SUMMARY MONTANA WETLAND COUNCIL MEETING
Wednesday September 26, 2001
10:00 am – 4:30 pm
Metcalf Building Directors Conference Room, Helena MT

Note: The next Montana Wetland Council Meeting is scheduled for **February 6, 2002** in Helena.

Council meeting summaries, Council agendas and other wetland announcements are also distributed electronically. If you would prefer to receive this information via e-mail or wish to be removed from the mailing list, please contact Lynda Saul at 444-6652 or lsaul@state.mt.us.

Welcome and Introductions.
Department of Environmental Quality (DEQ) Wetland Coordinator, Lynda Saul welcomed attendees to the Montana Wetland Council meeting and asked all in attendance to introduce themselves (please see attached sign in sheet). A summary from the May 31 meeting was reviewed.

EPA/DEQ Wetland protection grant program.
Lynda Saul discussed the 2002 wetland grant program and changes that EPA made to the process. These changes result in a shorter schedule for potential project sponsors to develop proposals and for the review team to review proposals. In addition to wetland grants, 3 other EPA funding programs are in the request for proposals. Applicants can apply for a combination of funding sources for the same proposal. EPA has about $1.5 million in wetland funding for our 6-state region; the cap on individual wetland projects is $100,000. Proposals should address one of the following priorities: develop a comprehensive wetland monitoring and assessment program; improve the effectiveness of compensatory mitigation; refine protection of vulnerable wetland and aquatic resources; wetland education or local government. The monitoring and assessment program will be developed collaboratively with DEQ as the lead. The timing this year is: Federal register posting September 5, State and Region VIII RFP issued beginning of October, draft proposals are due November 5. Final proposals are due November 26 to DEQ.

Wetland Protection through the Statewide Comprehensive Outdoor Recreation Plan (SCORP) and Land and Water Conservation Fund.
Tom Hinz, Fish Wildlife and Parks filled in for the State Parks Division to discuss the Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the Land and Water Conservation Fund (LWCF). DFWP is planning to revise the 1992 Montana SCORP and has requested assistance with the wetlands section of the plan. Wetlands play a critical role in the LWCF program because they can be purchased with LWCF monies and can be used for mitigation purposes when there is a conversion in use in LWFC funded properties. This is retroactive. Any impacts that have occurred on LWCF properties in the last 35 years are mitigatable. The SCORP forms the core of how DFWP selects projects for LWCF grant funding. Walt Timmerman is working on this and plans to attend the next meeting. If you have input please call Walt at 444-3753.

Ecologically significant wetlands in the upper Yellowstone River watershed.
Marc Jones, Montana Natural Heritage Program Ecologist presented results of the Montana Natural Heritage Program's wetland inventories in the upper Yellowstone River watershed. The inventory included the Boulder, Clarks Fork of the Yellowstone, Shields and Stillwater River drainages. The project identified 46 ecologically significant wetlands and evaluated their diversity and integrity. Criteria were based on quantitative and qualitative factors. The main problems identified were noxious weeds and loss of under story in cotton wood stands. Flow alteration was also identified as impacting several sites. Exotic species were a widespread cause of impairment. Management recommendations were developed for each site. Contact Marc at 444-3488 if you would like a copy of the final report.

Montana Wetlands Legacy.
Tom Hinz, Department of Fish Wildlife and Parks was recently hired as the Montana Wetlands Legacy Coordinator and brings over 25 years of professional wetland and waterfowl experience in Montana to the position. The goal of the Montana Wetlands Legacy is to protect wetlands and riparian areas through voluntary and incentive-based means. Tom will work with both landowners wishing to protect their wetlands and riparian areas and agency and other organizations to coordinate and increase funding for on-the ground wetland protection. One role for Wetland Council members is to help share the goals of the Legacy with others and relay the importance of wetland protection in our state. The Legacy is inclusive of the entire state and the Heritage Program will be tracking accomplishments via a database. Tom will be working on outreach material including a web site and can be reached at 994-7889.

Inventory and monitoring of Montana's amphibians and aquatic reptiles.
Bryce Maxell, UM Wildlife Biology Program PhD candidate provided a summary of current wetland related reptile and amphibian inventory and monitoring work in Montana. He also discussed the status and population trends and habitat and conservation needs of Montana's amphibians and aquatic reptiles. A summary of the talk is presented below.

Montana is home to only 13 of the known 5000 species of amphibians. Of the 6650 species of reptiles, Montana has 17 species. They have complex life histories and complex habitat uses. Most importantly to management actions are the three habitat requirements: breeding sites, over wintering, and foraging. The different habitat requirements of salamanders, toads, frogs, turtles, and snakes were shown along with species range distribution maps for Montana. Some of the foraging distances from wetlands can be quite far, for example toads forage up to 6 kilometers away from their breeding sites. Northern leopard frogs and Columbia spotted frogs need to overwinter in water that doesn't freeze. Amphibian loss can result in a trophic cascade. For example, western garter snakes are highly dependent on amphibians as prey.

He explained the biodiversity crisis and herpetological declines. Due to loss of habitat, the leopard frog has declined extremely around state. Loss of habitat can be: deterioration of habitat, direct loss due to filling in of wetlands, destruction of hibernicula, flooding habitats, loss of prey, etc. Functional loss can be caused by introduced predators, hydroperiod alteration, impassible roads or traffic and altered vegetation. Introduction of exotic species, such as cane toads, which have highly toxic excretions from the skin, have been studied and it is known that they disrupted the normal populations of native species. Diseases and pathogens have been known to cause

declines in herptiles such as Saprolegnia and Chytrid fungus. Saprolegnia is water mold that effects amphibian eggs and is commonly carried by fish. Chytrid fungus is found in 50 states, it causes mortality by causing the inability to hydrate or breath, or can cause secondary infections due to lesions on the skin. In some cases tissues are digested allowing for invasion by secondary infecting agents. Other causes may be climate changes, changes in precipitation, length of growing season, o-zone thinning and increased UV-B radiation, decreased egg survival, pollutants, acid rain (pH < 4.5 affects larval survival), heavy metals, herbicides, and pesticides. He showed pictures of amphibian deformities in Montana, such as missing limbs, multiple limbs, etc. The cause is thought to be either chemicals or parasites. Scientists have been able to duplicate the deformities in labs from the flat worms found in large snail populations. High levels of nitrogen in the water are known to trigger larger snail populations. Human harvest for food items or pet trade may also affect populations. He stated that it is possible that there are undocumented species native to Montana.

Bryce and others are researching amphibians from a landscape perspective to see how the different species are surviving in regards to landscape factors, such as presence of fish in the water and number of ponds. This research is done to determine what landscape features and processes promote the persistence of amphibians. They are now recording the areas where there is breeding evidence of amphibians species. In the 2000 field season, they surveyed 40 watersheds and visited 415 wetland sites; in 2001 they surveyed 54 watersheds and surveyed 800 wetland sites.

Data needs and new directions include moving away from independent site visits to landscape perspectives, the need to finish baseline inventories in Montana, and link findings to natural history. Bryce is particularly interested in breeding sites, if you have an area to report, contact Bryce Maxell at 777-0065. Data is housed at the NRIS Montana Natural Heritage web site. He asked that anyone who finds ill or dead amphibians or reptiles, save and report them and take actions to keep from spreading pathogens. He said that it is possible that they may die under ground and not be found. It has been noted that stock ponds have increased the population of tiger salamanders and they can become an aquatic predator. This could also be causing the decline of the spotted frog.

Using undergraduates to meet amphibian research needs.
Dr. Grant Hokit, Carroll College, Associate Professor of Biology provided some examples of faculty and student projects that provide educational opportunities and meet amphibian and wetland research needs in Montana. Dr Hokit discussed the four program goals: 1) collect georeferenced habitat and distribution data for amphibians, 2) examine landscape distribution versus habitat, 3) construct dynamic landscape models for simulation purposes, and 4) determine what mechanisms drive patterns of decline. Their approach is to study species at multiple scales. Questions directed at investigating the landscape approach to study population declines are posed. Such as; what size of landscape is large enough for a population to be extinction immune and how close to the adjacent ponds is important? The Carroll College student education and research focuses on the Snowy and Castle Mountains and the Helena and Lewis and Clark National Forest. As a result of this work, undergraduates are making a valuable contribution to the research needs of amphibians in Montana.

Other reptile and amphibian work going on in Montana.
Blake Hossack, US Geological Survey Aldo Leopold Wilderness Research Institute in Missoula, discussed the Amphibian Research and Monitoring Initiative (ARMI). This new program at the Department of Interior identified 7 project regions in Montana. Currently they are focusing on the Greater Glacier ecosystem, the Greater Yellowstone ecosystem and some National Monuments and National Wildlife Refuges. They are doing a species distribution inventory and will record annual changes of breeding population. Over 800 wetland sites were visited in Glacier National Park looking for breeding sites and conducting egg mass counts. They will compile and map data for future surveys.

Janet Ellis, Montana Audubon, talked about "Frog Bill" which passed the state legislature the year and gives the Department of Fish Wildlife and Parks authority to prohibit the collection and/or sale of non-game wildlife. Would like to see rule making, so that this doesn't become just a permit program, but rather a prohibition on the selling and taking of non-game native animals.

Dennis Flath, Department of Fish Wildlife and Parks, discussed his concern with coal bed methane involving water quality and soils. Extracting coal bed methane involves pumping millions of gallons of water. This can deplete the subsurface aquifers and saline discharge could affect amphibian and reptile populations. Currently southeastern Montana has stable leopard frog populations. Dennis would like to work with others to develop standards to preserve the amphibian population.

Windy (Moore) Sturgis, Nature Center in Missoula, informed the group that they have a display of live Montana amphibians and reptiles. She talked about the amphibian trunk they are developing which will used by teachers as an educational tool. The Nature Center hopes to have the trunk available by spring and are looking for teachers willing to pilot the trunk in their classrooms.

Katherine Lynch, Zoo Montana in Billings is working with the Amphibian Monitoring Program. This program is based on frog call surveys. The program is still considered a pilot program, but is expanding to statewide coverage. She is looking for volunteers to conduct the surveys which require some training and 3 evenings of monitoring in the spring.

Wetland Updates and Coordination Reports.

Lynda Saul, Montana Department of Environmental Quality
Wetland Grants cycle starting up. Researching wetland monitoring and assessment programs. Tracking how other states are responding to SWANCC decision. NWI mapping compete for Great Bozeman area (11 quads) and Bitterroot Valley (9 quads).

Duane Anderson, Montana Natural Resources Information System (NRIS)
Digital orthophotos are complete for 70% of the state. The Corp of Engineers are providing regular updates to the Corp 404 permits database housed on The Mapper at NRIS. The Heritage stewardship program is tracking conservation easements and NRIS is working with the Montana Wetland Legacy to also track all wetland protection in Montana. They are working to put water rights on streams on the Internet in cooperation with the DNRC.

Larry Urban, Montana Department of Transportation (MDT)
MDT has completed 87 acres of wetland mitigation this year. He described restoration projects, both finished and those in progress. Consultants for MDT have finished the first year of monitoring on 40 mitigation sites constructed since 1994. MDT is investigating the use of in-lieu fees as a mitigation option. As a result of a COE guidance letter, MDT is incorporating watershed-based mitigation versus strict on-site, in-kind mitigation into their wetland mitigation program.

Tom Hughs, Montana Department of Natural Resources and Conservation (DNRC)
DNRC is working with MDT on wetland mitigation sites on school trust lands. They have developed a new bioengineering structure that is removable after phreatophytes take root.

Tom Hinz, Montana Department of Fish Wildlife and Parks (DFWP)
The Montana legislature increased out of state migratory bird stamp fees. It is estimated that up to $100,000 of new money will be available to DFWP for wetland protection. The Flathead Valley Land Trust has a new proposal and are looking for projects and partners.

Pete Husby, Natural Resource Conservation Service (NRCS)
The wetland reserve program has a growing number of easements for protection of wetlands. The SWANCC ruling does not relax NRCS wetland determination for private landowners that request them.

Steve Potts, Environmental Protection Agency (EPA)
Gave a summary of the consolidated funding process as the new EPA Region 8 process to fund wetland, TMDL, water quality and RGI proposals. Mentioned the EPA and DEQ enforcement actions for 404 violations by the Yellowstone Mountain Club.

Mary Manning, US Forest Service (USFS)
Discussed the national riparian mapping standards and her interest in using an area in Montana as a pilot area.

Marc Whisler, Bureau of Land Management (BLM)
Marc discussed BLM's interest in monitoring both lotic and lentic systems and riparian condition mapping. They have collected 200 stream monitoring systems for lotic waters. BLM hasn't monitored lentic wetlands yet. The BLM has the lead on developing the EIS on coal bed methane. Would like everyone to go over the EIS and give it a thorough review and provide comments.

Brian Maiorano, Missoula County
Discussed Milltown Reservoir and the heavy metals contamination. The County is recommending complete clean up and that the Milltown dam be removed. There is strong local support for this position. EPA will be making a decision soon. He also talked about the Grant Creek Valley; the lower 3 miles have been ditched. The Department of Fish Wildlife and Parks feels that this is an important stream for bull trout and major restoration is needed.

Steve Kloetzel, Salish and Kootenai Tribes (SKT)
SKT will receive $18 million settlement from ARCO, the majority will be used to purchase additional lands and they are targeting wetland and riparian areas for acquisition. Restoration will be accomplished if needed. In the Jocko River valley, the tribe is restoring 850 acres of wetlands. Tribal ownership has increased from 46% of the reservation to 66% in the last decade. CSK College has a native plant nursery for riparian and wetland plant restoration needs.

Brad Cook, University of Montana
Talked about research on wetlands, and the development of the HGM guidebooks. The latest Guidebook is at the COE Waterways Experiment Station. They are discussing streamlining the vegetation identification component.

Pete Shade, Montana WaterCourse
A Wetland planning guide will be coming out this spring with workshops planned for later in 2002. They are working on developing a wetland volunteer monitoring network. A workshop is planned for May in Utah to discuss how to develop citizen wetland monitoring programs.

Rab Cummings, Montana WaterCourse
This summer Rab held two - 5 day teachers' watershed tours; Blackfoot and Upper Clark Fork. Three tours are planned next summer for teachers including the middle Yellowstone. Seven 'Make a Splash' festivals help on September 21 included a wetland component and reached 1500 students in Montana. A new web site for teachers has been developed and sent to 800 school districts. .

Tammy Crone, Gallatin Water Quality District (GWCD)
GWCD has a wetland grant and is conducting an inventory of Gallatin valley wetlands. They have received National Wetland Inventory (NWI) maps dating from 1985 and flew the valley in early September 2001. She also discussed coal bed methane activity in the Gallatin and Park County.

Dennis Longknife, Fort Belknap Indian Community
Talked about the watershed approach to doing wetland inventories on Peoples Creek. Collected 100 plant specimens, 47% were FACW or wetter. Inventoried 21 sites including 1 fen. Drought has affected the prairie potholes on the reservation.

Michelle White, Montana Water Center
Michelle is working on a volunteer stream monitoring project in Gallatin County. She stated that the Water Center has a lot of information on drinking water and ground water and the web site also has information on mine reclamation.

Potential Agenda Items for Next Wetland Council Meeting and Set Meeting Date.
Stream assessment techniques.
SWANCC and mitigation issues.
Permit system.
Water rights and adjudication issues.
Wetland regulations on small tracts of land.
MEPA compliance on state rivers.

Montana Wetland Council
September 26, 2001
Sign-In Sheet

Peter Ismert	EPA Region 8
Brad Cook	University of Montana
Michelle White	Montana Water Center
Marc Whisler	BLM - Montana State Office
Steve Potts	EPA - Helena Office
Burt Williams	The Nature Conservancy
Carl James	Federal Highway Administration
Steven Kloetzel	Salish and Kootenai Tribes
Misti Pilster	Montana Department of Agriculture
Marc Jones	Montana Natural Heritage Program
Dennis Flath	Montana Department of Fish, Wildlife and Parks
Terri McLaughlin	Montana Department on Natural Resources
Grant Hokit	Carroll College
Michael McHugh	Lewis and Clark County
Jon Jourdonnais	PPL Montana
Janet Ellis	Montana Audubon
Tom Hinz	Montana Department of Fish, Wildlife and Parks
Blake Hossack	United States Geological Survey
Lisa Bay	The Nature Conservancy
Justin Kucera	Bureau of Reclamation
Wendy Sturgis	Nature Center at Fort Missoula & Clark Fork Watershed Education Network
Bryce Maxell	University of Montana
Lawrence Urban	Montana Department of Transportation
Pete Shade	Montana Watercourse
Dennis Longknife	Fort Belknap Indian Community
Cathie Jean	Montana Natural Heritage Program
Duane Anderson	Montana Natural Resource Information System
Tammy Crone	Gallatin Local Water Quality District
Randy Apfelbeck	Montana Department of Environmental Quality
Brian Maiorano	Missoula County
Rab Cummings	Montana Watercourse - Project WET
Mary Manning	United States Forest Service
Peter Husby	Natural Resource Conservation Service
Mike Murphy	Montana Water Resource Association
Lynda Saul	Montana Department of Environmental Quality