 | Fargo, 11 K-12 teachers |
| July 8-13, 2007 | Mouse River Institute, Minot, 23 K-12 Teachers |
| July 15-19, 2007 | Red River and You Institute, Fargo, 21 K-12 Teachers |
| July 17-19, 2007 | Minot State University Preservice, Minot, 17 preservice |
| • | teachers |
| July 27-28, 2008 | Yunker Farm Water Education Day, Fargo, 128 grades 3- |
| • | 6 youth |
| August 7, 2007 | Triangle Y Wildlife Federation Camp, Lake Sakakawea, |
| | 42 grades 6-8 youth |
| August 13-17, 2007 | Yunker Farm Water Festival, 325 grades K-6 youth |
| September 4 and 6, 2007 | Barnes County Eco-Ed, Westley Acres 142 grade six |
| | youth |
| September 20-21, 2007 | Dickinson area Make A Splash Water Festival, |
| | Dickinson, 485 grade five youth |
| September 20, 2007 | Dickinson Make A Splash Water Family Night, 762 |
| ~ | adults and youth |
| September 25-28, 2007 | Red River Make A Splash Water Festival, Fargo, 1,562 |
| 0 1 10 2007 | grades 3-4 youth |
| October 10, 2007 | McLean County Eco-Ed, Ft. Stevenson State Park, 57 |
| October 11, 2007 | grades 7 youth |
| October 11, 2007 | Bismarck – Mandan 2008 Earth Day Planning Committee |
| October 17-19, 2007 | Meeting, Bismarck NDEA Teachers Conference, Minot (booth, four |
| October 17-19, 2007 | sessions) 57 K-12 teachers |
| October 24, 2007 | ND Water Education Foundation Meeting, Bismarck |
| November 13 and 14, 2007 | UND Preservice, Grand Forks, 22 Preservice Educators |
| November 27, 2007 | C^2E^2 Meeting, Bismarck |
| November 28, 2007 | Keep North Dakota Clean Meeting, Bismarck |
| December 5-6, 2007 | ND Water Convention, Bismarck |
| January 3, 10 and 17, 2008 | Project WET/Lewis and Clark Credit Workshop, Fargo, |
| , , , , , , , , , , , , , , , , , , , | 10 K-12 Educators |
| January 10, 2008 | Earth Day Meeting, Bismarck |
| January 21, 2008 | Towner, ND Teacher In-service, Towner, 39 K-12 |
| - | Educators |
| January 24, 31 and February 5, 2008 | Watershed/Missouri River Credit Workshop, Fargo, 9 K- |
| | 12 Educators |
| February 6, 2008 | Earth Day Meeting, Bismarck |
| | |

| February 2008 | Publication of Project WET Facilitator Handbook (112 pages) |
|---------------------------|---|
| February 8, 2008 | Project WET Advisory Committee Meeting, Bismarck |
| February 9-10, 2008 | Project WET Facilitator Leadership Training Credit |
| Teoruary 9-10, 2008 | |
| M 1 5 2000 | Workshop, 12 K-12 Educators |
| March 5, 2008 | Environmental Festival, Bismarck, 1,018 Fifth Grade |
| | Students |
| March 7, 2008 | Aquatics Committee Meeting (ND Envirothon), |
| | Jamestown |
| March 10, 2008 | 4-H Leader Program, 8 4-H Leaders |
| March 11, 2008 | Earth Day Meeting, Bismarck |
| March 12, 2008 | ND Envirothon Meeting, Crystal Springs |
| March 13, 20 and 27, 2008 | Project WET/Watershed Manager Credit Workshop, |
| | Fargo, 13 K-12 Educators |
| March 15, 2008 | Concordia College Pow-Wow (booth and activities), |
| Waren 13, 2000 | Moorhead, Minnesota |
| March 17, 2008 | 4-H Youth Program, Fargo, 20 Grade 1-6 students |
| March 24, 2008 | KNDC Board Meeting, Bismarck |
| | <u> </u> |
| March 27-29, 2008 | ND Science Teachers Convention, Minot (booth, four |
| | presentations), 44 K-12 Educators |
| April 1, 2008 | C ² E ² Meeting, Bismarck |
| April 3, 2008 | Earth Day Meeting, Bismarck |
| April 4, 2008 | ND Science and Engineering Fair, Fargo |
| April 5, 2008 | Native American Water Festival, Fargo, 75 K-8 Students |
| April 11, 2008 | ND Reading Association, Jamestown, three sessions, 88 |
| _ | K-12 Educators |
| April 12, 2008 | Youth Activity Day, Bismarck, 28 K-6 Students |
| April 22, 2008 | Earth Day Festival, Bismarck, 860 Adults and Youth |
| April 25, 2008 | Keep ND Clean Awards Program, Washburn, 38 Grade |
| 11p111 =0, =000 | One-Eight Youth, 95 Adults |
| May 2008 | Project WET Curriculum and Activity Guide Correlation |
| Way 2000 | to ND Content Standards Published |
| May 5 6 2009 | |
| May 5-6, 2008 | Children's Water Festival, Grand Forks, 747 Grade Four |
| M 0 10 2000 | Students |
| May 8-10 2008 | ND State Envirothon, Crystal Springs, 105 Grade 9-12 |
| | Students, 75 Adults |
| May 10, 2008 | Fargo United Way Forum, Fargo (booth and activities) |
| May 13-14, 2008 | Bismarck Water Festival, Bismarck, 752 Grade Three |
| | Students |
| May 16-17, 2008 | Project WET/Missouri River Credit Workshop, Buffalo, |
| | SD, 11 K-12 Educators |
| May 8, 15 and 22, 2008 | Watersheds/Missouri River Credit Workshop, Fargo, 18 |
| • / | K-12 Educators |
| June 4, 2008 | ND State Enirothon Meeting, Jamestown |
| June 9-11, 2008 | Project WET Summer Day Camp, Walhalla, 30 Grade 3- |
| Valie / 11, 2000 | 5 Students |

| June 9-10, 2008 | Project WET/Missouri River Credit Workshop, Watford City, 8 K-12 Educators |
|-------------------------|--|
| June 18-20, 2008 | Project WET Summer Day Camp, Harwood, 25 Grade 3-5 Students |
| June 23-25, 2008 | Project WET Summer Day Camp, Fargo, 27 Grade 3-5 Students |
| June 26-30, 2008 | Project WET Summer Day Camp, Horace, 26 Grade 3-5 Students |
| July 13-18, 2008 | Southwestern ND Missouri River Watershed Institute, Dickinson, 25 K-12 Educators |
| August 4, 2008 | Nonpoint Source Pollution Program, ND Wildlife Federation Camp, Triangle Y Camp, 78 Grades 6-9 Youth |
| August 11-15, 2008 | Water Quality Festival, Yunker Farm, Fargo, 335 K-6 Youth |
| August 14, 2008 | Morton County Soil Conservation District Meeting, Mandan (water festival) |
| August 21-22, 2008 | Red River Watershed Institute Field Scoping Days |
| September 10, 2008 | Nonpoint Source Pollution Task Force Meeting, Bismarck |
| September 11, 2008 | Grant County Eco-Ed Program, near Elgin, 75 Grade 6 Youth |
| September 18-19, 2008 | Dickinson Make A Splash Water Festival, 510 Grade 5 Youth |
| September 18, 2008 | Dickinson Make A Splash Family Program, 650 Adults and Youth |
| September 23 – 26, 2008 | Red River Make A Splash Water Festival, Fargo 1,572 Grades 4 and 5 Youth |
| September 22 and 29 | Project WET/Service Learning Credit Workshop, Fargo, |
| October 6, 2008 | 11 K-12 Educators |
| October 15, 2008 | Section 319 EPA Nonpoint Source Pollution Annual Report Submitted |
| October 22-23, 2008 | ND Education Association Conference, Fargo (booth and two sessions), 15 K-12 Educators |
| October 31, 2008 | Section 319 EPA Nonpoint Source Pollution FY 2009 Grant Completed |

Number of Youth Served <u>16,208</u> Number of Teacher Served <u>596</u> Number of Adults/Youth Served <u>3,207</u>

PROJECT WET EVALUATION/EXIT SURVEYS

The following summarizes the various formal methods Project WET currently uses when evaluating the effectiveness of its various programs and events.

- 1. Single credit teacher workshop exit survey and teacher activity incorporation/plan report.
- 2. Multiple credit summer watershed institute exit survey.
- 3. Water festival presenter evaluation (exit survey)
- 4. Water festival teacher evaluation (exit survey)
- 5. Example of a page from a student water festival evaluation/journal
- 6. Minot State University, North Dakota State University and University of North Dakota single and multiple teacher credit program evaluation (exit survey)

ONE PROJECT WET EVALUATION/EXIT SURVEYS



ND Project WET: Water Education For Teachers

WORKSHOP EVALUATION

| Name: | Home Address: |
|------------------|--|
| Subject | Number (home): Phone Number (school):s) or Topics Taught: |
| School School | evel(s) Taught: |
| 1. | Date(s) and location of workshop attended: |
| 2. | Was the training provided in this workshop appropriate for your own professional development plan, content areas, subject(s) and/or grade level(s) you teach? If NO, what suggestions do you have to make it more appropriate. |
| 3. | Were the objectives of the workshop clearly stated [] YES []NO []SOMEWHAT and accomplished? |
| 4. | Did the workshop meet your expectations? [] YES [] NO [] SOMEWHAT |

If you answered NO or SOMEWHAT to questions 3 and/or 4, please provide suggestions as to how

the workshop could have achieved better results.

| 5. | Did this workshop provide you with an understanding of the Project WET educational materials and resources? [] YES [] NO [] SOMEWHAT |
|-----|--|
| 6. | Do you have a good understanding of how to use and incorporate the Project WET guide into your classroom teaching situations? |
| | [] YES [] NO [] SOMEWHAT |
| 7. | Did this workshop give you insight into the importance of teaching K-12 students about ND's water resources, water quality/NPS pollution and solutions to those impacts in your classroom? |
| | [] YES [] NO [] SOMEWHAT |
| | answered NO OR SOMEWHAT to questions 5,6 and/or 7 please provide suggestions as to he workshop could have been more successful. |
| | |
| | |
| | |
| 8. | This workshop was: [] Excellent [] Very Good [] Good [] Fair |
| 9. | Your workshop facilitator(s) were: [] Excellent [] Very Good [] Good [] Fair |
| 10. | The workshop structure, location and methods of teaching were: [] Excellent [] Very Good [] Good [] Fair |
| | Please explain your responses to questions 8, 9 and 10. |
| | |
| | |
| | |
| 11. | Will you incorporate Project WET resources, materials and teaching ideas from this workshop into your classroom teaching situations? [] YES [] NO. Please explain your response. |

| 12. | Did this workshop help meet your school/district/state educational priorities, standards and assessments for the subject(s) and grade(s) you teach? [] YES [] NO [] SOMEWHAT |
|-----|---|
| 13. | Please provide your overall comments about this workshop (strengths, limitations, areas needing improvement, comments about specific components, topics/areas most useful to you). |
| 14. | I would like to assist the Project WET Program in the following manner [X]. |
| | [] Attending another type of Project WET educational program. Please specify what type of program (x) |
| | Discover Today's Devils Lake Institute |
| | Discover Today's Missouri River Institute |
| | Discover Today's James and Sheyenne Rivers Watershed Institute |
| | Discover Today's Mouse River Watershed Institute |
| | Discover Today's Northwestern Missouri River Institute |
| | Discover Today's Southwestern ND Missouri River Watershed Institute |
| | Discover Today's Red River Watershed Institute |
| | Another type of single credit workshop (specify) |
| | [] Organizing a local water community service learning project with some assistance. |
| | [] Helping organize a local workshop or educational program that would address other items of interest concerning water resources for educators and/or students. |
| | [] Serving as a point of contact for distributing notices of educational offerings (e.g. workshops, education programs, materials, etc.) in my and other neighboring school districts. |
| | [] Becoming a facilitator and promoting and conducting Project WET programs in my local area for educators and/or students. |
| | [] Not interested at this time. |
| | |

Thank you for taking the time to respond!!!



ND Project WET: Water Education For Teachers

Activity Lesson Plan

| Your Name: |
|---------------------------|
| Curriculum Guide: |
| Activity Title: |
| Page Number: |
| Materials Needed: |
| |
| |
| |
| Objectives: |
| |
| |
| |
| Standards Addressed: |
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| Time Requirement: |
| |
| Lesson Procedure/Outline: |

| Supplemental Resource N | Materials Planned: (eg., resource people, facilities, books, etc.): |
|-------------------------|---|
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| | ns/Extensions: |
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| Where Will You Incorpo | rate Activity? |
| | |
| Grade(s): | Subject(s) |
| Other Information: | |
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| What Are Your Planned | Assessments? |
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ND Project WET: Water Education for Teachers

Activity Lesson Report

| Your Name: |
|--|
| Curriculum Guide: |
| Activity Title: |
| Page Number: |
| Where I Incorporated the Activity: Grade(s): Subject(s): |
| Other Information: |
| |
| |
| What Local School and/or State Standards were addressed: |
| |
| |
| How did the students respond to the activity: |
| |
| |
| |
| What did you and your students learn as a result of completing the activity: |

| Were you able to meet all of the objectives listed for the activity? If no, why not?: |
|---|
| |
| |
| What modifications/adaptations/extensions did you make or use in completing the activity in your classroom (eg. Student skills, materials, procedure, supplemental resource, etc.)?: |
| |
| |
| How Did you Assess Student Learning? |
| |
| What ideas do you have for follow-up activities and/or extensions to activity completed in the classroom? |
| On a separate sheet, list any additional resources and/or learning materials, agencies, organizations, individuals or group that you used in completing the activity or that you feel could enhance students learning on a sheet of paper. Please bring additional resources/materials to the workshop. Attach separate sheet to these sheets. Please make a copy of these response sheets for your own future reference. |

TWO



ND Project WET (Water Education for Teachers)

Discover Today's Southwestern ND Missouri River Watershed Institute Evaluation

| Please provide us with the following information: | | | |
|---|--|--|--|
| Name: | | | |
| | Address and telephone # (where you prefer mail): | | |
| E-Mail address: | | | |
| Grade level(s) tau | ght: | | |
| Subject(s) taught: | | | |
| program in the pas □Yes □ No | volved in a Project WET water education workshop, institute or otherst? when were you involved and what type of program were you involved | | |
| _ | what extent did the Discover Today's Southwestern ND Missouri atershed Institute build upon your previous water education nce(s)? | | |

SUNDAY EVALUATION

Please answer the following questions by circling the appropriate response. In the space provided please include your ideas and suggestions for improvement or why you felt the experience was worthwhile.

Note: E = Excellent, VG = Very Good, G = Good, F = Fair

| | The Discover Today's Southwestern ND Missouri River Watershed Institu | te Introductory |
|-----|---|----------------------|
| | Areas were: | |
| | a. What is a Watershed?b. Southwestern ND Missouri River Watershed Discoveries | E VG G F E VG G F |
| | c. Overview of Institute | E VG G F |
| , | c. Overview of institute | L VO O I |
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| | The Discover Today's Southwestern ND Missouri River Watershed Institu Areas were: | · |
| | a. Explanation of Institute Objectives | E VG G F |
| | b. Explanation of Institute Materials and Project WET | E VG G F |
| Con | mments: | |
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| 3. The Project WET Watershed Managers Guide Activities were: a. Navigation of Watershed Managers Guide b. "Seeing the Southwestern ND Missouri River Watershed" (Watershed Manager Guide, pages 4-8) | E VG G F E VG G F |
|--|----------------------|
| c. "Blue Beads of the Southwestern ND Missouri River Watershed" (Watershed Manager Guide, pages 45-51) | E VG G F |
| Comments: | |
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| 4. The Water Quality Homemade "Make and Takes" were: (Dip Net, Turbidity Tube, Multi-plate Sampler) | E VG G F |
| Comments: | |
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| 5. The Southwestern ND Missouri River Watershed Log and Journaling was: E VG G F |
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| Comments: |
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MONDAY EVALUATION

Note: E = Excellent, VG = Very Good, G = Good, F = Fair

| 1. Navigating the Project WET Guide and the Project WET Activity was: |
|---|
| a. Navigating the Project WET guide E VG G F b. "Sum of the Parts" (Project WET Guide, pages 267-270) E VG G F |
| Comments: |
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| The Presentation on Southwestern ND Missouri River Watershed issues was: E VG G F |
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| 3. Navigating the Missouri River Watershed Guide was: E VG G F |
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| 4. | |
| | a. Southwest Water Authority/Pipeline (power-point) E VG G F |
| | b. Tour of SWWA Operations/Maintenance Center E VG G F |
| | |
| | c. Tour of SWWA Water Treatment Plant/Pump Station E VG G F |
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| 5. The l | Presentation on the Deep Creek Watershed Project was: E VG G F |
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| Comme | ents: |
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TUESDAY EVALUATION

Note: E = Excellent, VG = Very Good, G = Good, F = Fair

| 1. The Stream Field Investigation Sessions were: |
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| a. "Conducting a Watershed Survey and Visual Habitat Assessment" was: |
| E VG G F |
| |
| b. "Conducting a Bioassessment Survey and Macroinvertebrates" was: E VG G F |
| c. "Conducting a Chemistry Assessment" was E VG G F |
| |
| d. "Conducting a Stream Reach Survey and Stream Flow and Velocity Measurement" |
| were: E VG G F |
| e. The Summarization of Field Investigations was: E VG G F |
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| Comments: |
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| 2. Navigating the Healthy Water, Healthy People Guide and Test Kit Manual and the Guide | |
|---|--|
| | |
| Activity was: | |
| a. Navigating the HWHP Guide and Test Kit Manual E VG G F | |
| | |
| b. "Benthic Bugs and Bioassessment" (HWHP Guide, pages 154-163) E VG G F | |
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WEDNESDAY EVALUATION

(Note: E = Excellent, VG = Very Good, F = Fair)

| 1. The HWHP Guide Activity (pages 61-69) "A Snapshot in Time" was: E VG G F |
|---|
| Comments: |
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| 2. The Presentation on the Bully Pulpit Golf Course was: E VG G F |
| Comments: |
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| 3. The Little Missouri River Field Investigations were: E VG G F |
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| Comments: |
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| 4. The Theodore Roosevelt NP Presentations/Tour were: | |
|---|----------|
| | |
| a. TRNP Visitor Center Tour | E VG G F |
| b. Little Missouri River Issues (power point) | E VG G F |
| c. Interpretive Tour of TRNP Land and Water Issues | |
| c. Interpretive roul of TRIVE Land and water issues | E VO O F |
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| Comments: | |
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THURSDAY EVALUATION

(Note: E = Excellent, VG = Very Good, G = Good, F = Fair)

| 1. | The Institute Tours/Presentations Today were: | |
|------|---|--|
| | a. Red Trail Energy Ethanol Plant b. Dakota Gasification Plant c. Antelope Valley Power Plant d. Coteau Mine e. Heart Butte Dam f. Upper Cannonball Manure Management Site | E VG G F |
| Comm | ents: | |
| a. | | |
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FRIDAY EVALUATION

Note: E = Excellent, VG = Very Good, G = Good, F = Fair

| 1. The "String of Southwestern ND Missouri River Pearls" (Missouri River Guide, pages 130 – 141) Make and Take was: E VG G F |
|--|
| Comments: |
| |
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| |
| 2. Discovering Project WET and Water Education through Compass, Distance and GPS Direction (orienteering) was: E VG G F |
| Comments: |
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| 3. The Hail Suppression, Rain Enhancement Presentation was: E VG G F |
| Comments: |
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| 4. The Daily Evaluations and Idea Pools and their review was: E VG G F |
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| Comments: |
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| |

OVERALL INSTITUTE EVALUATION

Note: SA = Strongly Agree, A == Agree, U = Undecided, D = Disagree, SD = Strongly Disagree

| 1. The experiences that I received through the Discover Today's Southwestern ND Missouri River Watershed Institute met or exceeded my expectations: SA A U D SD |
|---|
| Comments: |
| |
| |
| |
| 2. I now have a greater understanding and appreciation of the Southwestern ND Missouri River Watershed issues and concerns and this watersheds importance: |
| SA A U D SD |
| Comments: |
| |
| |
| 3. I will use, incorporate and teach about North Dakota watersheds and water resource issues in my own local watershed and classroom situation: SA A U D SD |
| Comments: |
| |
| |
| |

Note: E = Excellent, VG = Very Good, G = Good, F = Fair

| 4. The Discover Today's Southwestern ND Missouri River Watershed Institute Facilitators and Instructors were: E VG G F |
|---|
| Comments: |
| |
| |
| 5. Overall the Discover Today's Southwestern ND Missouri River Watershed Institute was: E VG G F |
| Comments: |
| |
| |
| |
| 6. This Institute helped meet your school/district/state educational priorities and/or standards for the subject(s) and grade(s) you teach? |
| [] YES [] NO [] SOMEWHAT |
| Comments: |
| |
| |
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| |

| manner [X] |
|--|
| [] Attend another type of Project WET Explore Your Watershed educational program. |
| Please specify what type of program (x) |
| ——— Discover Today's Devils Lake Institute |
| ——— Discover Today's Missouri River Institute |
| Discover Today's Northwestern ND Missouri River Institute |
| — Discover Today's James and Sheyenne Rivers Institute |
| Discover Today's Mouse River Institute |
| —— Discover Today's Southwestern ND Missouri River Watershed Institute |
| —— Another type of single credit workshop or multi-credit institute |
| (specify) |
| [] Organize a local water festival or other student water education event with some assistance. |
| [] Help organize a local Project WET Explore Your Watershed program that would address |
| local water resource issues. |
| [] Serve as a point contact for distributing notices of educational offerings (e.g. workshops, |
| materials, etc.) in my school district or local area. |
| [] Become a facilitator in promoting and conducting Project WET Explore Your |
| Watershed programs in my local area for educators and/or students. |
| [] Not interested at this time. |

I would like to assist the Project WET Explore Your Watershed Program in the following

THANK YOU FOR TAKING THE TIME TO RESPOND!!

THREE

WATER FESTIVAL PRESENTER EVALUATION

| Name (| optional):Organization (optional) |
|--------|---|
| | ** Please return evaluation to the check-in table before leaving.** |
| | or send, fax or email to: |
| | River Keepers |
| | 325 7 th Street S |
| | Fargo, ND 58103-1846 |
| | Fax: 701-235-7394 |
| | |
| | Christine@riverkeepers.org |
| | •••••• |
| 1. | What did you like best about the water festival? |
| | |
| | |
| 2. | How could the water festival be improved? |
| | |
| | |
| 2 | |
| 3. | What did you think about the length of the presentations? |
| | |
| | |
| 4. | Do you think journaling was a good exercise for the students? |
| | |
| | |
| 5. | What did you think of the venue? |
| | |
| | |
| 6. | How can we better serve you as a presenter? |
| | |
| | |
| 7. | Would you be interested in participating in the water festival again next year? |
| | |
| | |
| 8. | What general comments about the water festival did you hear from teachers and students? |
| | |
| Λ | Do you have any additional comments on suggestions? |
| 9. | Do you have any additional comments or suggestions? |
| | |
| | |

Thank you for your feedback! We will use it to help make next years Red River Water Festival even better!

FOUR

WATER FESTIVAL PRESENTER EVALUATION

| Name (o | optional):Organization (optional) |
|---------|---|
| | ** Please return evaluation to the check-in table before leaving.** |
| | or send, fax or email to: |
| | River Keepers |
| | 325 7 th Street S |
| | Fargo, ND 58103-1846 |
| | Fax: 701-235-7394 |
| | Christine@riverkeepers.org |
| | |
| 1. | Did the activity description and schedule sent out ahead of time assist you in preparing your class for the water festival? |
| 2. | What did you enjoy the most about the water festival? |
| 3. | How could the water festival be improved? |
| 4. | Is journaling useful for your students? |
| 5. | What other topics/presentations would be useful for your curriculum? |
| 6. | What did you think of the location? |
| 7. | Was the Teacher Resource area useful to you? |
| 8. | If you participated in the optional $\frac{1}{2}$ day outside, what did you think of that venue? Logistics? Activities? |
| 9. | Do you have any additional comments or suggestions? |
| | ••••• |
| 1. | What were your favorite activities at the water festival? Why? |
| 2. | What were your least favorite activities at the water festival? Why? |
| | |

Thank you for your feedback!!

FIVE

MAKE A SPLASH WATER FESTIVAL STUDENT JOURNAL/EVALUATION

| Station Name |
|---|
| What did you do at this station? |
| List two new things that you learned: |
| What new words did you learn? |
| What would you like to know more about? |
| This station was (circle): excellent; very good; good; fair |

SIX

NDSU

<u>MiSU</u>

<u>UND</u>

5

Distance & Continuing Education

Center for Extended Learning

Continuing Education

FEEDBACK AND EVALUATION FORM

| Course Prefix & # | | | or Name | Location | Date(s) | |
|--------------------------------|---|---------------|---------|----------------|-------------|-----------------------|
| | | | | | | |
| Respond to the using the scale | e following statements at the right: (strongly | 1 y disagr | ee) | 3 (mixed op | 4 inion) | 5 (strongly agree) |
| 1. The course | was well organized. | 1 | 2 | 3 | 4 | 5 |
| | tor had reasonable is for this course. | 1 | 2 | 3 | 4 | 5 |
| | tor motivated me to ourse material. | 1 | 2 | 3 | 4 | 5 |
| 4. Exams/assigned me to think | gnments challenged & apply what I learned. | 1 | 2 | 3 | 4 | 5 |
| 5. My expecta | tions for learning were met. | 1 | 2 | 3 | 4 | 5 |
| 6. Text/mater | ials/resources were useful. | 1 | 2 | 3 | 4 | 5 |
| 7. The evaluat | tion of my work was fair. | 1 | 2 | 3 | 4 | 5 |
| 8. Overall, ins | tructor was effective. | 1 | 2 | 3 | 4 | 5 |
| 9. Overall, thi | s was a valuable course. | 1 | 2 | 3 | 4 | 5 |

What was most valuable about the course?

10. The facility met our needs well.

What was <u>least</u> valuable?

Suggested topics for future courses? Locations? Time frame?

How did you find out about this course?

Any other comments? (Use the back if necessary)

Thank You!