

Kristine Knutson, Environmental Scientist
U.S. Environmental Protection Agency
Region VIII, Montana Office
10 W. 15th Street, Suite 3200
Helena, MT 59626

RE: Wetlands Protection Grant CD998117-09

Dear Kris,

Enclosed is the Final Project Report for EPA Wetlands Protection Grant CD998117-09. The Montana Department of Environmental Quality received a 104(b)3 Wetland Protection Development Grant from EPA for \$381,926 as stated in the Wetland Protection Assistance Agreement awarded June 25, 2001. This grant provided funding for seven Montana wetland program development activities. All projects were completed by the Grant end date of September 30, 2004. MDEQ will be submitting a final Financial Status Report (FSR) to the EPA Montana Office.

Thank you for providing Montana with Wetland Protection Development funds. I am pleased with the wetland program development that Montana has been able to accomplish with the assistance of this funding. Please contact me at (406) 444-6652 or lsaul@mt.gov if you have any questions about the project activities associated with this grant.

Sincerely,

Lynda A. Saul
Wetland Program Manager

MDEQ Final Grant Project Report
EPA Wetland Protection Grant CD 998117-09
Federal Fiscal Year 2001 (7/01/01 - 9/30/04)
Report Date March 11, 2005

1) Title: **Coordinate and Expand Wetland Conservation in Montana.**
Agency: Montana Dept. of Environmental Quality
1520 East Sixth Avenue; P.O. Box 200901; Helena, Montana 59620-0901
Contact: Lynda Saul, Wetland Coordinator
406-444-6652; FAX 406-444-6836; e-mail: lsaul@state.mt.us
Funding: Total Project \$ 75,534
EPA Funds \$ 56,650
State Match \$ 18,884
Time line: July 1, 2001 - June 30, 2002.

Project Narrative

This project provides resources to MDEQ to: 1) Coordinate, oversee, and administer the EPA Wetland Protection Grants Program in Montana (55%); 2) Lead and direct the Montana Wetlands Council by planning, organizing and facilitating Council meetings (20%); 3) Work with the Montana Wetlands Legacy to promote on-the-ground wetland conservation (15%); 4) Provide outreach and expertise to local governments to promote, encourage and support local government wetland conservation programs (10%);

Project Report

All four components of this project were successfully completed, highlights include:

1. Worked with 3 local governments, 2 non-profits and 5 state agencies to develop and submit wetland proposals to EPA Region VIII Consolidated Funding Process. Six proposals were submitted to EPA. DEQ Wetland Coordinator recommended funding for five proposals and all five received funding from EPA Region VIII. Two projects will be refined for next year's submittal. Negotiated with contractors to refine work plans and approved performance based contracts. Led the collaborative process to develop a wetland monitoring and assessment program for the state of Montana involving 3 contractors and MDEQ. Led the development of the QAPP to provide sampling and analytical guidance on this complex program. MDEQ Wetland Coordinator continues to meet and help direct the collaborative wetland monitoring and assessment working group. All projects were completed for two wetland grants, 1996 and 1997, and final financial status reports were submitted to EPA. Provided direction and administrative responsibilities for all on-going wetland contracts.

2. Held informative and well-attended Montana Wetland Council meetings on September 26, 2001 and February 6, 2002. The September meeting focused on inventory, monitoring and protection of Montana's amphibians and aquatic reptiles. Experts from across the state presented and engaged the audience in a question and answer session about how wetland protection can mutually support herptile conservation. The February meeting, which was attended by more than 45 individuals, focused on

wetland regulatory issues. Considerable concern was raised over the lack of further direction and need for clarification resulting from the SWANCC decision. Attendees requested updates at the next Council meeting from DEQ legal division for Montana authority on wetlands and an update on what is happening with EPA and COE on SWANCC. Meeting summaries were prepared and distributed to 400+ individuals.

3. MDEQ Wetland Coordinator played an active role on the hiring team for the new Montana Wetlands Legacy program. The Legacy's goal is to protect 250,000 acres of wetland, riparian and associated upland habitat in Montana by 2005. An expertly qualified candidate with over 25 years of wetland experience across Montana was hired to lead the Legacy. Worked with the Legacy Coordinator and NRIS/MNHP to develop a database to track wetland protection statewide. Participated in developing the agendas and discussions at all Legacy meetings.

4. Organized and participated in a 90-minute panel on "Wetlands and Local Government Planning" for the Association of Montana Planners at their annual convention held October 11, 2001 in Billings. Participated in an hour-long live public television show titled "Planning and the Natural Environment". The discussion and call-in show was broadcast statewide at 7:00 pm on October 24, 2001. Finalized the revisions for the updated edition of the "Landowners Guide to Montana's Wetlands". Authorized printing and distributed copies of the Guide. Worked on new Planning Guide for Montana's Wetlands. Met with and assisted Jefferson County planning board and Billings Heights wetland sub-committee about local wetland issues. Met and worked with the Flathead Lakers to submit a wetland proposal for the EPA Consolidated Funding Process.

2) Title: **Developing and Implementing the Montana Wetlands Legacy Program.**
MDEQ Contract Number: 202012-1
Agency: Montana Department of Fish, Wildlife, & Parks (MDFWP)
P.O. Box 200701; Helena, Montana 59620-0701
Contact: Tom Hinz, Migratory Bird and Wetland Coordinator
406-994-7889; e-mail: thinz@montana.edu
Funding: Total Project \$226,000
EPA Funds \$ 72,000
Match \$154,000
Time line: July 1, 2001 - June 30, 2004.

Project Narrative

This project will support development of a Montana Wetlands Legacy Program by funding a program coordinator at MDFWP to work with partners around Montana to promote on the ground wetlands restoration and protection through voluntary, incentive based efforts. The goal of the Wetlands Legacy program is to create a single network based in the MDFWP to promote and coordinate wetland conservation activities. The coordinator will network and facilitate connections with partners, seek funding and target funds to protect and restore wetlands in Montana focusing on a goal of protecting an additional 100,000 acres of ecologically important wetlands, riparian areas and associated

uplands by the year 2005. The intent is to make the Legacy program self-sufficient after two to three years.

Project Report

The Developing and Implementing the Montana Wetlands Legacy Program was without doubt the most successful wetland development grant project funded by EPA in Montana. The three-year project horizon provided time and seed funds necessary to hire a well qualified full-time Legacy Coordinator, create the program and fully establish the Montana Wetlands Legacy as vital component of Montana's Wetland Protection program. I have highlighted some of the many successes from this grant below and have the Final Project Report from Tom Hinz, Legacy Coordinator, in my office. We should all be very proud to be a part of this project. It will leave a lasting Legacy of wetland and riparian protection for the State of Montana.

Development of the Legacy Program had four goals, the first being development of a statewide on-the-ground voluntary and incentive-based wetland protection program. The Legacy Coordinator completed all five tasks associated with this goal. Tangible outcomes include in March 2004, the Directors of the MDFWP, MDEQ and COE signed an agreement that established a new Montana Wetlands Legacy Trust Fund that will be available to do wetland, stream and other aquatic restoration and enhancement projects statewide. A Legacy partner goal was established to protect 250,000 acres of wetlands, riparian areas and associated uplands. At present time the Montana Wetlands Legacy database shows 170 projects that have effective over 100,000 acres of conservation. However the database is not up to date and will be updated before the close of the 5-year planning horizon of May 1, 2005.

The second goal and its five tasks address securing new funds and targeting existing funding sources for wetland protection projects. All five tasks have been accomplished. Legacy partners have written grants for and secured about \$5 million in NAWCA funds since May 2000. The Legacy has initiated a new In Lieu Fee Aquatic Resource mitigation fund program and is the administrator of this program. Another task surveyed Montanans regarding their interest in protecting wetlands. This survey showed that 84 percent of the respondents agreed or strongly agreed with the statement: "Wetlands and riparian areas are important resources in Montana."

The third goal, facilitating connections between wetland protection partners, has three tasks involving networking, developing contacts, and holding coordination meetings. The Legacy Coordinator has accomplished these tasks such as creating a web site, an email distribution list, Legacy brochures and attending and presenting Legacy information at dozens of meeting. The Legacy Coordinator is continuing these activities on an ongoing basis.

The final goal was to establish program self-sufficiency. The two associated tasks have been accomplished. The Legacy Coordinator has secured adequate funding to maintain the coordinator position in an office with support staff/computer network located in Montana Fish, Wildlife and Parks in Bozeman for at least two additional years. Due to the success of this project and the demand by project partners, it is expected that funding for coordination and administration could be secured indefinitely. Additional Wetland Development grant funds may be requested in the future to develop additional aspects of the Montana Wetlands Legacy program.

3) Title: **Inventory and Prioritization of Ecologically Significant and Highly Restorable Wetlands and Riparian Areas in the Missouri River Headwaters.**
MDEQ Contract Number: 202013-1
Agency: Montana Natural Heritage Program (MNHP)
Montana State Library; 1515 East Sixth Avenue; Helena, Montana 59620
Contact: Marc Jones, Wetland Ecologist
406-444-3488; FAX 406-444-0581; e-mail: marcj@state.mt.us
Funding: Total Project \$ 114,373
EPA Funds \$ 79,780
Match \$ 34,593
Time line: July 1, 2001 – June 30, 2004.

Project Narrative

This project will build upon earlier MNHP work in Montana to evaluate high quality wetlands and riparian areas in the Jefferson, lower Madison, lower Gallatin, and Centennial Valley portion of the upper Red Rock River watersheds. The project will consist of five components: 1) identifying and selecting sites with either high quality wetlands or high restoration potential; 2) inventorying those sites; 3) evaluating ecological significance and prioritizing sites for protection or restoration; 4) disseminating project results to partners, government agencies, and conservation organizations; and 5) tracking wetland protection under the Wetlands Legacy initiative.

Project Report

The primary goal of this project was met: MNHP surveyed high quality wetlands within the Missouri Headwaters documented in the report “Ecologically Significant Wetland in the Missouri Headwaters: Jefferson, Lower Madison, Lower Gallatin, and Upper Red Rock River Watersheds” (June 2004). MNHP identified, described and evaluated 21 ecologically significant wetlands in the study area, seven of which occurred on private lands. Copies of the report were distributed to interested parties.

Over the course of the contract modifications were made to support work with DEQ and other partners to develop a statewide comprehensive wetland assessment and monitoring program. These modifications were invaluable to aid MNHP to assist with DEQ efforts. First, MNHP sampled additional reference wetlands in the Middle Milk sub-basin and adjacent watersheds and conducted additional analysis of the resulting data. This was critical to the successful identification of vegetation metrics for ephemeral and intermittent prairie streams. Based on this, MNHP documented the findings in the report titled “Using Vegetation to Assess Wetland Condition: a multimetric approach for temporarily and seasonally flooded depressional wetlands and herbaceous-dominated intermittent and ephemeral riverine wetlands in the northwestern glaciatic plains ecoregion, Montana” (February 2004). MNHP was also able to develop better sampling methods and identify sample sites in southwestern Montana. Both these steps will be useful to improve the ability to develop vegetation metrics for riverine wetlands in this part of the State. Finally, MNHP provided DEQ with a rapid assessment protocol in time for its application and field test for the 2004 field season.

4) Title: **Wetland Resource Assessment of the Gallatin Valley and Bozeman Creek Watershed, Gallatin County, Montana.**
MDEQ Contract Number: 202014-1

Agency: Gallatin Local Water Quality District
311 West Main Street, Room 104
Bozeman, Montana 59715

Contact: Alan English; Program Manager
406-582-3148

Funding: Total Project \$ 78,910
EPA Funds \$ 53,989
Match \$ 24,921

Time line: July 1, 2001 – March 31, 2004.

Project Narrative

This project involves; 1) establishment of a county wide GIS data base with historical and current wetlands data for use by government agencies, local developers and land owners, and the public; 2) identification and assessment of wetlands in the Gallatin Valley and Bozeman Creek watershed for prioritization for protection and/or restoration; and 3) efforts to increase public awareness of the importance of wetlands and the current status of wetlands in the Gallatin Valley and Bozeman Creek watershed.

Project Report

This was an excellent locally led local government project to inventory wetlands and riparian areas in the Greater Gallatin Valley at three time intervals; pre-settlement historic wetland extent, mid-1980's National Wetland Inventory, and conduct a new 2001 color infrared flight along with ground truthing and wetland classification. The Gallatin Local Water Quality District (GLWQD) submitted a final project report titled "Wetland and Riparian Resource Assessment of the Gallatin Valley and Bozeman Creek Watershed, Gallatin County, Montana (June 2004) which included maps of the 520 square mile project area. This information has also been published on their website http://gallatincomt.virtualltownhall.net/Public_Documents/GallatinCoMT_WQDProjects/S004D6FA6-004D6FD1 and integrated with local government planning and GIS programs.

Seventeen specific tasks were associated with the original project goals and objectives. They can be grouped into three main categories.

One, GLWQD established a GIS database, containing historical and current spatial data on wetland to aid in management and interpretation of wetland data and provide wetland data to all interested government agencies, local developer, local landowner and the public. This included status of current wetlands based on 2001 aerial photography, incorporate historic wetlands spatial data and incorporate the National Wetland Inventory mapping data into the County GIS system.

Two, identify and prioritize wetlands areas within the Gallatin Valley and Bozeman Creek watershed that are threatened and/or in need of restoration. This was successfully complete in a regional perspective, with over 900 sites identified with a 520 square mile area, detailed analysis and prioritization was not practical within the scope and funding of this project. The extent of wetland losses were documented using the GIS database and reasons were document to the extent possible and included as attributes in the GIS database.

Three, education and outreach aimed at local government agencies including Planning Departments, local developers, landowners, and elected officials. The goal was to increase the awareness and importance of wetlands, the current status of wetland in the Gallatin Valley and Bozeman Creek watershed, and the impacts development has had on wetlands. Public access of study results and maps was completed successfully and is considered ongoing. The final report is on the Internet as a PDF format, the CIR imagery has been provided to many interested parties, is available on the USGS National Map site and was provided to NRIS. The GIS database was provided to NRIS for placement on the NRIS Wetland Clearing house website. Many education and outreach activities based on the results of this study were presented to Federal, State and local agencies involving land use planning and resource management. Other outreach was aimed at local developers, realtors, landowners, trade organizations and civic groups. All education and outreach activities are considered ongoing and are long-term activities for GLWQD.

5) Title: **Missoula Valley Wetland Stewardship and Restoration Program.**
MDEQ Contract Number: 202015-2
Montana Natural History Center (MNHC)
Missoula, Montana 59803
Contact: Anita Maxwell, Program Director
406-327-0405
Funding: Total Project \$ 83,902
EPA Funds \$ 59,437
Match \$ 24,465
Time line: July 1, 2001 –September 30, 2003.

Project Narrative

This project involves a partnership effort of the MNHC and the Clark Fork Watershed Education Network (CFWEN) and Save Open Space (SOS) to; 1) expand public outreach and education with community wetland walks and interpretive signs, and wetland media campaign and wetland video; 2) expand school programs with teacher workshops, curriculum packets and expanded field trips, and a pilot wetlands educational trunk; and 3) coordinate stewardship activities and develop a pilot monitoring program and vegetative restoration for two local urban wetlands.

Project Report

The Montana Natural History Center, the Watershed Education Network and Save Open Space accomplished this contract through the individual action of 47 separate education, outreach and stewardship activities. They successfully carried out and coordinated a partnership effort to bring high quality wetlands education to a large audience. A summary of activities completed include the following: 1) Two-years of citizen wetland walks. 2) A local wetland and riparian media campaign including PSA's, radio spots, newsletter articles and newspaper articles. 3) Researched, created, and aired a Wetland Habitat Video for public television and submitted several copies to DEQ. 4) Designed and installed interpretative signs for Cattail Corner and along the trail of the Children's Fish Pond. These are two urban wetlands in Missoula. 5) Designed and

conducted wetland and riparian teach workshops with classroom and field components. Challenged by low participant recruitment, providing administrative support and substitute teach stipends may result in higher participation in the future. 6) Designed and constructed wetland teacher trunks and teacher workshops to present the trunks. Piloted the trunks in classrooms and made revisions. Reproduction and distribution of the trunks should be statewide. 7) Created and offered wetland field trips in conjunction with the MNHC "Visiting Naturalist in the Schools" program. Wetland field trips were so popular that MNHC created a sequence of wetland field station so that classes could have return visits. 8) Created a planting scheme, conducted planning training, held planting events and developed a planting monitoring schedule at the Cattail Corner urban wetlands site. In addition inventory other wetland sites and assessed future urban wetland restoration priorities in the urban Missoula area.

6) Title: **Creating a Citizen Based Program for the Inventory of Bitterroot Valley Wetlands and Riparian Corridors.**
MDEQ Contract Number: 202016

Agency: Bitter Root Water Forum through the Bitterroot Resource Conservation & Development Program, Inc., (RC&D)
1709 North First Street; Hamilton, Montana 59840

Contact: Roxa French, Watershed Coordinator, 406-375-2272

Funding: Total Project \$26,333
EPA Funds \$17,093
Match \$ 5,740
Other Fed. Funds \$ 3,500

Time line: July 1, 2001 - June 30, 2003.

Project Narrative

This project will initiate citizen based wetlands inventory in the Bitterroot Valley under the tutelage of trained wetlands specialists. The project will enhance awareness about the importance of wetlands; promote wetlands conservation, restoration, and protection; encourage collaboration between the public and local, state and federal agencies; provide natural resources information for the Ravalli County Land Services Department for land use planning; establish a network for ground truthing the National Wetlands Inventory maps; laying the ground work for long-term wetlands monitoring.

Project Report

Existing Bitterroot Valley wetlands data was integrated into an ArcView GIS basemap project file and provided to the Ravalli County Planning Department and the Bitter Root Water Forum water resources office. This file consists primarily of National Wetlands Inventory (NWI) data, streams, rivers, irrigation ditches and canals, and floodplains. A GIS study project file was developed through the work of an interdisciplinary local citizen Wetlands Working Group. The study file contains additional information such as wells, 404 permit sites, soils, irrigated lands, parcel data, conservation easements, agricultural land uses, wildlife habitat, etc. to use for identifying areas in the county where wetland assessments and/or wetlands protection programs are

needed. These projects are being shared with local government and civic groups throughout the county.

A pilot citizen wetland assessment team was established in the Threemile/ Ambrose Creek drainage. They are ground truthing NWI maps and collecting information that: reveals trends in wetland health, correlates wetland conditions with land-use practices, and characterizes particular wetland features that are important to the community. Wetland assessment training was held to teach citizens techniques derived from *Classification and Management of Montana's Riparian and Wetland Sites* (1995), by Paul L. Hansen et al. This is a user-friendly, rapid assessment protocol upon which we will layer additional Montana state developed techniques as they become available.

7) Title: **Outreach Education for Wetlands Protection in Montana.**
 MDEQ Contract Number: 202017-3
Agency: Montana Watercourse
 201 Culbertson Hall; P.O. Box 170575; Bozeman, Montana 59717-0575
Contact: Karen Filipovich , Director, Montana Watercourse; 406-994-1910
Funding: Total Project \$ 62,977
 EPA Funds \$ 42,977
 Match \$ 20,000
Time line: July 1, 2001 – June 30, 2004.

Project Narrative

The project involves; 1) planning, conducting and evaluating 12 WET/WOW workshops for K-12 teachers in communities that have not received WET/WOW workshops and pre-service teaching students at State colleges (e.g., Eastern, Northern, Western Montana, and Carroll Colleges); 2) planning, conducting and evaluating two Wetland Stewardship workshops. Priority for WET/WOW and Stewardship workshops will be in the Missouri River Basin of Montana; 3) planning, conducting and evaluating two Wetland Planning workshops for local governments incorporating the new Planning Guide to Montana's Wetlands.

Project Report

Montana Watercourse hired a new Executive Director during the early stages of this project requiring a time extension. After hiring the new Executive Director and new Community Outreach Coordinator, Montana Watercourse accomplished all three major project goals involving the following accomplishments.

Twelve WET/WOW workshops for teachers and pre-service teachers were held reaching a total of 183 educators. Workshops were held in Bozeman, Choteau, Missoula, Lame Deer and Billings reaching educators from those communities as well as Dupuyer, Havre, Saint Xavier, St. Ignatius, Dillon and Colstrip. These workshops received very good to excellent participant evaluations.

Landowner workshops were held in Billings and in the Madison Valley in 2003. A total of 48 community members attended and 15 speakers gave presentations. The Billings workshop revolved around the potential restoration of an urban wetland. It also

addressed neighbor concerns about groundwater levels flooding basements due to the urban wetland restoration. The Madison Valley workshop was organized with the Madison Valley Ranchlands Group and included field tours with local knowledgeable experts. Field components of workshops continue to be important for participant understanding.

Land Use and Wetland Planning workshops were held in Flathead County and Lake County. Regulations were the major concern expressed during both workshops. Thirty individuals attended along with 6 speakers. Participant and speaker comments again were very positive, most expressing desire for more of these types of workshops and wishing for a larger audience.

With a non-regulatory approach to wetland protection, education and outreach are a critical component of Montana's wetland program. Montana Watercourse workshops have proven to be a valuable tool to provide this needed education and outreach.