Education and Outreach

2006

Idaho

Development of a Comprehensive Wetlands Protection Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100394

Shoshone-Bannock Tribes Elese D. Teton, Tribal Water Engineer eteton@shoshonebannocktribes.com 208-239-4580

Shoshone-Bannock Tribes will develop important components of a comprehensive wetlands protection program. These components would build the Tribes' capacity to protect and restore the Reservation's surface waters by continuing development of wetland protection capabilities through regulation, monitoring and assessment, restoration, outreach, and through coordination and partnership with other Tribal programs and interested parties.

Montana

<u>Planning for Wetlands: Educational Workshops and Local Government Assistance on Methods to Protect Wetlands and Riparian Areas in Land Use Decisions</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101110

Montana Audubon Janet Ellis jellis@mtaudubon.org 401-443-6652

The goals of this project are to: 1) provide instruction in strategies to protect wetlands and riparian areas in land use planning decisions in Montana; 2) provide technical assistance to communities interested in using land use tools; and 3) develop a website and educational information on how Montana local governments are using land use planning to protect wetlands and riparian areas; update "A Planning Guide for Protecting Montana's Wetlands and Riparian Areas" with current case studies and contact information. Emphasis will be in western Montana where development is occurring at the fastest pace. Instructional presentations will be based on "A Planning Guide for Protecting Montana's Wetlands and Riparian Areas", developed by Montana Audubon with a 2000 WPDG to MT DEQ and published in 2003.

Watershed Stewardship Education in Montana

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101111

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Nevada

Fallon Paiute Shoshone Tribe Wetland Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100364

Fallon Paiute Shoshone Tribe Richard Black

richard@enviro-fpst.org 775-423-0590

The purpose of this project is to assist with the development of the Fallon Paiute Shoshone Wetland Protection Program.

Utah

<u>Technical Assistance and Outreach for Refining the Reference Network and Rapid Assessment</u> Methods for Utah's Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101020

Utah DNR, Division of Wildlife Resources Nancy Keate nancykeate@utah.gov 801-538-4745

See proposal for project description. Proposal attached as project deliverable.

National

An evaluation of state wetlands programs: Phase IV and Roll-up reports

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100860

Environmental Law Institute James McElfish mcelfish@eli.org 202-939-3840

The Environmental Law Institute (ELI) will conduct a study on state wetland programs and provide an analysis and overview of the status and trends among the 50 state wetland programs. These tasks will provide states, tribes, and local governments with valuable information on how to improve the effectiveness of their programs.

2007

Montana

Chippewa Cree - 2007 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100530

Chippewa Cree Tribe Kieth Gopher keith@cct.rockyboy.org 406-395-4147

The 2007 wetland project for the Chippewa Cree Tribe will conserve and restore wetlands on the Rocky Boy's Indian Reservation in alighment with national goals of the Environmental Protection Agency of "no net loss" and focus of assessment of wetland conditions to achieve a net increase of total wetlands by 2011. The Chippewa Cree Tribe is currently implementing a comprehensive wetlands program to accurately assess and delineate Tribal wetlands through a rotating basin approach. Program objectives for FY07 will include; a fen wetlands protection demonstration project, public education (to include a fen identification workshop and a wetlands segment in an educational video), field testing a Tribal assessment method on wetlands monitoring sites, draft narratives for wetlands water quality standards, and continuing to aquire baseline data, including satellite imagery, of wetland sites on the reservation.

<u>Incorporating a Level 1 Functional Assessment into Regional Planning, Wetland Conservation, and Public Education</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100526

Montana Natural Heritage Program Greg Kudray gkudray@mt.gov 406-444-0581

Build on NWI-HGM mapping funded by a broad partnership to create Level 1 assessment tools useable at a beginner to expert level. An easy to use freely distributed DVD will enable citizens to recognize vulnerable wetlands, see wetland functions in their landscape, and relate personal values to wetland protection and restoration. Education and outreach efforts will focus on community, government, and conservation practitioner levels through three workshops with level appropriate goals addressing education, policy development, policy development, assessment tool use, and conservation planning. A web-based wetland assessment and information system will be developed to serve regional users and as a model for statewide and other regional efforts.

Washington

Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100444

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This project will address water quality issues affecting the Jamestown Tribe. The Tribe will increase their capacity by continuing to developing their environmental program that provides techn

2008

California

<u>California Stream and Wetland Protection Policy Development Pilot - Association of Bay Area</u> Governments

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100390

Association of Bay Area Government Paula Trigueros

510-622-2499

This project will complete the Basin Plan adoption process for the North Coast and San Francisco Bay Regional Water Quality Control Boards' Stream and Wetland Protection Policy, develop a permit checklist for stream and wetland restoration projects, and develop model language for local land use planning tools. The geographic location of this project is California's North Coast and Bay Area regions.

Kansas

Development of a Statewide Wetlands Restoration and Protection Process

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100346

Kansas Water Office Deb Baker

785-296-0162

This project will develop a comprehensive, standardized process for identifying, assessing and prioritizing wetland and vulnerable aquatic resources in the state of Kansas. This process is intended to customize and

refine existing wetland assessment methodologies to create a working standard for all agencies and watershed planning and stakeholder groups in the state of Kansas.

Missouri

Enhancing Wetland Protection Training: Collaborative Education and Policy Development in Metro Kansas City

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100342

Mid America Regional Council Tom Jacobs tjacobs@marc.org 816-701-8352

Mid-America Regional Council (MARC) will provide a three-year training and policy development initiative in the Kansas City metro region on watershed planning and wetland conservation and restoration with an empahasis on the role of green infrastructure and wetland mitigation strategies in planning for regional sustainability.

Montana

Montana Department of Environmental Quality - 2008 Wetland Program Development Grant II http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101062

Montana Department of Environmental Protection, Wetland Program Lynda Saul lsaul@mt.gov 406-444-6652

The MDEQ Wetland Program Development II proposal's main objectives are to strengthen state wetland data and build capacity for wetland monitoring and assessment at the local, state, and tribal level. We propose to develop four interrelated components to achieve these objectives: 1) evaluate DEQ's 401 certification program, 2) support significant nexus jurisdictional determinations, 3) identify wetland and floodplain protection priorities, and 4) host a Region 8 wetland program capacity building workshop. Final products will include: 1) a final report evaluating Montana's 401 certification program including recommendations for program improvement for increased wetland and vulnerable waters protection, 2) maps and other information along with metadata and training to help determine jurisdiction in CWA issues, 3) a comprehensive floodplain mapping plan for vulnerable floodplain wetlands and development of a Floodplain Mapping Advocacy Team and 4) a successful, well attended Region 8 Wetland Program Capacity Building Workshop that includes a strong focus on wetland monitoring and assessment.

Nevada

Fallon Paiute Shoshone Tribe - Wetlands Baseline Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100362

Fallon Paiute Shoshone Tribe Richard Black, Environmental Diretor richard@enviro-fpst.org 775-423-0590

The purpose of this project is to further develop the Tribe's ability to monitor and assess their wetlands, in order to better track and document the change in wetland acreage and condition. The Tribe will also monitor past wetland restoration projects to determine their effectiveness.

2009

Connecticut

Training to Improve the Protection of Wetlands and Aquatic Resources CT DEP Training Program http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100791

Connecticut Department of Environmental Protection Darcy Winther darcy.winther@ct.gov 860-424-3063

The Connecticut Department of Environmental Protection (CTDEP) will build and refine the 2010 Municipal Inland Wetland Commissioners Training Program (MIWCTP). Such program provides the CTDEP with the best opportunity to provide education and training to Connecticut's 170 municipal wetlands agencies and staff, so that they become knowledgeable and understand both the law they are implementing and the resources they are protecting. As a result of training, municipal wetlands agencies and staff are equipped to make regulatory decisions resulting in the protection of vulnerable wetlands and aquatic resources.

Florida

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> <u>Joseph Sound, Pinellas County, FL</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

Rhode Island

<u>Development of a Rhode Island Statewide Freshwater Wetland Restoration Strategy: Phase 3</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101151

Rhode Island DEM Office of Water Resources Carol Murphy carol.murphy@dem.ri.gov 401-222-4700

The Rhode Island Department of Environmental Management will undertake a multi-faceted project to further develop and promote a statewide strategy for the restoration of freshwater wetlands. The project will target activities involving the restoration of wetlands and the buffer areas surrounding regulated wetlands and build capacity to report more comprehensively on environmental indicators related to wetland restoration. In addition, the project will build capacity for restoration through an expanded program of outreach involving the transfer of information to local entities including both governmental and non-governmental organizations.

Vermont

Strengthening and Refining Vermont's Wetland Protection and Monitoring Programs

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100775

Vermont Department of Environmental Conservation Alan Quackenbush alan.quackenbush@state.vt.us 802-241-3761

Vermont Department of Environmental Conservation (DEC) Water Quality Division will integrate the Wetland Program into other water programs (e.g., watershed planning, ambient water quality monitoring, etc.). The development of wetland assessment tools will be essential in providing a useful link between the wetland program and other water programs, and in providing a framework for the pending revisions to the Vermont Wetland Rules.

2010

Massachusetts

<u>Vernal Pool and Rare Species Web Electronic Certification and Data Sharing for Massachusetts</u> <u>Vernal Pools and Rare Wetlands Wildlife</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101590

Massachusetts Division of Fish and Wildlife Natural Heritage and Endangered Species Program Jonathan Regosin jonathan.regosin@state.ma.us 508-389-6376

A web portal will be created for online submission of vernal pool certification data and observations of state-listed rare wetlands wildlife by members of the public, academic researchers, and environmental professionals. The interactive web-interface will enable partner agencies, such as the Massachusetts Department of Environmental Protection (MassDEP), conservation commissions, and the public, to obtain site-specific information about certified vernal pools throughout the Commonwealth for regulatory, conservation planning, and educational purposes. Also, the project will improve the efficiency with which Natural Heritage and Endangered Species Program (NHES) staff can process vernal pool certification forms and rare species observation forms. This will lead to a substantially decreased lag-time between data submission and certification, resulting in faster improved regulatory protection.

Montana

Chippewa Cree Wetlands Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101830

Chippewa Cree Tribal Water Resources Department Jonathan J. Eagleman, TWRD Director eaglemanjay@yahoo.com 406-395-4225

For FY10, the Chippewa Cree Tribe is proposing to utilize Wetland Program Development Grant funding to create and utilize Sweetgrass Monitoring Protocol for up to ten (10) Sweetgrass/Wetlands sites in historic and present metapopulations areas, Revise Wetlands Standards, work with the Cultural Resources Department in creating a Sweetgrass Curriculum as a voluntary educational component that will be presented in the local public school systems, and propose several Sweetgrass sites for inclusion in the Tribe's Tribal Registry of 'Traditional Cultural Places' which would ultimately serve as an additional protective measure under the Tribe's Cultural Resources Protection Ordinance.

MTDEQ 2010 WPDG: Wetland Capacity

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101761

Montana Department of Environmental Quality Stephen M. Carpenedo SCarpenedo2@mt.gov 406-444-3527

The main objective of this project is to improve professional proficiency and expertise among wetland and natural resource professionals in Montana. This will build capacity regarding wetland regulation, monitoring, assessment and restoration, lead to increased wetland protection and better mitigation and restoration projects, and forward the no-net-loss and net-gain goals. This project will develop a selfsustaining Wetland Professional Training Program in Montana and conduct the first two short courses. The training will meet the needs of professional ecologists, hydrologists, soil scientists, educators, agency professionals, consultants, and others who practice wetland science in Montana. Tasks include: Develop the accredited programmatic components for a self-sustaining Wetland Professional Training Program in Montana that is approved for continuing education credits and will lead toward the 15 semester hours needed for the Society of Wetland Scientists Professional Certification Program (SWS PCP). Create a process to use course fees generated from the initial two short courses as a revolving fund to develop curriculum, plan, conduct, and evaluate future short courses. Develop peer-reviewed content and curriculum for two initial wetland short courses, priority topics for additional short courses, and a speaker's bureau. Plan, conduct, and evaluate two 3-day short courses. Final products will be: A new selfsustaining Wetland Professional Training Program in the State of Montana. Extended University course curriculum for two short courses approved by SWS PWC that meets the needs of Montana professionals. The first two 3-day short courses successfully conducted and a process to provide future short courses...

Enforcement and Compliance

2006

National

 $\underline{\textbf{Building capacity for the ASWM to strengthen and expand state and other wetland programs}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859}$

Assoication of State Wetl;and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

2007

Indiana

Mapping Wetlands Impacts, Mitigation and Violations

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100337

Indiana Department of Environmental Management Elizabeth Pelloso epelloso@idem.in.gov 317-233-2482

Develop a Geographic Information System (GIS) for tracking permitted projects, mitigation sites and violations of State permits. Develop operation procedures to enter future geospatial data, standardize conditions on permit autorizations and make use of current technology, sciency and policy. Report on spatial distribution of impacts and mitigation in relation to 303(d) listed waters. Increase the number of compliance inspections. Provide related training to staff.

2008

Maryland

<u>Effectiveness Of Best Management Practices In Restoring Temporary Impacts In Nontidal</u> Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100461

Maryland Department of the Environment Denise Clearwater dclearwater@mde.state.md.us 410-537-3781

The goal of this proposal is to determine if wetlands subjected to activities that are believed to be temporary in nature, are in fact being restored to their previous condition by implementation of BMPs. The objective is to collect data that will enable MDE to determine if adequate restoration of the disturbed areas has occurred, which BMPs are effectively implemented and which are not, and to refine BMPs and other conditions as needed to return the wetlands to their previous condition.

2010

Montana

Missoula City Health Dept WPDG: Missoula County

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101765

Missoula City Michelle Hutchins hutchinsm@ho.missoula.mt.us 406-258-3495

This project would evaluate management of riparian and wetland areas that have been designated "Areas of Riparian Resource" under city and county subdivision regulation provisions adopted in the mid-1990s; these provisions require a management plan that protects all wetland and riparian areas contained in the subdivision, and generally include prohibitions or restrictions on structures, roads, native vegetation removal, livestock grazing and other potentially damaging land uses. Results of the evaluation would inform education and outreach efforts, as well as consideration of additional incentives, regulations and/or enforcement measures that might be needed to adequately protect these areas.

2010

North Carolina

<u>Assessing Impacts Due to Small Impoundments in North Carolina to Support 401 Certification</u> Policies

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101800

North Carolina DENR John Dorney --

Abstract: The objective of this proposed project is to collect chemical, physical, and biological water quality assessment data to support 401 Certification permitting decisions and addition of appropriate permitting conditions when issuing 401 Certifications in regards to small, artificial impoundments in NC. Currently, NC does not require mitigation for impounded stream reaches due to flooding and includes minimal conditions in 401 Certifications that are issued for small, private impoundments. This contradicts NC Division of Water Quality (NCDWQ) mitigation and restoration policies, since DWQ provides stream mitigation credits for dam removal projects. There are also concerns that these impoundments can lead to water quality degradation to the point that they can no longer be considered a change of use but a loss of use (e.g. aquatic life use support). Results from a large-scale, probabilistic study of small impoundments by the Tennessee Department of Environment and Conservation (TN DEC 2006) indicated that the impoundments had adverse affects on the physical, chemical, and biological components downstream. Thee are concerns that similar impacts occur in NC as well. During regulatory review of 401 applications, DWQ has insufficient data on small impoundments within NC to use as justification for inclusion of additional permit conditions based on concerns over these types of environmental risks. This study is intended to address these criticisms and also determine if existing data (such as the Tennessee study) are applicable to small, private impoundments located in the Blue Ridge and Piedmont ecoregions of NC.

Wisconsin

<u>Developing a Wetland Change Analysis for Wisconsin and Building Compliance Montoring Efforts</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102172

Wisconsin Department of Natural Resources Greg Searle greg.searle@wisconsin.gov 608-266-9252

The multi-agency, multi-partner WI Wetland Team has set goals for increasing the quantity and quality of wetlands in its strategic plan, "Reversing the Loss." Accurate and comprehensive geospatial data on wetland extent and type are needed to compare with past data of similar quality to document changes in wetland quantity and type in a target area. Phase 1 of the project provide a geospatially-based quantitative summary of the important wetland changes taking place on the landscape. Phase 2 will use the data to conduct a thorough investigation to study the causes of the forces driving wetland changes both within and outside the regulatory arena. It will formulate conclusions and recommendation to the Wetland Team for reducing wetland loss and disturbances while increasing wetland quantity and quality through restoration in the target areas.

Mitigation

2006

Montana

Northern Cheyenne - Comprehensive Wetland Monitoring and Assessment Program http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100518

Northern Cheyenne Tribe David Millegan

The goal of the Northern Cheyenne Tribe's Wetland Program is to ensure that Reservation wetland resource management achieves no net loss and to provide protection to vulnerable wetlands, with the ultimate goal of a net gain of wetlands. This project supports enhancement of the Northern Cheyenne Tribe's wetland monitoring and assessment program through several tasks. Information will be gathered to develop management strategies to control non-native, invasive wetland species. This project will also evaluate the cumulative effect of wetland loss and restoration. This project also supports Northern Cheyenne coordination with the USACE and EPA pursuant to the USACE/EPA Memorandum of Agreement on Mitigation, 1990.

Ohio

Assessment of Wetland Mitigation Projects in Ohio

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100292

Ohio Environmental Protection Agency Mick Micacchion mick.micacchion@epa.state.oh.us 614-644-2001

A randomly selected group of individual wetland mitigation projects from around Ohio were studied to determine their ecological performance. Projects were stratified by the number of years since construction and were put into groups of five year intervals. Those groups were: less than five years since construction ("recent"); five to ten years since construction ("middle"); and more than ten years since construction ("old"). Twenty-six projects were randomly selected and monitored, seven were from the recent group, ten were from the middle group and nine were from the old group. Wetlands were monitored for the ecological condition using the Vegetation Index of Biotic Integrity (VIBI) and the Amphibian Index of Biotic Integrity (AmphIBI). Automatic water level recorders were deployed at each wetland and the data was used to develop hydrographs. Landscape Development Intensity Index (LDI) scores for the areas surrounding the study wetlands, both at 100 meters and 100 to 350 meters were calculated. Two sites did not meet wetland criteria, as no significant plant communities of any kind had developed. For all 26 mitigation projects, VIBI scores had a mean of 34.35, which was significantly different than the mean for a group of Ohio natural reference wetlands that span the range of human disturbance. VIBI scores found 38.5% (10 sites) of the 24 mitigation wetlands monitored to be in poor ecological condition, 42.3% (11 sites) were in fair ecological condition, and 19.2% (5 sites) were in good ecological condition. There were not significant differences between mean VIBI scores for mitigation wetlands based on age classes. There were also no significant differences between VIBI score means for mitigation wetlands in high or low intensity surrounding land uses based on LDI scores at both 100 meters and 100 to 350 meters. However, overall VIBI scores were higher for natural wetlands surrounded by low intensity land uses both at 100 meters and 100 to 350 meters. AmphIBI scores for the 24 projects monitored found 87.5% (21 sites) of the mitigation projects to be in poor ecological condition, 8.3% (2 sites) were in fair ecological condition and 4.2% (1 site) were in excellent ecological condition. There were not significant differences between mean AmphIBI scores based on age classes although the middle age group AmphIBI scores were, on

average, higher than the other two age groups. There were no correlations between AmphIBI scores and LDI scores at either 100 meters or 100 to 350 meters as AmphIBI scores were uniformly low. Overall, based on VIBI and/or AmphIBI evaluations, of the 26 individual wetland mitigation projects 61.5% (16 sites) are considered failures, 15.38% (4 sites) are considered potential successes and 23.08% (6 sites) are considered successes. Reasons for successes and failures are discussed.

Wisconsin

<u>Improving Wisconsin's Wetland Compensatory Mitigation Program: Evaluating Proposals and Site Progress at a Landscape Scale</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100401

Wisconsin Department of Natural Resources Tom Bernthal Thomas.Bernthal@dnr.state.wi.us 608-266-3033

This project is designed to improve Wisconsin's wetland compensatory mitigation program by introducing new ways to evaluate proposals and restoration progress at mitigation sites, including site characteristics, floristic quality and wildlife assessment (birds, amphibians). Add spatial information to the mitigation database and use watershed planning tools to evaluate the effects of landscape position and site history on the success of restoration sites.

National

Assessing existing practices on avoidance and minimization

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101031

Environmental Law Institute Loretta Reinersmann reinersmann@eli.org 202-939-3800

ELI researched existing state and federal regulations, policy and guidance regarding avoiding and minimzing impacts to wetlands and other waters and published two reports summarizing its findings and recommendations.

<u>Building capacity for the ASWM to strengthen and expand state and other wetland programs</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859

Assoication of State Wetl; and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

Improving the capacity of land trusts to manage mitigation http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101032

Environmental Law Institute

Loretta Reinersmann reinersmann@eli.org 202-939-3800

ELI developed and deployed a series of trainings to help build the capacity of land trust to assit with key aspects of compensatory mitigation such that long term stewardship of compensatory mitigation sites Improving the effectivness of compensitory mitigation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101033

The Conservation Fund

The Conservation Fund partered with EPA to provide scholarships to state, tribal and local government representatives to participate in the 2007 and 2008 National Mitigation Banking Conference.

Performance standards for mitigation and monitoring of wetlands in the US: Phase II National Framework

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101030

NatureServe Mirela Smole mirela_smole@natureserve.org 703-908-1800

In 2006, NatureServe produced a report entitled, "Ecological Integrity Assessment and Performance Measures for Wetland Mitigation." It describes how NatureServe's assessment system was adapted for use in evaluating the performance of compensatory mitigation projects. The report includes detailed analysis of 18 types of wetland ecosystems. Relying on literature sources and field wetland manuals, NatureServe has identified indicators and metrics for assessing the ecological integrity of each system. They used 1) a standardized classification of wetland types, including diagnostic characteristics, 2) identified key ecological attributes and indicators of each system, with protocols for measuring those indicators to ensure consistent field measurements and documentation, 3) identified practical metrics with ratings based on "reference' or "natural" benchmarks, and 4) provided a scorecard matrix by which the indicators/metrics are rated and integrated into an overall assessment of the ecological integrity of the wetland.

2007

Indiana

Mapping Wetlands Impacts, Mitigation and Violations

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100337

Indiana Department of Environmental Management Elizabeth Pelloso epelloso@idem.in.gov 317-233-2482

Develop a Geographic Information System (GIS) for tracking permitted projects, mitigation sites and violations of State permits. Develop operation procedures to enter future geospatial data, standardize conditions on permit autorizations and make use of current technology, sciency and policy. Report on spatial distribution of impacts and mitigation in relation to 303(d) listed waters. Increase the number of compliance inspections. Provide related training to staff.

Maine

Evaluating Alternative Wetland Compensatory Mitigation Assessment Techniques

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100436

Maine Department of Environmental Protection Jeanne DiFranco jeanne.l.difranco@maine.gov 207-822-6359

Maine Department of Environmental Protection (DEP) is interested in visiting a variety of wetland mitigation sites at different stages of restoration and using applicable biological monitoring techniques to evaluate the sites success based on the ecological health of the biological community. A review of currently available methods would be conducted in order to select the most appropriate method for each site based on the type of wetland and the biological assemblages present (plants, macroinvertebrates, algae, etc.). In conjunction with sampling these mitigation sites, DEP will also monitor comparable reference sites. To facilitate the comparison with the reference condition, the Tiered Aquatic Life Use strategy will be applied to assign Biological Condition Gradient tiers to all sites sampled. To date, DEP has focused monitoring efforts on areas of open water with communities of emergent vegetation, usually associated with a river, stream or lake. Drier-end wetlands, while recognized as a critical wetland type to monitor, have not yet been assessed. This project will afford DEP the opportunity to review existing monitoring methods not currently used and explore the possibility of expanding the program to wetland types and biological assemblages not currently being examined.

Wetland Mitigation in Maine: Identifying Opportunities for In Lieu Fee

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100399

Maine State Planning Office Eliabeth Hertz, Senior Planner elizabeth.hertz@maine.gov 207-287-8935

The State of Maine has created an In Lieu Fee program for wetland compensation with the objective of encouraging ecologically meaningful wetland compensation. The purpose of this project is to create a readily accessible database of ecologically significant wetland sites for use in the In Lieu Fee program. The database will allow state agencies, developers and consultants to quickly identify wetlands where restoration, enhancement, or preservation is a state conservation priority. The database will provide better opportunities to match suitable compensation projects with the anticipated losses of wetland functions and values associated with development projects.

New Hampshire

<u>Developing a Watershed Strategy for the Restoration and Protection of Wetlands in the Merrimack</u> River Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100375

New Hampshire Department of Environmental Services Collis Adams, Bureau Administrator cadams@des.state.nh.us 603-271-2147

New Hampshire Department of Environmental Services (DES) has developed an in-lieu-fee program through which DES may accept payment for an unavoidable loss of aquatic resource functions and values from a proposed activity, in lieu of other forms of compensatory mitigation. Under this program a fund was created to pool money for watershed related projects. This fund provides financial support for projects related to wetland restoration or creation, aquatic habitat improvement, preservation of upland

areas adjacent to wetlands, and stream restoration. The overall goal of this project is to develop a model watershed strategy that can be used to effectively allot funds generated by the in-lieu-fee program. Specifically, the current project will develop a watershed strategy for the restoration and protection of wetlands in the Merrimack River Watershed, which can serve as a transferable model for other watersheds. Through this project DES will develop a process that produces tools to aid decision makers in identifying, prioritizing, and protecting specific tracts of land that will most effectively achieve the program goal of no net loss of wetland functions and values and improve overall health in the watershed.

National

Assessing Existing Practices on Avoidance and Minimization

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100881

Environmental Law Institute Ms. Loretta Reinersmann reinersmann@eli.org 202-939-3800

ELI researched existing state and federal practices and procedures regarding avoiding and minimizing impacts to wetlands and other waters and published a report summarizing its findings and recommendations.

2008

California

<u>California Vernal Pool Compensatory Mitigation Improvement - University of California at Davis http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100391</u>

University of California at Davis Michael Barbour, PhD mgbarbour@ucdavis.edu 530-752-2956

The project will improve conservation and compensatory mitigation of vernal pools by producing a functional community association scheme that can be readily adapted to the Clean Water Act Section 404 permit s and mitigation requirements. The geographic location of this project is throughout California where vernal pools are found.

Kentucky

<u>Development of functional assessment and monitoring guidelines for stream restoration projects</u> in Kentucky

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100805

University of Louisville Research Foundation, Stream Institute Michael A. Croasdaile, Ph.D. m.croasdaile@louisville.edu 501-852-3220

"The purpose of this project is to improve methods for assessing and monitoring stream functions to help Kentucky Division of Water to increase the likelihood that restoration projects will result in successfully functioning streams and associated wetlands. The main objectives are to (1) identify the primary physical processes (e.g., surface/subsurface water interaction, sediment dynamics, channel evolution, etc.) that contribute to functionally successful stream restorations in Kentucky; (2) design and apply cost-effective methods for assessing indicators of these processes prior to, and following construction to obtain baseline inormation and evaluate post-restoration success; (3) produce guidelines for measuring and interpreting

indicators of these processes, and offer training in these methods; and (4) incorporate functional criteria into existing Kentucky Water Quality Certification guidelines to improve the quality of compensatory restoration efforts.

Maine

<u>Wetland Mitigation in Maine: Identifying Opportunities for In Lieu Fee in Eastern Coastal and Eastern Interior Regions</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100317

ME DEC, Maine Natural Areas Program Elizabeth Hertz

207-287-8043

The State of Maine has created an In Lieu Fee program for wetland compensation with the objective of encouraging ecologically meaningful wetland compensation. In 2007, MNAP and SPO initiated the first phase of this project, to create a database of ecologically significant wetland sites in central interior, midcoast, and southern Maine. Data collected through landscape analysis and from towns, land trusts, and public land managers in these regions will be used this summer (2008) to help target wetland sites for field surveys. This project will allow review and analysis to occur along the remaining coastal and coastal interior sections of Maine, thereby increasing the number of biophysical regions available for mitigation and completing potential mitigation project review for over one third of the state.

New Hampshire

Building A Watershed Model for Enhancing Wetland Protection in New Hampshire

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100321

New Hampshire Department of Environmental Services Collis Adams, Bureau Administrator cadams@des.state.nh.us 603-271-2147

The New Hampshire Department of Environmental Services (DES) will develop a preliminary multiagency GIS tool to integrate the review and protection of three primary wetland functions; specifically, flood flow storage, water quality improvement, and wildlife habitat. Using the preliminary framework of this model, DES will also develop an inspection and tracking program for mitigation, compliance and secondary impact assessments. The improvements proposed for the mitigation program come at a time when the addition of an in-lieu fee program, the Aquatic Resource Mitigation (ARM) Fund has recently been implemented. The DES will use this grant to apply a watershed model that assists stakeholders in three watersheds to apply for ARM funds for important wetland restoration and protection projects. Also, DES will provide local communities with tracking reports/GIS maps illustrating conservation lands and mitigation sites within their town. This information will assist in the monitoring of these identified resources and enable towns to be proactive in land use decisions.

Wisconsin

Improving Wetland Compensatory Mitigation in Wisconsin

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100816

Wisconsin Department of Natural Resources Tom Bernthal Thomas.Bernthal@wisconsin.gov 608-266-3033 Improve wetland compensatory mitigation in Wisconsin by enhancing coordination of different mitigation programs and introducing the watershed approach to decision-making. Wisconsin Department of Natural Resources (WDNR) will conduct the following: 1) Analyze available information about wetland mitigation approval decisions across different watersheds; 2) Review mitigation rules and guidance, including the new federal mitigation rules and Wisconsin Department of Transportation's (WDOT) technical guidelines for mitigation banking, and work on resolving inconsistencies; 3) Coordinate database so that the same information is being tracked and shared for analysis and reporting; 4) Prepare new guidance for prospective mitigation bankers and will be made available on the WDNR website; and 5) Interagency State-Federal staff training for staff who review mitigation projects for greater consistency.

National

Model In-Lieu Fee Instrument

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100857

Environmental Law Institute Loretta Reinersmann reinersmann@eli.org 202-939-3800

ELI developed a model in-lieu fee program instrument that will support state and other in-lieu fee programs as they come into compliance with the new federal compenstory mitigation regulations.

National Evaluation of Compensatory Mitigation: Study Design Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100856

Environmental Law Institute Loretta Reinersmann reinersmann@eli.org 202-939-3800

ELI coordinated the effort to develop the study design for the first ever nationwide field-based evaluation of the success of all three forms of compensatory mitigation: mitigation banks, in-lieu fee mitigation and permittee-responsible mitigation.

Wetlands Assessment Technical Assistance Center: EPA Region 4

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100852

Research Triangle Institute Kimberly Sherrill ksherrill@rti.org

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This grant is to develop and implement the Southeastern Wetland Assessment Technical Assistance Center (SEWATAC) to provide the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee with technical assistance and workgroup support for collecting, managing and analyzing wetland monitoring and assessment data. The workgroup's focus will be on rapid wetland assessment methods, statistically-based data analysis, and methods for collecting wetland assessment data for parameters such as vegetation, soils, hydrology, aquatic insects, amphibians, algae, and water chemistry. Technical assistance will be provided through a Webinar-based apporach, field training visits to participating states, and telephone and Web-based statistical assistance.

2009

Florida

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> Joseph Sound, Pinellas County, FL

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

Maine

Conservation Planning for Tidal Marsh Migration Due to Sea Level Rise

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100792

Maine Department of Conservation Natural Areas Program Molly Docherty molly.docherty@maine.gov 207-287-8045

The goal of this project is to minimize net loss of tidal marsh habitat and its incumbent functions and values by identifying and initiating conservation planning for landscapes that will be needed to accommodate marsh migration.

New Hampshire

Enhancing New Hampshire's Aquatic Resource Mitigation and Compliance Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100794

NH Department of Environmental Services Collis Adams cadams@des.state.nh.us 603-271-2147 The New Hampshire Department of Environmental Services (DES) will develop a stream crossing database and continue building the mitigation and compliance permitting inspection program. In partnership with the New Hampshire Department of Transportation (DOT), and Office of Information Technology, DES will develop a culvert and bridge inventory database documenting the location, physical and geomorphologic conditions at road crossings. This information has been collected by various programs and organizations and is not consolidated into one system. The inventory will gather existing data in one central location. Once established, DES can prioritize crossing replacements. DES will also work with DOT and other stakeholders to develop a new stream mitigation program to replace, upgrade and restore identified crossings as a mitigation option when appropriate. The database will serve additional long-term functions for municipalities, watershed groups and various state agencies that may be in the position to secure funding for high hazard crossings and/or high ecological impact when federal funds may become available. This project will support on-going efforts by DES to update existing stream rules and develop an in-lieu mitigation option for projects impacting streams and rivers.

North Carolina

North Carolina Wetlands Assessment Method (NC WAM) comprehensive training effort

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101690

North Carolina Dept of Environment and Natural Resources DWQ John Dorney
John.Dorney@ncmail.net
919-733-9646

This grant will result in comprehensive training of state and federal agency staff (including staff from neighboring states) in the use of NC WAM and Surface Water Identification Training and Certification (SWITC) method. NC WAM is the new rapid wetland assessment method developed by a team of wetland scientists from NC DWQ, USEPA, USACE, NCDOT, NC Natural Heritage Program, and NC EEP. The method allows state and federal agencies to modify monitoring, permitting, and mitigation programs to reflect wetland quality in addition to acreage. An essential part of the 4-day training will be to emphasize proper use of the field manual.

Oregon

Restoring Diverse, Invasive-Resistant Wetland Prairies

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100798

Lane Council of Governments Jeff Krueger, Project Manager jkrueger@lcog.org 541-682-4122

This Lane Council of Governments partnership project will improve the long-term viability and success of wetland prairie restoration efforts, and thus compensatory mitigation for impacts to wetlands under Clean Water Act Section 104, by addressing key knowledge gaps limiting successful restoration efforts and translating that information into practical management tools. Newly gained information will be disseminated through partners, outreach and education efforts, and direct training within the Willamette Valley.

Virginia

Strengthening Virginia's Wetland Management Program-VIMS

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101390

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The primary goal of this project is to focus on the beginning of the development of a comprehensive wetland management plans for localities that address the threat of climate driven impacts to tidal wetlands; and to begin the effective linkage of the wetland management programs with VA's water quality program.

Wisconsin

Building Wetland Assessment and Monitoring Capacity, Phase 4

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101250

Wisconsin Department of Natural Resources Tom Bernthal Thomas.Bernthal@wisconsin.gov 608-266-3033

1. Wetland Condition Intensification Study--Lake Michigan tributary basins 2. Ephemeral Ponds Mapping and Monitoring--add 3 SE Wisconsin Counties--Washington, Walworth and Waukesha 3. Wetlands Activity Tracking, including a geospatial data base adding after-project wetland cover type and better covering transportation projects--Statewide

2010

California

<u>Performance Curves for Estuarine and Coastal Riverine Systems using California Rapid Assessment Method (CRAM) - Aquatic Science Center</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101920

Aquatic Science Center Lawrence Leung lawrence@sfei.org

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This assistance agreement provides federal funding in the amount of \$346,091 to develop performance curves for estuarine and coastal riverine systems using California Rapid Assessment Method (CRAM). Performance curves will forecast how beneficial uses and functional capacity of projects will increase over time. This project will provide new tools for automating watershed profiles (i.e., assessing the distribution, abundance, and size frequency of wetlands and riparian buffers, and including associated CRAM scores) which will provide consistency for statewide guidance on implementation of mitigation and restoration permitting.

Oregon

Moving Oregon's Wetland Program into a Functions-based Accounting System http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101625

Clean Water Services
Bobby Cochran
cochran@willamettepartnership.org
503-681-4436

Work with state, federal and local partners to develop an implementation strategy and alternative approaches to transiton from an acreage based mitigation approach to a functional-based mitigation approach which can be adopted for use in the State of Oregon.

National

<u>Model Approaches to the Watershed Approach: A Handbook for States, Tribes and Local</u> Governments

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102143

Environmental Law Institute Jessica Wilkinson wilkinson@eli.org 202-558-3100

This project will advance the application of the watershed approach to compensatory mitigation decision-making and to the voluntary restoration and protection of aquatic resources. The recipient will convene national leaders engaged in the watershed approach to analyze current watershed approach methodologies and use this information to develop and deliver a handbook for states, tribes, and local governments outlining detailed, step-by-step frameworks for carrying out the watershed approach.

<u>Testing & Evaluating a Study Design Development to Assess the Succes of Compensatory Mitigation</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102140

Environmental Law Institute Rebecca Kihslinger kihslinger@eli.org

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The recipient together with the North Carolina Division of Water Quality propose to conduct a pilot study using the study design in North Carolina and then synthesize the results from the pilot studies in Ohio and North Carolina to provide an evaluation of the performance of mitigation in two states (in two EPA regions) and also to fine tune the study design prior to investing in a nationwide evaluation. The project will develop a synthesis article outlining the results from the two pilot studies and develop a webinar and panel presentation to disseminate the results and encourage other states to conduct pilot studies.

Monitoring and Assessment

2006

Arizona

Characterization of Micro-climate and Vegetation - University of Arizona

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100373

The project will investigate the potential impacts of urban development on the micro-climate and vegetation of riparian areas along ephemeral stream systems in Arizona.

University of Arizona George Zaimes jrm5@email.arizona.edu 520-907-5531

San Carlos Apache Tribe Wetland Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100363

San Carlos Apache Tribe Ms. Loretta Stone 928-475-2218

This assistance agreement provides full federal funding in the amount of \$97,000. The purpose of this project is to develop a comprehensive wetland monitoring and assessment program for the San Carlos Apache Tribe.

California

Los Coyotes Band of Mission Indians - San Luis Rey Watershed Wetlands Assessment and Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100368

Los Coyotes Band of Mission Indians Sandra Stoneburner loscoyotesepa@yahoo.com 760-782-0712

The purpose of this project is to develop a wetlands protection program through assessment, monitoring and restoration of wetlands in the San Luis Rey Watershed

Roughness Characteristics of California Native Plant Species in Riparian Habitat - California Department of Water Resources http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100286

California Department of Water Resources Stefan Lorenzano

916-651-9617

This project determines the roughness characteristics of plants in waterways in order to gain a greater understanding of how the roughness coefficient applies to riparian restoration projects.

Colorado

Floristic Quality and Wildlife Habitat Assessment of Playas in Eastern Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100971

Rocky Mountain Bird Observatory Alison Banks Cariveau and David Pavlacky david.pavlacky@rmbo.org 303-659-4348

Project leads are Alison Banks Cariveau, Research Division Director, alison.cariveau@gmail.com and David Pavlacky, Spatial Ecologist, david.pavlacky@rmbo.org. The RMBO has been studying playa wetlands in Colorado since 2004, to improve understanding of locations and conditions of these important wetlands. Additonal information on RMBO's research to survey and assess playas in Eastern Colorado is at http://www.rmbo.org/v2/web/science/research/playaCO.aspx. Individual wetland research reports, including the report for this WPDG project, are available at http://www.rmbo.org/v2/web/Publications/scientificReports.aspx.

Southern Ute - Monitoring and Water Quality Standards Development for Wetlands Protection

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100515

Southern Ute Indian Tribe, Environmental Programs Division Michiko Burns mburns@southern-ute.nsn.us 970-563-0135

This project will further water quality sampling and database development for the development of wetland water quality standards for the Southern Ute Tribe. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

Survey of Critical Wetlands in Boulder County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100961

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Information on the Colorado Natural Heritage Program is at http://www.cnhp.colostate.edu. Individual CNHP documents and reports, including this WPDG project and other county wetland surveys, are available online at http://www.cnhp.colostate.edu/download/reports.asp. Information on CNHP's database and requesting CNHP data are at http://www.cnhp.colostate.edu/exchange/request.asp. Note: Subgrant dollars are the actual EPA award for this individual project. Project category dollar amounts are estimates only and represent an equal division among the project categories.

Survey of Critical Wetlands in Rio Blanco County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100970

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Information on the Colorado Natural Heritage Program is at http://www.cnhp.colostate.edu. Individual CNHP documents and reports, including this WPDG project and other county wetland surveys, are available online at http://www.cnhp.colostate.edu/download/reports.asp. Information on CNHP's database and requesting CNHP data are at http://www.cnhp.colostate.edu/exchange/request.asp. Note: Subgrant

dollars are the actual EPA award for this individual project. Project category dollar amounts are estimates only and represent an equal division among the project categories.

Idaho

Development of a Comprehensive Wetlands Protection Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100394

Shoshone-Bannock Tribes Elese D. Teton, Tribal Water Engineer eteton@shoshonebannocktribes.com 208-239-4580

Shoshone-Bannock Tribes will develop important components of a comprehensive wetlands protection program. These components would build the Tribes' capacity to protect and restore the Reservation's surface waters by continuing development of wetland protection capabilities through regulation, monitoring and assessment, restoration, outreach, and through coordination and partnership with other Tribal programs and interested parties.

Kansas

Grant Link Mapping and Characterization of Playa Basins

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100580

University of Kansas Main Campus Dr. William C. Johnxon wcj@ku.edu 785-864-5548

Playa Basins of the High Plains of western Kansas are the primary wetlands of this region. The project is to map and characterize the playas and develop a protocol for assessment of wetland functions. Creating the first comprehensive databse for playa wetlands on the High Plains of western Kansas and developing a regional subclass-specific guidebook for applying the Hyrdogeomorhpic (HGM) Approach to assessing wetland functions of Playa Basin Depressional wetlands on the High Plains Playa depressional wetlands in western Kansas.

Maine

<u>Integrating Wetlands into the Maine DEP Biomonitoring Program and Developing a</u> Comprehensive Wetland Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100417

ME DEP/Bureau of Land and Water Quality/Biological Monitoring Program Jeanne DiFranco jeanne.l.difranco@maine.gov 207-822-6359

This project will continue to refine the statewide comprehensive wetland monitoring and assessment program by collecting and analyzing wetland biological data. The Maine DEP Biomonitoring Program will coordinate with DEP's river, stream and watershed program and focuse on watersheds not previously sampled, including some tribal areas.

Missouri

Criteria for Headwater Monitoring

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100591

Missouri Department of Natrural Resources Amanda Sappington amanda.sappington@dnr.mo.gov 573-751-8728

This project will develop a methodology appropriate for assessing intermittent and ephemeral streams. The study is needed to determine how shifts in flow regime due to headwater impoundments affect the physical habitat, hydrology, and biology of these ecosystems. The resulting methodology will be used for state comprehensive wetland monitoring and will enhance future headwater stream research.

Kansas Impoundments on Missouri Wetlands in the Marmaton and Marais des Cygnes Watersheds http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100278

Missouri Department of Conservation Daniel Zekor daniel.zekor@mdc.mo.gov 573-522-4115

Flood control impoundments planned by Kansas in the Marmaton and Marais des Cygnes Watersheds will decrease the frequency that extensive wetlands in this drainage will be inundated. This project will provide information on the impact these impoundments will have on wetland hydroperiods, vegetation, and selected wildlife species to aid stakeholders in developing strategies to protect private and public wetlands in west-central Missouri

Montana

<u>Confederated Salish and Kootenai Tribes - Wetlands Program Development and Watershed-Based</u> Monitoring and Assessment of Reservation Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100517

Confederated Salish and Kootenai Tribes Richard Janssen, Manager, Environmental Protection Division richj@cskt.org 406-883-2888

This project supports the Confederated Salish and Kootenai Tribes' Wetland Conservation Plan and watershed-based Wetland Monitoring and Assessment Strategy. Program goals and objectives are to protect and conserve wetland and riparian areas within the Flathead River watershed of western Montana and meet the goals of stopping loss of wetland quantity and long-term, increasing wetland quality by restoring Reservation wetlands and riparian areas. This project supports these program objectives and goals by monitoring and assessing wetland health in the Jocko River watershed.

Development of a GIS Level I Assessment Tool

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101131

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 404-444-3380

This project will develop a GIS Level I assessment tool that will identify and refine landscape-level metrics for preliminary assessment of site-level wetland condition. This project is part of Montana Natural Heritage Program's (MTNHP) three-year project to update and expand digital wetland mapping

for watersheds with significant development pressures. Six of nine ecological sections of Montana (Flathead Valley, Northern Rockies, Rocky Mountain Front, Northwest Glaciated Plains, Bitterroot Valley and Belt Mountains) will be covered by the GIS Level I Assessment Tool. There are five tasks associated with this project: 1) identify landscape-level assessment metrics to produce a preliminary assessment of site-level wetland condition; 2) develop a probabilistic sampling strategy for model refinement; 3) computer test the model; 4) field test and refine the model; and 5) develop a Level I GIS tool that can be used by ArcMap users to evaluate wetlands. The probabilistic sampling strategy incorporates a stratification approach by geographic area and wetland type, and uses GIS to query 24K USGS quads identifying at least 20 sites of the 15 most prevalent unaltered wetland type in each geographic area. The prototype model will be tested and refined by classifying condition these sites and randomly selecting a small subset to examine using orthophotos and National Agricultural Imagery Program color IR photos. The subset will be entered into a blind database and field-assessed using a rapid assessment tool. Results from the Level I and Level II assessments will be compared to determine the accuracy and sensitivity of individual parameters. This user-friendly Level I GIS model will be disseminated to wetland planners and managers in Montana and will run with datasets readily available from the Montana State Library's Natural Resource Information System (NRIS), enabling identification of high-quality wetland areas for conservation, protection, monitoring, or mitigation. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

Fort Belknap Indian Community - Wetlands Management Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100519

Fort Belknap Indian Community Julia Doney

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Mapping and Analysis of Geographically Isolated Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101130

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 404-444-3380

This project will fill data and information gaps by mapping, analyzing, and surveying geographically isolated wetlands in Montana. The Montana Natural Heritage Program (MTNHP) will use existing NWI maps, wetland maps being produced under a pilot mapping and change detection project, NAIP color IR photography, and maps created specifically for this project to assess the scope, condition and status of isolated wetlands including ephemeral and intermittent streams. An analysis of wetland acreage, types, functions and values will be compiled and wetland types and/or geographic areas most in need of protection will be prioritized. Using NatureServe and MTNHP databases, wetland types, associations and species at risk will be identified. HGM functions will be assigned to mapped wetlands using a GIS model created under an earlier WPDG, enabling an analysis of functions at risk. Field surveys will be conducted to identify high-quality reference wetlands. High quality reference wetlands will be entered into the MTNHP and State databases. Models developed will guide the acquisition of additional digitized NWI data and/or creation of new digital maps from IR photos. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

Northern Cheyenne - Comprehensive Wetland Monitoring and Assessment Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100518

Northern Cheyenne Tribe David Millegan

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The goal of the Northern Cheyenne Tribe's Wetland Program is to ensure that Reservation wetland resource management achieves no net loss and to provide protection to vulnerable wetlands, with the ultimate goal of a net gain of wetlands. This project supports enhancement of the Northern Cheyenne Tribe's wetland monitoring and assessment program through several tasks. Information will be gathered to develop management strategies to control non-native, invasive wetland species. This project will also evaluate the cumulative effect of wetland loss and restoration. This project also supports Northern Cheyenne coordination with the USACE and EPA pursuant to the USACE/EPA Memorandum of Agreement on Mitigation, 1990.

Wetland Monitoring in the Milk River Watershed on the Blackfeet Indian Reservation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100520

Blackfeet Tribe Gerald Wagner

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The Montana Department of Transportation is planning several major highway improvements on the Blackfeet Reservation, and many of these will impact wetlands on the Reservation. Work tasks under this Wetland Program Development Grant will include refining the current Montana Department of Transportation's wetland rapid assessment method to include vegetation monitoring and field testing the revised Level 2 Rapid Assessment Method and Level 3 Vegetation Monitoring Method for assessing wetland condition. The current Wetland Program Quality Assurance Project Plan will be revised to incorporate selected vegetation monitoring. The project will identify reference wetlands and impacted wetlands based on data that has already been collected. The project will also monitor 12-24 wetlands in the Milk River watershed. These tasks support continued development and enhancement of the Blackfeet Tribe's Wetlands Program.

Nebraska

<u>Investigating the role of the Rainwater Basin Wetlands Contributing to Groundwater Recharge,</u> Water Ouality, & Wildlife Habitat

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100283

Nebraska Game and Parks Commission

Ted LaGrange ted.lagrange@ngpc.ne.gov 402-471-5436

Rainwater Basin wetlands of Nebraska area of international importance and provide critical habitat for a variety of wildlife, and may contribute to groundwater recharge and water quality improvement. This project will investigate the role of Rainwater Basin wetlands, in south-central Nebraska, in contributing to the function of ground recharge, water quality improvement, and wildlife habit including an assessment of the impact of sediment on these functions. (grant was funded in 2006 and 2007 under the same grant number - Grant for 2006 was funded for \$257,126 and Grant for 2007 was funded for \$226,936 with a total of \$484,062 - Grant for 2007 is CD987804012)

Nevada

Fallon Paiute Shoshone Tribe Wetland Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100364

Fallon Paiute Shoshone Tribe Richard Black richard@enviro-fpst.org 775-423-0590

The purpose of this project is to assist with the development of the Fallon Paiute Shoshone Wetland Protection Program.

New Mexico

Rapid Assessment Project, Wetlands Action Plan, and Mesilla Valley Wetland Projects

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100277

New Mexico Environment Department Maryann McGraw maryann.mcgraw@state.nm.us 505-827-0581

Three projects were funded in this grant:: 1. Rapid Assessment (formerly Hydrogeomorophic modelint)Project - \$428,036 2. Wetlands & Riparian Corridors, Phase II - \$101,663 3. Messilla Valley (formerly Riverside Recreation Area Restoration) - \$91,369

North Dakota

Building Capacity: the Region 8 Bioassessment Workgroup

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100990

International Water Institute Charles Fritz charles.fritz@ndsu.edu 701-231-9747

Estimating Wetland Quality for the Missouri Coteau, North Dakota: Phase II

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100981

North Dakota State University Edward (Shawn) DeKeyser edward.dekeyser@ndsu.nodak.edu 701-231-7590

Remote Wetland Landscape Profiles for Agricultural Wetland Assessment and Monitoring

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100982

University of North Dakota, John D. Odegard School of Aerospace Offer Beeri beeri@aero.und.edu 701-777-6095

Northern Mariana Islands

Coral Reef Biological Criteria Development for the Commonweatlh of Northern Mariana Islands http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100365

Commonweath of Northern Mariana island - Division of Env. Quality

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This project will develop biological criteria for the nearshore coral reef ecoystems of the Commonwealth of Northern Mariana Islands

Ohio

Assessment of Wetland Mitigation Projects in Ohio

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100292

Ohio Environmental Protection Agency Mick Micacchion mick.micacchion@epa.state.oh.us 614-644-2001

A randomly selected group of individual wetland mitigation projects from around Ohio were studied to determine their ecological performance. Projects were stratified by the number of years since construction and were put into groups of five year intervals. Those groups were: less than five years since construction ("recent"); five to ten years since construction ("middle"); and more than ten years since construction ("old"). Twenty-six projects were randomly selected and monitored, seven were from the recent group, ten were from the middle group and nine were from the old group. Wetlands were monitored for the ecological condition using the Vegetation Index of Biotic Integrity (VIBI) and the Amphibian Index of Biotic Integrity (AmphIBI). Automatic water level recorders were deployed at each wetland and the data was used to develop hydrographs. Landscape Development Intensity Index (LDI) scores for the areas surrounding the study wetlands, both at 100 meters and 100 to 350 meters were calculated. Two sites did not meet wetland criteria, as no significant plant communities of any kind had developed. For all 26 mitigation projects, VIBI scores had a mean of 34.35, which was significantly different than the mean for a group of Ohio natural reference wetlands that span the range of human disturbance. VIBI scores found 38.5% (10 sites) of the 24 mitigation wetlands monitored to be in poor ecological condition, 42.3% (11 sites) were in fair ecological condition, and 19.2% (5 sites) were in good ecological condition. There were not significant differences between mean VIBI scores for mitigation wetlands based on age classes. There were also no significant differences between VIBI score means for mitigation wetlands in high or low intensity surrounding land uses based on LDI scores at both 100 meters and 100 to 350 meters. However, overall VIBI scores were higher for natural wetlands surrounded by low intensity land uses both at 100 meters and 100 to 350 meters. AmphIBI scores for the 24 projects monitored found 87.5% (21 sites) of the mitigation projects to be in poor ecological condition, 8.3% (2 sites) were in fair ecological condition and 4.2% (1 site) were in excellent ecological condition. There were not significant differences between mean AmphIBI scores based on age classes although the middle age group AmphIBI scores were, on average, higher than the other two age groups. There were no correlations between AmphIBI scores and LDI scores at either 100 meters or 100 to 350 meters as AmphIBI scores were uniformly low. Overall, based on VIBI and/or AmphIBI evaluations, of the 26 individual wetland mitigation projects 61.5% (16 sites) are considered failures, 15.38% (4 sites) are considered potential successes and 23.08% (6 sites) are considered successes. Reasons for successes and failures are discussed.

Pennsylvania

Support of Mid-Atlantic Wetland Workgroup

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100271

Pennsylvania Department of Environment Protection David Goerman, Jr. dgoerman@state.pa.us 717-772-5971

The Mid-Atlantic Wetland Workgroup (MAWWG) was formed in 2002. The primary objective of the MAWWG is to support a forum in which to facilitate the development and implementation of wetland monitoring strategies, including elements of a comprehensive wetland monitoring program, that meet the needs of the Mid-Atlantic states.

Utah

Groundwater Modeling to Assess the Effects on Wetlands, Salt Lake Valley, Utah

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101021

Utah DNR, Utah Geological Survey Mike Lowe mikelowe@utah.gov 801-537-3389

See proposal for project description. Proposal attached as project deliverable.

<u>Technical Assistance and Outreach for Refining the Reference Network and Rapid Assessment</u> Methods for Utah's Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101020

Utah DNR, Division of Wildlife Resources Nancy Keate nancykeate@utah.gov 801-538-4745

See proposal for project description. Proposal attached as project deliverable.

National

Building capacity for the ASWM to strengthen and expand state and other wetland programs http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859

Assoication of State Wetl;and Managers
Jeanne Christie

jeanne.christie@aswm.org

207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

2007

Arizona

Navajo Nation - Wetland Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100450

Navajo Nation Dariel Yazzie darielyazzie@navajo.org 928-871-7601

Navajo Nation will use existing data and newly gathered wetland monitoring and assessment data to create a Navajo Nation Wetland Information System (NNWIS) and GIS clearinghouse. Will continue developing their wetland protection program through conducting an assessment of their wetlands.

Arkansas

Rapid Checklist Assessment based on Hydrogeomorphic (HGM)

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100293

Arkansas Natural Resources Commission Ken Brazil ken.brazil@arkansas.gov 501-682-3980

The purpose of this project is to develop a rapid checklist-style assessment procedure based on hydrogeomorphic (HGM) classification and existing reference data, which would offer the Corps regulatory districts HGM consistent, if less sensitive, results for small projects.

White Oak Bayou Basin Strategic Area Management Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100300

City of Maumelle Jim Narey jimn@maumelle.org 501-851-2500

The proposed project includes the development of a Special Area Management Plan (SAMP) by a consulting firm, aimed at regulating, monitoring, assessing and protecting the White Oak Bayou Watershed wetland area. This project would be a collaborative effort involving the city of Maumelle, the city of North Little Rock, Pulaski County, the Little Rock District Corps of Engineers, and EPA Region 6.

California

Hoopa Valley Tribe - Hoopa Valley Wetlands Inventory

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100314

Hoopa Valley Tribe Louisa McConnell louisamcc@hoopa-nsn.gov 530-625-5515

The purpose of this project is to conduct an inventory of all Hoopa Valley wetlands using the United States Fish & Wildlife Services (USFWS) inventory protocol, and the California Rapid Assessment Methodology for wetlands.

Multi-species Fish Gene Micro-array - Southern California Coastal Water Research Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100312

Southern California Coastal Water Research Project Doris Vidal dorisv@sccwrp.org 714-755-3216

The purpose of this project is to demonstrate the effectiveness of a multi-species gene microarray as a rapid assessment tool for wetland monitoring in Southern California. The main objective is to develop a rapid tool to assess the biological impacts of contaminants because the need has been identified for such a tool through the Southern California Wetlands Recovery Project. Wetland condition, as measured by physical and landscape metrics, often does not reflect impairment from pollution. This grant examines the relationship between different methods of determining site condition using a new technique (gene microarray), the California Rapid Assessment Method (CRAM), and more traditional water and tissue chemistry indicators. It includes developing the application of the microarray technology for application in estuarine wetlands. Data on wetland condition is being collected at three sites in Southern California. The microarray data will be compared to intensive measurements of chemical contamination and biological effects in a common fish species with the goal of determining the relative ability of the microarray to detect differences among the sites. Similarly, the microarray data will be compared to CRAM results. The chemical analyte list includes pharmaceuticals and personal health care products, industrial and commercial compounds, pesticides, hormones, and miscellaneous compounds. Preliminary data indicate there are overall different gene expression profiles among some stations and there is genderspecific gene expression in fish. CRAM found no differences among stations with sites scores indicating good condition, while chemical and biological indicators show high concentrations and adverse effects in fish gonad tissues at two of the sites.

Ormond Beach Wetland Monitoring and Assessment and Restoration Planning - Calif.ornia Staste Coastal Conservancy

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100311

California State Costal Conservancy Peter Brand pbrand@scc.ca.gov 510-286-4162

The State Coastal Conservancy will monitor the present ecological conditions of the Ormond Beach Wetlands in preparation for restorataion and to enable the future tracking of the effects of restoration on the wetalnd's condition.

Colorado

<u>Development of a Regional Restoration and Protection Program for Mountain Fens: Phase 4 http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100521</u>

Colorado State University, Department of Forest, Rangeland and Watershed Stewardship David Cooper dcooper@rm.incc.net 970-491-5430

This project will extend an EPA-funded fen inventory and assessment development program to the next phase: restoration and protection. We will develop protocols for restoring and protecting fens from the most common disturbances observed in previous assessments of fens in the San Juan Mountain region. These methods will provide guidance for state and federal land managers, local governments, and others throughout Region 8 and the western US. Our products will include a detailed report and database and a field manual of common fen types, common disturbances, and restoration and management protocols. We

will train land managers and local government officials through workshops to enable implementation of fen protection and restoration programs. We will also produce a document with a range of wetland protection ordinance language that could be used by local governments to develop wetland and fen protection programs. This program will serve as a model for fen wetland programs throughout the mountainous western United States.

$\underline{\textbf{Survey of Critical Wetlands and Riparian Areas in Chaffee County, Colorado}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100522}$

Chaffee County Don Reimer, Planning Director dreimer@chaffeecounty.org 719-530-5565

Chaffee County will partner with the Colorado Natural Heritage Program (CNHP) to conduct a targeted survey and condition assessment of the County's wetlands and riparian areas. This project provides baseline information on the status and location of biologically significant wetlands in the headwaters of the Arkansas River within Chaffee County, an area experiencing increased recreation and residential development. Project activities include: 1) building partnerships through the formation of an Advisory Group; 2) identification of potential wetlands to survey; 3) coordination with on-going wetland projects; 4) field survey and condition assessment of wetlands; and 5) identification of potential conservation areas and synthesis of results. Results will be interpreted and disseminated to parties that can implement conservation of critical wetland resources. Data collected will also be used to support calibration and validation of newly developed statewide wetland assessment methods: Vegetation Index of Biotic Integrity and Ecological Integrity Scorecards. Project lead is Stephanie Neid, Ecologist, Colorado Natural Heritage Program, Colorado State University.

Delaware

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100385

Assessment of the Condition of Tidal Wetlands including the Impact of Sudden Wetland Dieback to Improve Wetland Protection and Restoration Efforts in Delaware

DE Department of Natural Res and Env Control Amy Jacobs amy.jacobs@state.de.us 302-739-9939

Tidal wetlands in the Inland Bays (IB) watershed are under excessive pressure from high rates of development and the occurrence of Sudden Wetland Dieback (SWD). This project will perform a probabalistic assessment of the condition of tidal wetlands in the IB watershed amd determine the impact of SWD. This information will be used to direct future restoration and protection efforts to improve the condition of wetlands.

Hawaii

Coral Reef Biocriteria Development for Hawaii - University of Hawaii

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEO:100313

University fo Hawaii Paul Jokiel

808-236-7440

The purpose of this project is to conduct a coral reef health assessment along gradients of pollution. Existing and new coral reef bio-assessment data will be used to develop coral reef bio-criteria.

Idaho

Development of a Landscape-scale Assessment Tool in Two Ecological Sections through Collaboration with the Idaho Wetlands Working Group

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100377

Idaho Department of Fish and Game Chris J. Murphy chris.murphy@idfg.idaho.gov 208-287-2728

Idaho Department of Fish and Game will develop a GIS model that accurately predicts wetland condition and general function for two ecological sections with high wetland impacts. The model will be developed by using reference wetlands, statistical analysis, and field assessments to validate the final product. This will result in a prototype Landscape-scale Wetland Assessment Tool useful for land management and planning.

Iowa

Development of an integrated wetland monitoring and assessment program for natural, restored, and reference wetlands in Iowa

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100306

Iowa Department of Natural Resources Dr. Mary Skopec mary.skopec@dnr.iowa.gov 319-335-1579

Iowa Department of Natural Resources will build upon the statewide comprehensive wetland monitoring and assessment program to expand their methodology to evaluate the ecological condition of natural existing wetlands, restored wetlands, and high quality reference wetlands.

Kansas

Assessment of Floodplain Wetlands of the Lower Missouri using the EMAP Study Approach Phase **II: Verification of Rapid Assessment Tools**

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101161

The wetland monitoring and assessment study will apply and test assessment tools, provide an unbiased estimate of the current condition of floodplain wetlands in the lower Missouri River study area. Gather and assess water quality, floristic, macroinvertebrate, and landscape data from 40 wetlands selected by an EMAP probability-based approach.

Maine

$\underline{\textbf{Evaluating Alternative Wetland Compensatory Mitigation Assessment Techniques}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100436}$

Maine Department of Environmental Protection Jeanne DiFranco jeanne.l.difranco@maine.gov 207-822-6359

Maine Department of Environmental Protection (DEP) is interested in visiting a variety of wetland mitigation sites at different stages of restoration and using applicable biological monitoring techniques to evaluate the sites success based on the ecological health of the biological community. A review of

currently available methods would be conducted in order to select the most appropriate method for each site based on the type of wetland and the biological assemblages present (plants, macroinvertebrates, algae, etc.). In conjunction with sampling these mitigation sites, DEP will also monitor comparable reference sites. To facilitate the comparison with the reference condition, the Tiered Aquatic Life Use strategy will be applied to assign Biological Condition Gradient tiers to all sites sampled. To date, DEP has focused monitoring efforts on areas of open water with communities of emergent vegetation, usually associated with a river, stream or lake. Drier-end wetlands, while recognized as a critical wetland type to monitor, have not yet been assessed. This project will afford DEP the opportunity to review existing monitoring methods not currently used and explore the possibility of expanding the program to wetland types and biological assemblages not currently being examined.

Maryland

Building Capacity to Perform Wetland Assessments

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100384

MD Dept of Natural Resources Erin McLaughlin emclaughlin@dnr.state.md.us 410-260-8713

The recipient will, in collaboration with the Virginia Institute of Marine Science (VIMS), produce a statewide landscape level assessment of all mapped non-tidal wetlands and will transfer from VIMS the capacity to conduct the landscape level analysis covering any region of the state to track changes in non-tidal wetland condition resulting from land use changes. Wetland stressor scores will be integrated into the revised state Green Infrastructure Analysis. The primary goal of this project is to develop the capability through technology transfer with VIMS to assess wetland water quality function and habitat function at periodic intervals.

Massachusetts

Building Capacity for Comprehensive Coastal Wetland Monitoring, Assessment, and Restoration http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100374

Massachusetts Office of Coastal Zone Management Bruce Carlisle, Acting Director bruce.carlisle@state.ma.us 617-626-1205

The Massachusetts Office of Coastal Zone Management (CZM), in collaboration with the Massachusetts Bays Program (MBP) and the Massachusetts Wetlands Restoration Program (WRP), is proposing to extend its wetlands program development work to build state and regional capacity for coastal wetland assessment, monitoring, and restoration. Capacity building will be achieved by creating a manual based on MACZM's recently completed rapid assessment for coastal wetlands report to EPA, implementing standardized tools for managing and reporting monitoring data, and generating a feasibility report and strategic plan for an integrated approach to the assessment, monitoring, and restoration of Massachusetts' coastal wetlands.

Massachusetts Wetlands: Monitoring and Assessment Phase 2

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100443

Massachusetts Department of Environmental Protection (MassDEP) and UMASS Amherst will collaborate to develop a Rapid Assessment Methodology (RAM) used for assessing freshwater wetland condition and validating the innovative computer program developed by UMass-Amherst, the Conservation Assessment & Prioritization System (CAPS). The CAPS was adopted by MassDEP to

predict ecological integrity on a landscape-scale. MassDEP will use CAPS, together with a RAM and intensive site assessment to help guide policy, regulation and management actions. Also, MassDEP will develop data to be incorporated into EPA's 2011 National Wetland Condition Assessment.

MA DEP Wetlands and Waterways Program Lealdon Langley, Director lealdon.langley@state.ma.us 617-574-6882

Missouri

2007 Missouri Wetlands Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100304

Missouri Department of Natural Resources (MDNR) Steve McIntosh steve.mcintosh@dnr.mo.gov 573-751-7823

The project aims to be the start of a Missouri Wetlands Monitoring and Assessment Program. To demonstrate a wetlands hydrologic monitoring program, describe and monitor the biological and chemical process required for hydric soil formation at the monitored wetlands; develop the biologic criteria to assess the biological functions of wetlands, and to measure wetland health for future wetland assessments at the monitoring sites.

Montana

Chippewa Cree - 2007 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100530

Chippewa Cree Tribe Keith Gopher keith@cct.rockyboy.org 406-395-4147

The 2007 wetland project for the Chippewa Cree Tribe will conserve and restore wetlands on the Rocky Boy's Indian Reservation in alighment with national goals of the Environmental Protection Agency of "no net loss" and focus of assessment of wetland conditions to achieve a net increase of total wetlands by 2011. The Chippewa Cree Tribe is currently implementing a comprehensive wetlands program to accurately assess and delineate Tribal wetlands through a rotating basin approach. Program objectives for FY07 will include; a fen wetlands protection demonstration project, public education (to include a fen identification workshop and a wetlands segment in an educational video), field testing a Tribal assessment method on wetlands monitoring sites, draft narratives for wetlands water quality standards, and continuing to aquire baseline data, including satellite imagery, of wetland sites on the reservation.

Nebraska

<u>Investigating the role of the Rainwater Basin Wetlands Contributing to Groundwater Recharge,</u> Water Quality, & Wildlife Habitat

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100302

Nebraska Game and Parks commission Ted LaGrange ted.lagrange@ngpc.ne.gov 402-471-5436 Rainwater Basin wetlands of Nebraska area of international importance and provide critical habitat for a variety of wildlife, and may contribute to groundwater recharge and water quality improvement. This project will investigate the role of Rainwater Basin wetlands, in south-central Nebraska, in contributing to the function of ground recharge, water quality improvement, and wildlife habit including an assessment of the impact of sediment on these functions. (grant was funded in 2006 and 2007 under the same grant number - Grant for 2006 was funded for \$257,126 and Grant for 2007 was funded for \$226,936 with a total of \$484,062 - Grant for 2006 is CD987804010)

Nevada

Moapa Band of Paiutes - Moapa Wetlands Protection Development Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100403

Moapa Band of Paiutes Darren Daboda d_daboda@yahoo.com 702-865-2787

The purpose of this project is to inventory, assess, and monitor the wetlands and the water quality of the Moapa wetlands.

North Dakota

Estimating Wetland Quality for the Missouri Coteau, North Dakota: Phase III

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100528

North Dakota Department of Health, Division of Water Quality Mike Ell mell@nd.gov 701-328-5214

The primary purpose of this three-phased (reconnaissance, sampling, analysis) project is to estimate and report on wetland quality in a designated area of the Missouri Coteau Level IV ecoregion within North Dakota. The Missouri Coteau is found within the Northwest Glaciated Plains Level III ecoregion which has the highest density of prairie pothole wetlands in the state. This ecoregional-scale probabilistic survey of wetland quality will be conducted using level I, II, and III wetland indicators and assessment methods developed for North Dakota wetlands. Earlier Wetland Program Development Grant (WPDG) projects developed an Index of Plant Integrity (IPCI) for temporary, seasonal, and semi-permanent wetlands of the Northwestern Glaciated Plains in North Dakota . The IPCI is Level III indicator of the vegetative quality of wetlands, and is a key tool for North Dakota Department of Health's goal of assessing wetland condition in the State. Another WPDG project developed a Landscape Wetland Condition Assessment Model (LWCAM), a level I model that uses satellite imagery and landscape metrics to predict wetland condition. Phase I of this three-phase project included generating the probabilistic survey monitoring design, conducting site evaluations and reconnaissance, and obtaining an IPCI prediction using the LWCAM. Phase II included development of a North Dakota Rapid Assessment Method (NDRAM) and field sampling and measurement of IPCI, NDRAM and Hydrogeormorphic Model (HGM) data at survey sites. Phase III will involve analysis, summarization and reporting of wetland quality based on data collected during Phases I and II of this project. Phase III will also include testing the Level II NDRAM tool for rapidly predicting wetland quality and analyzing the LWCAM level I model predictions through comparison of predicted quality to actual IPCI, NDRAM and HGM results. Edward "Shawn" DeKeyser and Christina Hargiss at North Dakota State University are the principal investigators and will lead the field sampling and data analyses for this WPDG project. Shawn DeKeyser's contact information is edward.dekeyser@ndsu.nodak.edu, 701-231-7868. Christina Hargiss's contact information is christina.hargiss@ndsu.edu and 701-231-8451.

Pennsylvania

Seasonal Pool Ecosystem Classification

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100380

PA Dept of Conservation & Natural Resources Greg Podniesinski ggpodniesin@state.pa.us 717-214-7513

This grant supports the development of a statewide classification system for seasonal pool ecosystems in PA. Data will be analyzed to classify and describe seasonal pool types, including descriptions of plant and animal composition and community structure. Threats to seasonal pool habitats and species will be identified and recommendations made for their conservation and management.

Utah

Completion of Site Specific Nutrient Standards for Farmington Bay Wetlands, Great Salt Lake Basin Wetlands Reference Network, and Phase I Wetlands Mercury Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100529

Utah Department of Environmental Quality, Division of Water Quality Jeff Ostermiller jostermiller@utah.gov 801-538-6370

See proposal for project description. Proposal attached as project deliverable.

Virginia

<u>Continuing Development of a Non-Tidal Wetland Inventory and Functional Assessment and</u> Monitoring Strategy for Virginia

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100447

Virginia Department of Environmental Quality Dave Davis dldavis@deq.state.va.us 804-698-4105

The goal of the project is continue to develop a complete wetland monitoring and quality assessment in Virginia's Coastal Plain, Piedmont, Valley and Ridge and Appalachian Plateau physiographic provinces. The proposal builds on existing work for Virginia's long-term wetland assessment strategy. This project will complete Phase 2 (model development and calibration) of the assessment process for Virginia.

Refinement of Method for Tidal Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100382

VA Institute of Marine Science Jane Arrowood Lopez jlopez@vims.edu 804-684-7029

The effort is centered on three watersheds in the states of Delaware, Maryland, and Virginia where they are developing a multi-level assessment methodology for Mid-Atlantic tidal wetlands. These additional Level III biological endpoint data will help provide local, state and federal agencies and resources managers with a better understanding of the functions and ecological services provided by these systems and the assessment tools necessary to provide regulatory protection to rare and unique wetlands, identify wetland restoration opportunities, and evaluate the suitability of proposed mitigation sites.

West Virginia

WV Wetland Rapid Assessment and Inventory Refinement

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100381

WVNAT - WV Div of Natural Resources Walter Kordek, Asst Chief, Wildlife diversity and Technical Support waltkordek@wvdnr.gov 304-637-0245

The project proposes to correct and improve the National Wetland Inventory for West Virginia by correctly registering wetland polygons to state-standard imagery and by augmenting the data set with smaller, previously unrecognized wetlands. It will also initiate a pilot to begin establishing a rapid assessment protocol (Level 2) for West Virginia wetlands. These activities are in preparation for participating in the Mid-Atlantic Wetlands Work Group supported 3-level approach to monitoring and assessment.

Wisconsin

Building Wisconsin's Wetland Monitoring and Assessment Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100409

Wisconsin Department of Natural Resources Tom Bernthal Thomas.Bernthal@wisconsin.gov 608-266-3033

This project is the fourth phase of a larger project to improve Wisconsin's capacity to monitor and assess its wetlands. The project consists of two components: 1. Revising the Wisconsin Rapid Assessment methodology (WRAM) for more effective regulatory application; test the revised method in pilot applications. Add amphibian habitat assessment and floristic quality assessment (FQI) 2. Integrating wetland data into watershed reporting and management as part of WDNR's overall water monitoring and assessment system. Have a template and the data architecture to add wetland assessment, tracking and monitoring information to WDNR's Surface Water Integrated Monitoring System (SWIMS) and Waterbody Assessment Display and Reporting System (WADRS), for potential use in Clean Water Act Section 305(b) reports; do a pilot analysis in at least one watershed.

National

Enhancing Wetlands Protection by Building Expertise and Improving Decisions Made by States, Tribes, Local Government and Land Trusts

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100872

Association of State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The key objective is to undertake five projects that will quantify problems and describe solutions for protecting vulnerable waters by collecting, analyzing, summarizing, and distributing information. The results of the tasks selected for funding will help States, Tribes, and local governments strengthen their wetlands programs by: 1) providing recommendations on how to improve the State Programatic Permit Program; 2) improve general knowledge among States, federal agencies and other partners on strategies to streamline permitting; 3) improve knowledge of Land Trusts and local governments with respect to their role in compensatory mitigation; 4)improve knowledge on wetlands and global climate change; and 5) support the development of Wetland Mapping Coalitions.

2008

Alaska

Assessing and attributing mapped wetlands considered important for supporting salmonid habitat.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100720

Kenaitze Indian Tribe (IRA) Brenda Trefon btrefon@kenaitze.org

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The Kenaitze Tribe will use a recently completed analysis of wetland maps to verify and document the corelations between predicted presence of coho salmon and actual presence. Verification will be conducted by visiting selected sites and setting traps for coho salmon. The Kenai Peninsula Borough GIS wetland layers will then be updated to reflect the actual presence of coho salmon as a wetland function and the likelihood of coho salmon at wetlands that were not sampled but met the analytical criteria of those sites that were sampled and found to support coho salmon.

Arizona

Ak-Chin Indian Community Wetland Protection Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100393

Ak-Chin Indian Community Kendra Tso, Director, Environmental Protection Department ktso@ak-chin.nsn.us 520-568-1159

The purpose of the project is to develop a wetland protection program through monitoring and assessment of Ak-Chin's wetland resources, and development of a Tribal Wetland Protection Ordinance and Anti-Degradation Policy, and a Wetland Restoration Plan.

Navajo Nation Wetlands Monitoring, Assessment and Mapping

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100470

The purpose of this project is to continue to monitor, map and assess the wetlands on Navajo Nation lands, in order to prioritize wetland protection needs and inform wetland decision-making. The geographic extent of this project includes the wetlands across the entire Navajo Nation.

S. Deb Misra

928-871-7996

Navajo Nation

Arkansas

Development of Geomorphology Mapping in the Coastal Plain Region of Arkansas

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100340

Arkansas Natural Resources Commission Ken Brazil ken.brazil @arkansas.gov 501-682-3980

This proposal seeks to complete a detailed geomorphic map of the Quaternary environments in the entire Coastal Plain in Arkansas. This project would complete areas not covered in the Quanchi River

Geomorphic mapping effort funded in 2006, and combine all Coastal Plain Geomorphic mapping in a single GIS coverage.

GIS Level 1 Wetland Assessment Model: Pilot Study in the Bayou Meto Wastershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100338

Arkansas Natural Resources Commission Ken Brazil ken.brazil@arkansas.gov 501-682-3980

This pilot study will build a Level 1 Wetland Assessment GIS model. The GIS model will predict Wetland Condition based on widely available coverages in a buffer surrounding the wetland, such as road density, population density, and land use, as well as variables within the wetland, such as LIDAR measurements and reflectance. The predicted Wetland Condition values will be compared to field assessments using HGM (level 3 Assessment) and correlations will be measured.

California

<u>California Rapid Assessment Methodology (CRAM) for Wetlands: Development of a Statewide Reference Network - Southern California Coastal Water Research Project http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100392</u>

Southern California Coastal Water Research Project (JPA) Christopher Solek chriss@sccwrp.org 714-755-3203

The purpose of this project is to develop a conceptual framework and initial network of wetland reference sites for the State of California in order to clarify and modify the California Rapid Assessment Methodology (CRAM).

Georgia

<u>Creation and development of additional tools and models for the Protection and Restoration of Georgia's Wetland and Aquatic Resources</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100803

University of Georgia Elizabeth Kramer lkramer@uga.edu 706-542-3577

The proposed project by the University of Georgia twill build on previous modeling efforts which developed tools to facilitate watershed planning for wetland protection. This project will create a user interface tool that allows users to access data for planning activities. (MKJ)

Development of a Wetlands Monitoring and Assessment Program in Georgia

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100804

Georgia Department of Natural Resources Branden Moody brandon.moody@dnr 404-675-1661

The Georgia Department of Natural Resources plans to establishe a program for the monitoring and assessment of wetlands. The goal of this project is to train and educate staff about wetlands and to establish a statewide protocol for monitoring wetlands in Georgia. This will include professional training

and fieldwork to identify wetlands, determine monitoring parameters and assess the condition of wetlands. (MKJ)

Idaho

Refining Idaho's Landscape-scale Assessment Tool: Demonstrating Wetland Planning Uses with Partners

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100406

Idaho Department of Fish and Game Chris Murphy chris.murphy@idfg.idaho.gov 208-287-2728

Idaho Department of Fish and Game, working with the Idaho Wetlands Working Group, will test and refine Idaho's prototype Landscape-scale Assessment Tool and demonstrate its applicability in wetland planning through partnerships. The main product will be a GIS-based decision-support tool for statewide landscape-scale wetland assessment.

Kansas

Assessment of Pesticide Deposition in High Plains Wetlands

To assess wetland conditions, and protect wetlands through demonstration whether pesticide contamination is or is not a high importance for High Plains wetland in Nebraska and Kansas. The primary goal is to provide insight into the degree of pesticide contamination in wetlands in order to gain a better understanding of how pesticide contamination issues should be considered within the context of wetland assessment and mitigation strategies. The secondary goal, will assess the effects of land use (cropland agriculture versus native grassland/CRP) on level of pesticide contamination.

Oklahoma State University

 $http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100348$

Dr. Jason Belden research@okstate.edu 405-744-1418

Kentucky

<u>Development of functional assessment and monitoring guidelines for stream restoration projects in Kentucky</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100805

University of Louisville Research Foundation, Stream Institute Michael A. Croasdaile, Ph.D. m.croasdaile@louisville.edu 501-852-3220

"The purpose of this project is to improve methods for assessing and monitoring stream functions to help Kentucky Division of Water to increase the likelihood that restoration projects will result in successfully functioning streams and associated wetlands. The main objectives are to (1) identify the primary physical processes (e.g., surface/subsurface water interaction, sediment dynamics, channel evolution, etc.) that contribute to functionally successful stream restorations in Kentucky; (2) design and apply cost-effective methods for assessing indicators of these processes prior to, and following construction to obtain baseline

inormation and evaluate post-restoration success; (3) produce guidelines for measuring and interpreting indicators of these processes, and offer training in these methods; and (4) incorporate functional criteria into existing Kentucky Water Quality Certification guidelines to improve the quality of compensatory restoration efforts.

Maine

<u>Applying Tiered Aquatic Life Criteria and EPA's Biological Condition Gradient Model to Maine</u> Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100455

Maine Department of Environmental Protection Jeanne DiFranco jeanne.l.difranco@maine.gov 207-822-6359

The Maine Department of Environmental Protection (DEP) is developing a standardized approach to apply Maine's tiered aquatic life criteria to wetlands for aquatic macroinvertebrate and algal communities. Focus of this work will be on emergent/open water marsh habitat and riverine/lacustrine fringe wetlands. The Biomonitoring Program also will adapt EPA's Biological Condition Gradient (BGC) model for Maine wetlands to allow for comparison of assessment results among different waterbody types and biological assemblages (aquatic invertebrates, algae). This project will focus on the development of a standardized process to determine wetland class attainment under the State's narrative criteria for fresh surface waters and provide other programs with consistent information about wetland condition and impacts from regulated activities. Maine DEP will be able to fully integrate wetlands into its water quality monitoring program and fulfill federal reporting requirements under Sections 305(b) and 303(d) of the Clean Water Act. This project enhances DEP's ability to evaluate wetland condition, and consistently interpret and present wetland monitoring results so that data may be more easily used by other DEP programs.

Preventing Maine's Best Wetlands from Slipping through the Cracks

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100404

Many sites in Maine supporting rare and exemplary wetland ecosystems and natural communities lack sufficient data for use in regulatory and planning review. Examples of these wetland types include rare communities in Maine such as Silver Maple Floodplain Forest, Coastal Plain Pondshore, and Pitch Pine Bog, and exemplary common types such as Red Maple Swamp, Sedge Meadow, and Shrub Swamp. These sites were originally documented in the 1980's and early 1990's as part of a landowner awareness campaign and have not been subsequently revisited. Seventy four of these sites are in the regions of southern and midcoast Maine projected to have greatest development pressure in the coming decades. Approximately one third of these sites lack sufficient data for mapping, and a number of others lack detailed enough information to assign quality ranks that are necessary to determine their relative significance. Additionally, the data for any site last observed 20 or more years ago is considered unreliable and is not included in current review or planning processes. The objective of this project is to document these sites using methods and mapping precision sufficient to make them suitable for use in regulatory and planning review.

Maine Natural Areas Program

Don Cameron

207-287-8040

<u>Wetland Protection and Assessment Thriough Landowner Collaboration in Maine's Central and Western Mountains</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100318

Maine Department of Conservation/Maine Natural Areas Program Kristen Puryear

207-287-8043

The Maine Natural Areas Program (MNAP) and the Maine Department of Inland Fisheries and Wildlife (MDIFW) will work with private and public landowners to gather, assess, and synthesize information on rare or significant wetlands in the Central and Western Mountains Ecoregions of Maine. The results of the survey will help close the gap on our knowledge of wetland communities in this ecoregion and complement comparable MNAP/MDIFW assessment work recently completed in the other regions of Maine. All data will be entered into MNAP's Biotics Database for conservation planning and environmental review, and will help enhance the state's understanding of the distribution and abundance of wetland-associated rare plants and animals and rare or outstanding natural communities. Also, collaboration with landowners, state agencies, and other conservation organizations will increase opportunities for management and/or protection of priority areas.

Maryland

<u>Effectiveness Of Best Management Practices In Restoring Temporary Impacts In Nontidal</u> Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100461

Maryland Department of the Environment Denise Clearwater dclearwater@mde.state.md.us 410-537-3781

The goal of this proposal is to determine if wetlands subjected to activities that are believed to be temporary in nature, are in fact being restored to their previous condition by implementation of BMPs. The objective is to collect data that will enable MDE to determine if adequate restoration of the disturbed areas has occurred, which BMPs are effectively implemented and which are not, and to refine BMPs and other conditions as needed to return the wetlands to their previous condition.

Massachusetts

<u>Massachusetts Wetlands: Monitoring & Assessment Freshwater (Phase 2) and Integration of Coastal Wetlands (Phases 1 & 2)</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100456

MA DEP Wetlands and Waterways Programs Lealdon Langley, Director lealdon.langley@state.ma.us 617-547-6882

The Massachusetts Department of Environmental Protection (MassDEP) has identified the need to monitor and assess wetland condition as a part of a comprehensive wetland program. MassDEP, in collaboration with the University of Massachusetts-Amherst (UMass), is developing a site-level assessment method that will provide the basis for developing a reliable Rapid Assessment Methodology (RAM). This project will expand the monitoring and assessment program, including the Conservation

Assessment Prioritization System model, to include coastal wetlands through collaboration with the Massachusetts Office of Coastal Zone Management (CZM). Coordination among MassDEP, UMass and CZM, will result in a comprehensive wetland monitoring and assessment program that includes all wetland types in Massachusetts. The goal of this inter-agency collaboration and work is to better protect wetlands through regulation, policy and additional outreach using the tools developed by this grant.

Protection Classification of Massachusetts' Spruce and Hemlock Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100405

Massachusetts Division of Fisheries & Wildlife-MassNHESP Patricia Swain pat.swain@state.ma.us 508-389-6360

The project will improve the Massachusetts Natural Heritage and Endanger Species Program's (MassNHESP) knowledge of the range and variations of Massachusetts' forested, conifer dominated wetlands. Spruce dominated wetlands are uncommon in Massachusetts. Hemlock swamps with sphagnum moss have not been carefully studied for classification in Massachusetts. Using GIS and other databases, MassNHESP will locate and visit these conifer wetlands. Vegetation and condition data will be collected and permanent plots established in the best examples of these community types. This would improve classification of the community types and establish baseline vegetation information along the geographical gradient. MassDEP's wetland datalayer would be checked for the occurrences of these community types and DEP would be informed of the results. Ranking criteria would be developed in conjunction with NatureServe. Greater protection of the best occurrences would result from ranking the quality of sites, and identifying the best for acquisition by conservation organizations, and, on state land, for inclusion in forest reserves or as High Conservation Value Forests. The baseline information on the community-types would provide an improved basis for mitigation and restoration, and for comparison over time as global climate changes. The natural community occurrences would be added to the "NHESP Natural Community" free public datalayer on MassGIS; improved fact sheets and classification descriptions would be available on the NHESP web site.

Missouri

University of MO Wetlands Riparian Buffers

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEQ:100345

University of MO-Columbia Jason A. Hubbart, Ph. D. HubbartJ@Missouri.edu

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This study will examine how buffers modulate stream temperature, and quantify the movement of water and nutrients from the stream to the adjacent riparian wetland.

Wetland Nutrient Monitoring and Biological Based Nutrient Enrichment Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEO:100344

Missouri Department of Natural Resources Steve A. McIntosh, MS steve.mcintosh@dnr.mo.gov 573-751-7823 To demonstrate a wetlands nutrient monitoring program in Missouri and develop biologically based nutrient enrichment assessment tools that can be used to develop wetland nutrient criteria and assess the health of wetland ecosystems.

Montana

Chippewa Cree - 2008 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101061

Chippewa Cree Tribe, Division of Environmental Protection Keith Gopher keith@cct.rockyboy.org 406-395-4147

Wetlands Program objectives for FY09 will include: inventory of outstanding wetlands for inclusion in wetlands standards, public education, developing partnerships for on the ground Best Management to protect wetlands, drafting numeric standards for wetlands water quality standards, developing reference networks for measuring total wetland plant community health, conducting a peer review of Tribal assessment method, and continuing to aquire baseline data of wetland sites on the reservation.

<u>Developing a Long-Term, Rotating Basin, Wetland Assessment and Monitoring Strategy for Montana</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100357

Montana Natural Heritage Program Montana State University Lynda Vance livance@mt.gov 406-444-3380

This project is the initial step in developing a statewide rotating-basin assessment and monitoring program. It has four parts: 1) We will conduct a Level I-II-III wetland survey in three important river basins, the Milk, the Marias and the St. Mary's, collaborating with the Blackfeet tribe to share resources and data in areas where state and reservation boundaries overlap. 2) We will create outreach and training materials to promote the Level I-II-III approach to tribes, agencies and other stakeholders who wish to conduct their own, more geographically intense assessments to complement the 2011 National Survey. 3) We will build data storage, maintenance and display capacity so that data is broadly accessible to state, federal and tribal resource managers, and the public. 4) We will guide the Montana Wetland Council monitoring and assessment workgroup to develop a long-term integrated, statewide, multi-jurisdictional wetland condition monitoring and assessment strategy, based on EPA's recommended elements. Outputs will include 1) a report to the Montana Wetland Council, Region 8 of the EPA, and the Blackfeet Tribal Council detailing the results of the wetland surveys; 2) a publicly accessible geodatabase for storing, retrieving and maintaining non-tribal wetland assessment data; 3) a minimum of three workshops on wetland assessment, and training materials that will be available through the MTNHP and MTDEQ websites; and 4) a draft Statewide Monitoring and Assessment Strategy.

Nevada

Fallon Paiute Shoshone Tribe - Wetlands Baseline Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100362

Fallon Paiute Shoshone Tribe Richard Black, Environmental Diretor richard@enviro-fpst.org 775-423-0590

The purpose of this project is to further develop the Tribe's ability to monitor and assess their wetlands, in order to better track and document the change in wetland acreage and condition. The Tribe will also monitor past wetland restoration projects to determine their effectiveness.

Moapa Band of Paiutes - Wetland Inventory and Evaluation of Desert Springs Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEQ:100389

Moapa Band of Paiutes Darren Daboda d_daboda@yahoo.com 702-865-2787

The purpose of the project is to increase the understanding of the Moapa Band of Paiutes Tribe's wetlands through monitoring, increase the tribal members' understanding of their wetlands through outreach, and selection of erosion control restoration methods. The Tribe will map the wetlands at Hogan Springs and Little Hogan Springs, monitor groundwater, surface flow and surface water quality, vegetation, and wildlife. They will demonstrate revegetation techniques for effectiveness for erosion control.

<u>Pyramid Lake Painte Tribe - Assessment of Wetland Water Quality and Macroinvertebrates and Correlation of Rapid Assessment methodology.</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100471

Pyramid lake Paiute Tribe Fannie Ely, Environmental Specialist fely@plpt.nsn.us 775-574-0101

The funds support the further development of the Tribe's Wetland Protection Development Program. The tribe will revise their Quality Assurance Project Plan, collect additional data on water quality and macroinvertebrates, correlate their wetland rapid assessment methods, and gain an increased understanding of the condition of their wetlands.

New Hampshire

Building A Watershed Model for Enhancing Wetland Protection in New Hampshire

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100321

New Hampshire Department of Environmental Services Collis Adams, Bureau Administrator cadams@des.state.nh.us 603-271-2147

The New Hampshire Department of Environmental Services (DES) will develop a preliminary multiagency GIS tool to integrate the review and protection of three primary wetland functions; specifically, flood flow storage, water quality improvement, and wildlife habitat. Using the preliminary framework of this model, DES will also develop an inspection and tracking program for mitigation, compliance and secondary impact assessments. The improvements proposed for the mitigation program come at a time when the addition of an in-lieu fee program, the Aquatic Resource Mitigation (ARM) Fund has recently been implemented. The DES will use this grant to apply a watershed model that assists stakeholders in three watersheds to apply for ARM funds for important wetland restoration and protection projects. Also, DES will provide local communities with tracking reports/GIS maps illustrating conservation lands and

mitigation sites within their town. This information will assist in the monitoring of these identified resources and enable towns to be proactive in land use decisions.

North Carolina

Documenting a signficant nexus to navigable waters in the headwater streams in the Southeast

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100807

NC Division of Water Quality John Dorney john.dorney@ncmail.net 919-715-3471

"This project will generate flow and macroinvertebrate data for headwater streams in all Region 4 States to document the extent of jurisdiction to Corps districts regionwide. It will produce a list of aquatic species found in traditionally navigable waters throughout Region 4 that can document a significant nexus to headwater streams and wetlands."

<u>Hydrologic Connectivity, Water Quality Function and Biocriteria of Coastal Plain Geographically</u> Isolated Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100809

NC DENR Virginia Baker

919-715-3475

The goal of the project is to expand work underway on isolated wetlands in eight NC and SC Coastal Plain counties. The results will provide a better understanding of the condition of isolated wetlands and their ecological functions, which is needed to better protect them at the state and national levels.

Oregon

Oregon Wetland Monitoring and Assessment Framework

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100323

Oregon Watershed Enhancement Board Greg Sieglitz Greg.Sieglitz@state.or.us 503-986-0194

Development of a framework for an Oregon Wetland Monitoring and Assessment program.

Pennsylvania

PSU Wetlands Assessment and Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100333

Penn State University Rob Brooks rpb2@psu.edu 814-863-1596

This project will compile, interpret and communicate reference data from the region for use in designing and evaluating restoration and mitigation performance. This will aid in the progression toward the development of comprehensive monitoring and assessment programs resulting in improved protection and

restoration of wetland resources for multiple state agencies and stakeholders in improving wetland mitigation.

Pennsylvania Wetland Plant Community Rarity Ranking and Identification

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100331

PA Department of Conservation and Natural Resources Greg Podniesinski

This project will assist the grantee in the identification of rare plant communities in Wetlands by ranking plants by their rarity, a field key and fact sheets developed to aid in plant identification.

Rhode Island

Monitoring and Assessment of Freshwater Wetlands in Rhode Island

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100453

RI DEM Office of Water Resources Carol Murphy carol.murphy@dem.ri.gov 401-222-4700

The Rhode Island Department of Environmental Management (RIDEM) will continue the development of a wetlands monitoring and assessment program by applying its rapid assessment method (RAM) to sixty (60) additional wetlands during 2009. The project will deliver data to improve the characterization of wetland condition in Rhode Island and provide additional information on the relative importance of wetland stressors and the causes of degradation. This information, in combination with data collected in prior years, will assist RIDEM in evaluating the effectiveness of various protection efforts and, where needed, strengthening policies or devising new strategies to protect and restore the ecological functions and values of wetlands in the state. Wetland monitoring will be targeted to 1-2 watersheds to support the integration of this program with related surface water quality programs. The project will be conducted via a cooperative agreement between the RIDEM and the Rhode Island Natural History Survey.

Vermont

$\underline{\textbf{Strengthening and Refining Vermont's Wetland Protection and Monitoring Programs}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100454}$

Vermont Department of Environmental Conservation Alan Quackenbush alan.quackenbush@state.vt.us 802-241-3761

The Vermont Department of Environmental Conservation (DEC), Wetlands Division is committed to updating the Vermont Wetland Inventory Maps. These maps are critical for wetlands protection in Vermont because they are the basis of the wetlands regulatory program. The DEC will update the inventory maps using data from newly digitized National Wetlands Inventory maps, town wetland maps, the Wetlands Project Database and from wetland natural community inventories conducted by the Vermont Fish and Wildlife Nongame and Natural Heritage Program. Updated maps will provide a new baseline of the state wetland resources, and will be used to track wetland status and trends of wetland area (quantity) and quality. Wetland attributes, related to wetland type, function and condition, will be added to enhance the maps, based upon protocols under development. As a part of the wetlands monitoring and assessment program, DEC will continue the development of protocols for assessing wetland condition. These protocols will be used to help update the Vermont Water Quality Monitoring Strategy. Also

proposed is the development of Best Management Practices (BMPs) for restoration and mitigation projects to ensure their long-term success.

Virginia

<u>Continuing Development of a Non-Tidal Wetland Inventory and Functional Assessment and</u> Monitoring Strategy for Virginia

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100462

Virginia Department of Environmental Quality Dave Davis dldavis@deq.state.va.us 804-698-4105

The goal of the project is continue to develop a complete wetland monitoring and quality assessment in Virginia's Coastal Plain and Piedmont physiographic provinces. The proposal builds on exisiting work for Virginia's long-term wetland assessment strategy. Tasks include: Completion of Level II assessment of non-tidal piedmont wetlands, Continuation of Level III in Coastal Plain and selected sites in Piedmont Public Outreach and Technology transfer

Hydrogeomorphic Approach to Flats in Mid-Atlantic Coastal Plain

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100330

VA Institute of Marine Science Kirk Havens kirk@sweethall.wetlan.vims.edu 804-684-7386

This project will develop a Regional Hydrogeomorphic guidebook for Coastal Plain Flats in the Mid-Atlantic which will provide guidance in determining functions associated with flats for use in the Mid-Atlantic which will provide guidance in determining functions associated with flats for use in the regional regulatory programs. This project will provide information that will direct efforts on how to best restore and protect wetlands.

National

Developing Wetlands Monitoring & Restoration Strategies for Climate Change

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100855

Association of State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The project will provide direction on how to monitor and assess changes in wetlands induced by climate change and then how to apply wetland restoration techniques to minimize and offset those changes. States, tribes, and local governments are increasingly aware of the need to manage wetlands for climate change and they recognize this will largely be done in the context of existing programs. The purpose of this project is to identify tools and information available to help them make decisions, about 1) using wetlands monitoring and assessment to measure changes and 2) identifying wetlands restoration techniques and practices that can be applied to mitigate the impacts of climate change. In this context ASWM proposes to work with partners to develop a comprehensive national and international bibliography and other materials about wetlands and climate change and make them available on the internet. In addition it will undertake two pilot projects, one on the west coast and the other on the east coast. The goal of this project is to assemble information about wetlands in one place accessible on the web and organized to be useful to wetlands professional at the state, tribal, and local level. In addition the

two pilot studies will show how information already available can be applied to analyze and plan wetland restoration. The Wetlands Conservancy, the Oregon Natural Heritage Information Center and the North Carolina Department of Environment and Natural Resources will partner with ASWM to carry out the pilot studies.

<u>Development and Implementation of an Integrated Monitoring and Assessment Program for the Different Tidal Wetlands of the Delaware Estuary</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100840

Partnership for the Delaware Estuary, Inc. Karen Johnson KJohnson@delawareestuary.org 302-655-4990

Project will establish a network of pilot reference sites covering different tidal wetland types and develop, test, and implement intensive monitoring and rapid assessment methodologies for examining the condition of diverse types of tidal wetlands in the Delaware Estuary. Reference sites located in DE, NJ, and PA.

Northeast Regional Floristic Quality Index

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100854

New England Interstate Water Pollution Control Commission Theresa Portante-Lyle @neiwpcc.org 978-323-7929

This project is to develop a Floristic Quality Assessment Index (FQAI) that is specific to the Northeast. FQAI is a multimetric index used to infer wetland condition information based on the vegetative plant community.

Wetlands Assessment Technical Assistance Center: EPA Region 4

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100852

Research Triangle Institute Kimberly Sherrill ksherrill@rti.org

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This grant is to develop and implement the Southeastern Wetland Assessment Technical Assistance Center (SEWATAC) to provide the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee with technical assistance and workgroup support for collecting, managing and analyzing wetland monitoring and assessment data. The workgroup's focus will be on rapid wetland assessment methods, statistically-based data analysis, and methods for collecting wetland assessment data for parameters such as vegetation, soils, hydrology, aquatic insects, amphibians, algae, and water chemistry. Technical assistance will be provided through a Webinar-based apporach, field training visits to participating states, and telephone and Web-based statistical assistance.

2009

Arizona

Seep-Spring Monitoring Program Development - Hualapai Tribe

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100786

Hualapai Tribe Donald Bay donbay@ctaz.com 928-769-2254

The main focus and accomplishment of this grant was to develop and refine sampling protocols for the assessment of seep and spring wetland habitats in the arid southwestern United States. Wetland habitats in the arid southwest are extremely fragile and support a great diversity of aquatic and terrestrial wildlife species even though some are only a few square meters in size. These wetlands habitats are extremely valuable due to their relative scarcity in such a large, arid area. Sampling them is very challenging due to their size and remote locations. Existing wetland sampling protocols do not adequately characterize spring and seep wetland habitats due to the nature of these habitats. For example, existing destructive sampling can be devastating to the biota of some of the smaller spring habitats. The protocols that were developed were used to assess both the biotic and abiotic characteristics of the seep and spring wetlands. Physical and chemical water quality parameters, and macroinvertebrate assessments were accomplished using these protocols. One unique deliverable from this grant, was the development of protocol for nocturnal sampling of invertebrate and vertebrate species. As part of the project, the Tribe implemented the assessment protocols on nine isolated spring and seep wetlands of the Reservation. In addition to the development of sampling protocols, the Tribe also developed indices of biological integrity that are unique to the spring and seep wetland habitats of the desert southwest. One final aspect of this project, was the development of curriculum to conduct workshops for federal, state, and tribal scientists in order to mentor others about how to implement these new sampling protocols. The Hualapai Tribe has conducted many outreach trainings and will conduct the next training in the spring of 2011, and welcomes attendance by anyone interested in learning about the assessment of desert wetland habitats.

Wetland Monitoring and Assessment Strategy - Arizona DEQ

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100825

Arizona Department of Environmental Quality Jason Jones jdj@adeq.gov 602-771-2235

The Arizona Department of Environmental Quality will develop a strategy for wetlands monitoring and assessment. Funding will allow for an update to the National Wetland Inventory.

Arkansas

White Oak Bayou Basin

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101420

City of Maumelle Jim Narey, Director of Planning and Zoning jimn@maumelle.org 501-851-2500

This project is the second phase in developing a wetland management plan for the White Oak Bayou watershed in Pulaski County, Arkansas. In this project a formal Steering Committee and Technical Committee will be formed. The Technical Committee will conduct a wetland assessment study utilizing the hydrogeomorphic functional assessment method. The Steering Committee will incorporate the results of the study into the watershed management plan along with various actions and elements to preserve and protect aquatic resources while addressing economic and community growth concerns. The project has given rise to a monthly newsletter produced by the city to inform the local citizens about the project and current activities as well as educate them about the biology and ecology of the White Oak Bayou Wetlands.

California

Seasonal Estuaries Assessment Method Development - San Jose State University - Moss Landing http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100828

San Jose State University - Moss Landing Marine Laboratory Erin Romer rclark@coastal.ca.gov 831-427-4873

SJSU at Moss Landing Marine Lab. will develop a California Rapid Assessment Model (CRAM) module for California coastal lagoons (seasonally tidal estuaries) in order that they may better assess, understand, and provide for the protection of coastal watersheds and wetlands. Specific project activities include: compilation of existing data on California coastal lagoons; verification, validation and calibration of the CRAM lagoon module, and ambient assessment of lagoons along California's coast.

Calif. Status & Trends Assessment of Wetlands - California Natural Resources Agency

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100829

California Natural Resource Agency Brian Baird brian,baird@resources,ca.gov 916-675-0198

This project will improve conservation and compensatory mitigation of wetlands and will result in an increase in wetland condition and acreage by augmenting the State's wetland inventory and adding to their wetland condition assessment efforts, all of which can be readily adapted to the Clean Water Act Section 404 regulatory program.

<u>Development of Integrated Measures of Ecosystem Condition - Southern California Coastal Water</u> Research Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100827

Southern California Coastal Water Research Project Dr. Eric Stein erics@sccwrp.org 714-755-3233

This project will improve conservation, protection and understanding of riverine and riparian wetlands by producing a functional community assessment methods and indices that can be readily adapted to the Clean Water Act Section 404 regulatory program.

Ecological Standards for Vernal Pool Compensatory Mitigation - University of California at Davis http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100826

The Regents of the University of CA- Davis Dr. Michael Barbour mgbarbour@ucdavis.edu 530-752-2956

"The project objective is to improve conservation and compensatory mitigation of vernal pools by producing a compensatory mitigation and monitoring methodology, with performance standards and analysis methods.

Yurok Tribe - Klamath River Estuary Wetlands Restoration Planning

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100787

Yurok Tribe Kathleen Sloan ksloan@yuroktribe.nsn.us 707-482-1822

Yurok Tribe will assess estuarine wetlands, monitor wetland water quality and refine prioritization of wetlands for protection. They will fill data gaps regarding the importance of the Klamath River's estuarine habitat quality in salmon restoration. A restoration plan will be developed.

Colorado

Tools for Colorado Wetlands: Essential Information for Identification, Assessment and Conservation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101041

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2127

The Colorado Natural Heritage Program (CNHP) proposes to develop two essential tools to aid in the identification and protection of wetlands and wetland-dependent wildlife in Colorado. This proposal builds and expands on several tools developed through previous EPA Wetland Program Development Grants. The first tool is the Colorado Wetland Field Guide (Guide), which will contain botanical descriptions of over 500 wetland plants as well as information on Colorado Division of Wildlife (CDOW) priority wildlife species and other wetland-dependent animals, wildlife and vegetation ecology, and rare and/or sensitive plants. Currently, a wetland professional or lay person needs several resources to properly identify and assess wetland vegetation. The Guide will serve as the ultimate resource to determine a plant's identity, wetland indicator status, coefficient of conservation, rarity, and ecology. The second tool will be the development of an easily accessible Colorado Wetland Website that will present a) information on wetland ecosystems and their conservation status, b) a database to calculate condition assessment scores for wetlands, and c) reports on Colorado wetlands and wetland assessment tools, and links to statewide wetland mapping and other wetland projects and programs—a virtual "one-stop shopping" for wetland information in Colorado.

Delaware

Delaware Wetland Assessment Methods and Water Quality Certification

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100800

Delaware Dept. of Natural Resources and Evironmental Control Mark Biddle mark.biddle@state.de.us 302-739-9939

This project will address the various programs through which wetlands are protected in Delaware, including; state and federal permitting processes and local land use review and decision making, to ensure that proposed improvements will protect vulnerable wetlands. It will also provide training to in-house regulatory reviewers, county land administrators, consultants and developers to understand wetland conditions in Section 401 Wetland permit reviews. In addition, an evaluation by ELI to provide recommendations on DE's wetland program will be conducted.

Florida

<u>Climate Change Vulnerability Assessment and Adaptation Opportunities for Salt Marsh Types in Southwest Florida</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101637

Southwest Florida Regional Planning Council Elizabeth Donley idonley@swfrpc.org 239-338-2556

the Charlotte Harbor National Estuary Program will inventory and map the physical extent of the five types of salt marsh present within the CHNEP Study Area. Researchers will then identify significant potential effects on these salt marsh ecosystems from anticipated climate change. An assessment of significant potential effects will be developed as well as identificant of opportunities for avoidance, minimization, mitigation and adaptation that could be implemented. An interactive GIS mapping product depicting the project outputs will be uploaded to the CHNEP website for use by researchers, local governments and the public.

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> Joseph Sound, Pinellas County, FL

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

<u>Performance Partnership Grants: Seminole Tribe of Florida Tribal Wetland Program Development Project</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101615

Seminole Tribe of Florida Craig Tepper

954-965-4380

the Tribe will develop a wetland management program for the Big Cypress, Brighton and Immokalee Reservations, develop Tribal capacity and assistal Tribal stakeholders to develop regulation regarding Tribal wetlans. Activities will expand the Wetland Management Plan to include the Immokalee Seminole Indian Reservation, identify, integrate, and expand Tribal efforts in the area of wetland management by identifying at-risk wetlands, integrate water quality and wetland efforts by conducting a study of aquatic species and conducting a study of water quality in the mitigation areas, mapping wetlands and developing a wetland geo-database and educating Tribal stakeholdrs, among others.

Iowa

Development of a Wetlands Condition Index for Iowa's Prairie Pothole Region

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEO:101230

Iowa Department of Natural Resources Vince Evelsizer vince.evelsizer@dnr.iowa.gov 319-335-1579

Iowa Department of Nature Resources will determine the validity of previously identified indicator metrics and evaluate additional metrics for wetland condition assessment. Will monitor 50 wetlands. The wetland condition index and standardized methodology provided from this study will provide protocol for assessing overall condition of Iowa's depressional wetlands.

Maine

Adding a Monitoring Component to Houlton Band of the Maliseet Indian's Wetlands Program http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100773

Houlton Band of Maliseet Indians

Sharri Venno, Environmental Planner water@maliseets.com 207-532-4273

The Houlton Band of the Maliseet Indians (HBMI) is a federally recognized Tribe located in Aroostook County Maine with over 850 acres of trust land along or near the Meduxnekeag River and a recently purchased 125 acre parcel in an adjacent watershed. HBMI's wetlands program has identified 150 acres of wetlands through soils mapping and focused on protecting and enhancing wetlands based on wildlife habitat assessment. The HBMI will begin to develop a wetlands monitoring and assessment program that will improve its ability to determine the causes, effects, and extent of pollution, to tribal wetland resources with the goal of implementing wetlands restoration and enhancement activities that optimize the biological and functional potential of wetlands.

$\underline{\textbf{Applying Tiered Aquatic Life Criteria and EPA's Biological Condition Gradient Model}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100772}$

Maine DEP Biological Monitoring Program Jeanne DiFranco jeanne.l.difranco@maine.gov 207-822-6359

The Maine Department of Environmental Protection's Biomonitoring Program (BP) assesses the condition of rivers, streams and wetlands by evaluating resident aquatic macroinvertebrate and algal communities. This project will focus on development of a standardized process to determine wetland class attainment under the State's narrative criteria for fresh surface waters, to provide other programs with consistent information about wetland condition and impacts from regulated activities. The ability to determine wetland class attainment will allow DEP to fully integrate wetlands into its water quality

monitoring program, and fulfill federal reporting requirements under Sections 305(b) and 303(d) of the Clean Water Act. Also, the BP needs to compare results among different habitat types and reaches in order to assess biological condition on a watershed scale. Different sampling methods must be used depending on the habitat of individual monitoring sites, and currently the ability to integrate the resulting data for watershed assessments are limited. The BP proposes to modify EPA Biological Condition Gradient (BCG) model for wetland invertebrates and algae to provide a common scale to compare biological condition among different resource types and sampling methods.

Massachusetts

Wetland Information Resource (WIRE) Public Access Tool and Massachusetts Wetlands Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100770

MADEP Wetlands and Waterways Program Lealdon Langley, Director lealdon.langley@state.ma.us 617-547-6882

The Massachusetts Department of Environmental Protection (MassDEP) will build a public access tool that allows Conservation Commissions (CCs), regulatory agencies, applicants and the public to view data related to wetland permit applications and permits issued on a GIS based map viewer. This project will expand public participation in project review and provide a tool to help CCs track and monitor projects, including those involving compensatory mitigation. Also, MassDEP will continue to build its wetland monitoring and assessment program by calibrating the Level 1 Landscape Model, Conservation Assessment and Prioritization System (CAPS), with data on wetland condition. They will update a statewide Wetlands Monitoring and Assessment Plan based on ongoing research being conducted in forested wetlands and salt marshes.

Missouri

The University of Missouri Wetlands Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101090

University of Missouri - Curators of the University of Missouri Jason Hubbart hubbartj@missouri.edu

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This project will examine the hydrology and fluvial geomorphology of the lower Hinkson Creek, an impaired stream as defined by Section 303(d) of the Clean Water Act.

Montana

<u>Developing a Statewide Rotating Basin Assessment and Monitoring Strategy for Montana</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101050

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 406-444-3380

This project is the second phase of a statewide rotating-basin assessment and monitoring program. It has five components: 1) Carry out a Level I-II-III baseline wetland survey in 11 watersheds in southwest Montana; 2) Develop outreach and training materials to promote the Level I-II-III approach to tribes, agencies, and other stakeholders who wish to conduct their own assessments; 3) Complete digital wetland

and riparian mapping in southeastern Montana in preparation for the third phase of basin-wide assessments; 4) Collaborate with the Northern Cheyenne Tribe to share resources and data to build capacity for developing a wetland assessment and monitoring on the reservation; 5) Refine data storage, management, and display capacity so that data are broadly accessible to state, federal and tribal resource managers, and the public.

<u>Development of a comprehensive mapping and assessment program on the Northern Cheyenne</u> Reservation, Montana

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100785

Northern Cheyenne Tribe Charlene Alden cwalden2001@yahoo.com 406-477-6506

The goal of the proposed wetland development program is to develop a comprehensive wetlands mapping and assessment program within the Tongue River watershed on the Northern Cheyenne Reservation in southeastern Montana. The Northern Cheyenne Tribe (NCT) developed a Wetlands Conservation Plan (WCP) in 2001, which presents an initial framework for wetlands conservation on the reservation. Since approving the WCP, the NCT has worked to develop a wetlands program, yet we are limited by a lack of comprehensive, digital wetland mapping and condition data. This lack of standardized wetlands data, combined with coalbed methane development occurring upstream, and the proposed Tongue River Railroad, has renewed interest in building on the existing WCP to develop a comprehensive wetlands mapping and assessment program on the reservation. In addition, we are interested in mapping wetland plants of cultural significance, and developing technical and non-technical wetland materials for use in environmental decision-making and education. With these desires in mind, four objectives were developed to guide the development of the Northern Cheyenne tribe's wetlands program: (1) map and assess wetland condition within the Tongue River basin on the reservation using established. Level I-III assessment approaches and Federal Geographic Database Committee wetlands mapping standards; (2) map culturally significant wetland plant species; (3) develop an accessible GIS-based data storage and display system for wetlands mapping and assessment data; and (4) develop outreach materials for dissemination of wetlands program data and findings. The NCT will partner with the Montana Natural Heritage Program's Wetland and Riparian Mapping Center, who will provide training and support to develop the wetlands program.

Nebraska

Nebraska's Wetland Condition Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100820

Nebraska Game and Parks Commission Ted LaGrange ted.lagrange@nebraska.gov 402-471-5436

"Nebraska Game & Parks Commission will monitor 110 sites in 11 different Nebraska Wetland complexes. These sites will be used to track changes to the health and condition of the state's wetlands."

Nevada

Pyramid Lake Paiute Tribe - Isolated Wetland Inventory and Monitoring

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100788

Pyramid lake Paiute Tribe Fannie Ely

fely@plpt.nsn.us 775-574-1000

Pyramid Lake Paiute Tribe will map and identify isolated wetlands, monitor previously assessed wetlands to determine trends, and report on the functions and values of wetlands on their lands.

New Hampshire

The New England Wetland Mapper: A Web-Based Application for Assessing Wetland Functions and Values

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100793

Land & Water Conservation Program Amanda Stone amanda.stone@unh.edu 603-862-1067

This project will develop the New Hampshire Wetland Mapper, an easy-to-use web tool that provides public access to data and techniques that support the study and evaluation of wetlands in New Hampshire based on the Method for the Comparative Evaluation of Non-tidal Wetlands in New Hampshire ("NH Method"). The tool will be embedded in web pages that provide associated data to facilitate wetlands mapping and evaluation. Serving these resources from one point will promote and enhance the use of the NH Method by community volunteers and professionals. The New Hampshire Wetland Mapper will allow users to explore wetland features and characteristics, and use this information in a watershed context to answer questions about wetland functions, identify potential prime wetlands, conduct wetland inventories, and identify potential restoration sites and at-risk wetlands.

North Carolina

North Carolina Wetlands Assessment Method (NC WAM) comprehensive training effort

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101690

North Carolina Dept of Environment and Natural Resources DWQ John Dorney John.Dorney@ncmail.net 919-733-9646

This grant will result in comprehensive training of state and federal agency staff (including staff from neighboring states) in the use of NC WAM and Surface Water Identification Training and Certification (SWITC) method. NC WAM is the new rapid wetland assessment method developed by a team of wetland scientists from NC DWQ, USEPA, USACE, NCDOT, NC Natural Heritage Program, and NC EEP. The method allows state and federal agencies to modify monitoring, permitting, and mitigation programs to reflect wetland quality in addition to acreage. An essential part of the 4-day training will be to emphasize proper use of the field manual.

Northern Mariana Islands

C ommonwealth of the Northern Mariana Islands -Coral Reef and Sea Grass Monitoring and Biological Criteria Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101210

CNMI Division of Environmental Quality Frank Rabauliman frankmrabauliman@deq.gov.mp 679-664-8555

Build upon previous coral reef work and establish monitoring in the Saipan Lagoon for seagrass-macroalgae seasonal cycles, impacts of disturbance and to determine the impacts of land-based pollution. In addition, CNMI will develop and incorporate seagrass biocriteria regulations into DEQ water quality standards.

Oregon

Benton County Wetlands Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100796

Benton County Community Development Department Greg Verret, Director greg.verret@co.benton.or.us 541-766-6294

A Benton County Wetland and Riparian Planning and Protection project will prepare wetland assessment data that will be used to inform watershed planning decisions, including the use of assessment data to prioritize wetland restoration and incentives for protection and enhancement across and within jurisdictions within Benton County, Oregon.

Pennsylvania

PA DCNR Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101280

PA Dept. of Conservation and Natural Resources (DCNR) Gregory Podniesinski gpodniesin@state.pa.us 717-214-7513

The primary goal of this project is to establish long-term monitoring sites to track the ecological health of high-elevation wetlands in Pennsylvania.

Rhode Island

Monitoring and Assessment of Freshwater Wetlands: Method Validation of the Rhode Island Rapid Assessment Methodology

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100774

Rhode Island DEM Office of Water Resources Carol Murphy carol.murphy@dem.ri.gov 401-222-4700

The project will characterize wetland condition in Rhode Island and provide additional information on the relative importance of wetland stressors and causes of degradation. This information, combined with data collected in prior years, will assist RIDEM in evaluating the effectiveness of various protection efforts and policies or help devise new strategies to protect and restore the ecological functions and values of wetlands in the state. The project will be conducted via a cooperative agreement between the RIDEM and the Rhode Island Natural History Survey.

Vermont

Strengthening and Refining Vermont's Wetland Protection and Monitoring Programs

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100775

Vermont Department of Environmental Conservation Alan Quackenbush alan.quackenbush@state.vt.us 802-241-3761

Vermont Department of Environmental Conservation (DEC) Water Quality Division will integrate the Wetland Program into other water programs (e.g., watershed planning, ambient water quality monitoring, etc.). The development of wetland assessment tools will be essential in providing a useful link between the wetland program and other water programs, and in providing a framework for the pending revisions to the Vermont Wetland Rules.

Wisconsin

Building Wetland Assessment and Monitoring Capacity, Phase 4

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101250

Wisconsin Department of Natural Resources Tom Bernthal Thomas. Bernthal@wisconsin.gov 608-266-3033

1. Wetland Condition Intensification Study--Lake Michigan tributary basins 2. Ephemeral Ponds Mapping and Monitoring--add 3 SE Wisconsin Counties--Washington, Walworth and Waukesha 3. Wetlands Activity Tracking, including a geospatial data base adding after-project wetland cover type and better covering transportation projects--Statewide

Enhancing the Capacity of Wetland Programs to Assess and Manage Habitat for Secretive Marshbird Support

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101450

Chicago Horticultural Society Daniel Larkin dlarkin@chicagobotanic.org

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The project will assist state, tribal, and local wetland programs nationwide with meeting conservation targets for secretive marshbirds, a key wetland function. Challenges in monitoring marshbird populations have resulted in this group being underrepresented in bird monitoring programs and in wetland programs' conservation planning which is problematic, as several species are of conservation concern. This project will integrate existing marshbird data with intensive sampling of wetland habitats to provide technical assistance to wetland programs. For a subset of Wisconsin's marshbird monitoring sites, the grantee will supplement Levels 1-2 site data and Level-3 marshbird data with Level-3 vegetation/habitat data collected using NWCA protocols. Chicago Horticultural Society (CHS) will assess relationships between habitat variables and marshbird diversity and abundance. Restored wetlands will be included to assess effectiveness of restoration at meeting habitat needs of secretive marshbirds. Guidance to wetland programs on site-level habitat requirements of secretive marshbirds, protocols for habitat and marshbird monitoring, and restoration recommendations to enhance marshbird support will be developed.

National

Rapid Assessment - Tidal Wetlands of Delaware Estuaries

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101470

Partnership for the Delaware Estuary Karen Johnson KJohnson@delawareestuary.org 302-655-4990

The Partnership for the Delaware Estuary, working with the States of Delaware, New Jersey, and Pennsylvania, will develop and test approaches to sample and assess the ecological condition of tidal wetlands in 5 representative watersheds of the Delaware Estuary using a probability-based sampling design and newly developed rapid assessment methodologies.

2010

California

<u>California Wetland Protection Program Development for 401 certification, wetland and riparian area policy, and wetland monitoring plan - Aquatic Science Center.</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101930

Aquatic Science Center Lawrence Leung lawrence@sfei.org 510-746-7356

This assistance agreement provides federal funding in the amount of \$350,000 to The Aquatic Science Center (ASC), to build on past wetland protection program work. Together with partners, ASC will: - provide scientific review of the watershed approach to 401 certification, - recommend wetland and riparian beneficial uses and water quality objectives, - develop a riparian buffer definition and mapping methodology, - expand capacity for tracking 401 certifications and related activities, - develop comprehensive statewide monitoring plan based on the USEPA wetland Core Elements, and - develop statewide guidance for implementing wetland and riparian rules in a watershed.

<u>California Wetland and Riparian Area Monitoring Program (WRAMP) for Sierra Nevada</u> Ecoregion - Aquatic Science Center

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101921

Aquatic Science Center Lawrence Leung lawrence@sfei.org 510-746-7356

This assistance agreement provides federal funding in the amount of \$345,000 to The Aquatic Science Center, to evaluate the efficacy of the California Wetland and California Wetland and Riparian Area Monitoring Program (WRAMP) for the Sierra ecoregion through a demonstration watershed assessment and landscape profile within the Tahoe Basin.

<u>Standardization of the California Rapid Assessment Methodology Update Process, Manual and Training Materials - San Jose State University</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101980

San Jose State University Erin Romer eromer@foundation.sjsu.edu 408-924-1440

To further develop a common set of tools and to improve state infrastructure related to comprehensive monitoring and assessment of wetlands. This will be accomplished by working with existing partnerships of regional experts and resource managers to standardize the California Rapid Assessment Method (CRAM) and supporting materials and establishing a quality assurance process for state agencies and the CRAM development team.

Colorado

<u>Development of Quantitative Invertebrate Community Sampling Protocols to Assess Playa</u> Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101767

University of Kansas James Thorp thorp@ku.edu 785-864-1532

Creation of a statistically valid, aquatic invertebrate monitoring tool for measuring the effects of stressors on playa wetlands and to develop a strategic long term plan for monitoring aquatic invertebrate community structure and composition in playa wetlands. We will develop the preliminary quantitative methods for collecting and storing macroinvertebrate data from playa lakes and similar seasonal wetlands. The main objectives of invertebrate monitoring are to provide biological indicators of potential and/or actual effects of various environmental perturbations on the health and functionality of aquatic habitats and to monitor and establish success criteria for constructed or restored habitats (Resh and Rosenberg 1984; Plafkin et al. 1989; Hutchison 1993; Rogers 1998). Our project will allow for the quantitative collection of macroinvertebrate data through time, with all data collections being statistically comparable. If the expected output of a playa wetland biomonitoring program is developed under this proposal and eventually adopted and funded through the coming decades, the data collected will produce a standardized baseline from which long and short term impacts can be identified and measured. Furthermore, these data will establish performance standards for habitats that are part of restoration efforts. This program will also lay the foundation for developing a playa wetland index of biotic integrity (IBI).metric identification and development, quality control, and potential funding needs.

Connecticut

Training to Improve the Protection of Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101591

Connecticut Department of Environmental Protection Darcy Winther darcy.winther@ct.gov 860-424-3063

This project is designed to build and refine an effective comprehensive 2011 Municipal Inland Wetland Commissioners Training Program (MIWCTP). The MIWCTP will provide clear guidance to wetland commissioners through workshops, curriculum handouts, an on-line training platform and a website to Connecticut's 170 municipal inland wetland agencies and the public on various programmatic topics, such as regulatory program requirements and how to identify wetlands and watercources. Included in CTDEPs effort to build and refine the 2011 MIWCTP, the CTDEP will evaluate the existing regulatory decision monitoring database infrastructure and assessment method. This evaluation will allow CTDEP to design a plan for refinements resulting in a modern data assessment process and data management system that supports training program objectives, monitoring program goals, and reporting compliance, thereby

allowing the CTDEP to measure the environmental results of the MIWCTP. The MIWCTP is an annual effort of the CTDEP, however, program building and refinement is unique each year, as the program curriculum needs to refect changes in wetlands science, law, court cases, administration, and policy; and, new contemporary training mediums need to be explored to ensure overall program effectiveness. There is a continual need to improve the knowledge and decision making ability of local inland wetlands agencies that are in the position of creating and enforcing regulations, ordinances, and permits, which protect wetland and watercourse resources.

Illinois

Assessment of Ecological Function of Created Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102150

Board of Trustees University of Illinois Kathy Young gcoaward@uillinois.edu 217-333-6323

Assessment of Ecological Function of Created Wetlands Study will develop a sampling methodology that will evaluate overall health and function of created seasonal wetlands in the state of Illinois. Aslo, develop an Index of Biological Integrity that incorporates information from two major biotic components (amphibians and plants) and one major abiotic component (water quality) of seasonal wetlands.

Iowa

Iowa Department of Natural Resources Wetland Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101650

Iowa Deparment of Natural Resources Vince Evelsizer vince.evelsizer@dnr.iowa.gov 319-335-1574

Iowa's workplan will design and carryout a three year monitoring study of drained (farmed) wetlands that focuses on three major components: wildlife value, water quality, and hydrological condition of wetlands in North Iowa.

Massachusetts

Wire and Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101600

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The Massachusetts Department of Environmental Protection will administer environmental programs for air, water, and waste with flexibility to direct resources where they are most needed to address environmental and public health priorities. [Performance Partnership Grant].

Minnesota

Development of a Tribal Wetlands Program for the Red Lake Band of Chippewa Indians

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102171

The project will consist of two parts in line with the two core elements upon which they are concentrating (see Project Description, section a, for descriptions directly related to core elements). First, in order to develop a wetland monitoring program, we will assess existing wetland data. Data will include GIS data (photos, National Wetland Inventory, LIDAR), biological data (fish, invertebrates, vegetation, etc.) and

physical/chemical data (pH, Nutrients, Dissolved Oxygen, etc.). This data will be used to inform us about both the state of the wetlands on the Reservation and the state of our current data availability. The results will help guide the development of our wetland monitoring strategy which will be incorporated into our Integrated Resource Management Plan. This document ensures coordination between all resource managers (natural resource and otherwise) throughout Tribal programs. As a component of the Monitoring Strategy, they will coordinate with Tribal, State, Federal, and Local units of government to develop an appropriate, non-overlapping, complementary monitoring design. A primary monitoring tool will be volunteer monitoring coordinated through the Red Lake Tribal College in partnership with the Red Lake DNR. The second major component of this project will be the development of a Tribal Wetland Protection Ordinance. Current protections exist only at the federal level on the Red Lake Reservation, and the federal presence is minimal. This has resulted in poor enforcement and probable oversights of wetland degradation. We will develop a Tribal Wetland Protection Ordinance that is at least as protective as the CWA carrying the authority of the Tribal Council and enforceable by local conservation officers. This effort will bring wetland protection under local control and result in greater protection to wetlands. The ordinance will also clearly define "wetlands of the reservation" and clearly state who holds authority over them. The process of developing this ordinance will include meetings with the ordinance committee and the planning department, public meetings with members, cooperative meetings with local counties and SWCDs who have dealt with wetland ordinance issues in the past, and direct meetings with the Tribal Council. The finalized ordinance will be presented to the Tribal Council to be passed by resolution.

Shane Bowe sbowe@redlakenation.org

Red Lake Band of Chippewa Indians

Missouri

<u>University of Missouri - Columbia Wetland Program</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101910

Curators of the University of Missouri Dr. Timothy Matisziw matsziwt@missouri.edu 573-882-1423

The project proposes a framework for better modeling of and reasoning about connectivity in aquatic resources and how changes in connectivity (particularly by altering the landscape) may influence the vulnerability of wetlands, streams, and inhabitant species. Three types of connectivity are essential and will be considered in this framework: 1)biological connectivity - corresponding to species movement potential; 2) chemical connectivity - the chemical relationship among water resources; and 3) hydrological connectivity - the hydrologic connection linking aquatic resources. The influences of barriers such as transportation infrastructure, landcover, terrain, and topography on potential connectivity among impact of proposed landuse changes to measures of biological, chemical, and hydrologic connectivity will also be developed. In conjunction with these efforts, capability to evaluate the impact of potential best management practices (BMPs) and emerging remediation technologies will be integrated.

Montana

Developing and Refining Montana's Wetland Assessment and Monitoring Strategy

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101762

University of Montana-Montana Natural Heritage Program Karen Newlon

knewlon@mt.gov 406-444-0915

This project will work toward the continued development of the Montana Natural Heritage Program's (MTNHP) statewide wetland assessment and monitoring strategy. The goals of this project are to: 1) complete the third phase of MTNHP's statewide rotating basin assessment and monitoring program; 2) continue the development of scientifically defensible rapid wetland assessment methods by calibrating and validating assessment metrics to independent measures of wetland condition; 3) continue to develop Montana's reference network by establishing regional differences in least disturbed condition; 4) integrate wetland assessment data into MTNHP web applications such as National Wetland Inventory mapping; 5) integrate wetland assessment data collected by MTNHP, as well as other agencies and organizations, into MTNHP databases and web applications; and 6) provide trainings and workshops to various partners on wetland data acquisition and potential uses. Outputs of this project will include: 1) estimates of wetland condition across several basins in southeastern Montana; 2) rapid wetland assessment methods that provide reliable measures of wetland condition; 3) biotic (vegetation) and abiotic (soils) indicators of ecological integrity that complement other indicators currently in development by other State partners; 4) readily accessible wetland assessment data information; 5) training to state, federal, and tribal partners, detailing methods of accessing wetland assessment data; and 6) a report to the Montana Wetland Council, EPA Region 8, and state, federal, and watershed partners across Montana.

<u>Development of a strategy for the identification, protection and restoration of fens in Montana</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101763

The University of Montana-Montana Natural Heritage Program Linda Vance livance@mt.gov 406-444-3380

This project will develop a clear and consistent strategy for the identification, protection and restoration of ecologically significant and vulnerable wetlands, focusing on fens. To accomplish this, we will 1) develop and refine GIS-based methods to distinguish fens from other saturated and semi-saturated wetlands and to identify hydrologic and ecological connections; 2) build GIS-based predictive models to identify fen-rich areas for field surveys; 3) identify and assess ecologically significant fens in the field; and 4) coordinate efforts to develop a multijurisdictional, Region 8 working group to set protection and restoration goals for fens. Outputs will include an illustrated set of photointerpretation guidelines; GIS layers and paper maps of target-rich areas for field surveys; a technical note on model development; a report with field data and descriptions; web-based assessment data and photos; and a multijurisdictional Region 8 work group, with a group workspace on the EPA Portal. As a result of this work, professionals and other stakeholders will have an enhanced ability to use aerial photography to identify fens and their hydrological/ecological connectivity; researchers will be able to target surveys for maximum efficiency; planners and other stakeholders will have maps and geographic data enabling them to minimize or avoid losses to fens; and agency biologists, researchers and non-governmental entities will be able to coordinate voluntary protection and restoration strategies.

Nebraska

<u>Developing LiDAR-Derived Wetland Maps to Assess Conservation Design Practices for Playa Wetlands in Rainwater Basin</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101860

University of Nebraska Board of Regents University of NE-Lincoln Zhenghong Tang ztang2@unl.edu 402-472-9281

To provide topgraphically correct, 3-D wetland maps to prioritize wetland conservation efforts and assess wetland conservation design practices.

Nevada

<u>Pyramid lake Paiute Tribe - Wetlands Program Development Grant Workplan - Improving</u> Wetland Protection Efforts

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101619

Pyramid Lake Paiute Tribe Fannie Ely fely@plpt.nsn.us 775-574-0101

The Tribe will review and verify their existing wetland monitoring program. They will train their staff in wetland monitoring and assessment methods, develop a Wetland Program Plan, and begin the development of a management plan for the Numana Wetlands.

<u>Washoe Tribe of Nevada and California Wetland Protection Program Development - Monitoring</u> and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101653

Washoe Tribe of Nevada and California Marie Barry marie.barry@washoetribe.us 775-256-8682

The Washoe Tribe of Nevada and California will build on past wetland protection program work to strengthen their wetland program. The Washoe Tribe will monitor and assess tribal wetlands, create a comprehensive wetland database to track the extent and distribution of tribal wetlands, develop a Tribal Monitoring and Assessment Strategy, and provide wetland education and outreach on wetland monitoring to Tribal members. These activities will help develop the Tribe's wetland protection program.

New Hampshire

Building Statewide Wetlands Monitoring and Assessment Capabilities

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101580

New Hampshire D. E. S. Paul Currier Paul.Currier@des.nh.gov 603-271-3289

This project addresses the Monitoring and Assessment and Water Qualty Standards Core Elements identified by USEPA's Enhanced State and Tribal Initiative. This project is an effort to improve coordination between New Hampshire DES's wetland program, provide the public with accessibility to GIS representation of wetlands biological condition, and lay the foundation for developing the full capacity for NH DES to do biological assessment of wetlands at landscape and site levels.

North Carolina

<u>Assessing Impacts Due to Small Impoundments in North Carolina to Support 401 Certification</u> Policies

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101800

North Carolina DENR John Dorney john.dorney@ncdenr.gov

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Abstract: The objective of this proposed project is to collect chemical, physical, and biological water quality assessment data to support 401 Certification permitting decisions and addition of appropriate permitting conditions when issuing 401 Certifications in regards to small, artificial impoundments in NC. Currently, NC does not require mitigation for impounded stream reaches due to flooding and includes minimal conditions in 401 Certifications that are issued for small, private impoundments. This contradicts NC Division of Water Quality (NCDWQ) mitigation and restoration policies, since DWQ provides stream mitigation credits for dam removal projects. There are also concerns that these impoundments can lead to water quality degradation to the point that they can no longer be considered a change of use but a loss of use (e.g. aquatic life use support). Results from a large-scale, probabilistic study of small impoundments by the Tennessee Department of Environment and Conservation (TN DEC 2006) indicated that the impoundments had adverse affects on the physical, chemical, and biological components downstream. Thee are concerns that similar impacts occur in NC as well. During regulatory review of 401 applications, DWO has insufficient data on small impoundments within NC to use as justification for inclusion of additional permit conditions based on concerns over these types of environmental risks. This study is intended to address these criticisms and also determine if existing data (such as the Tennessee study) are applicable to small, private impoundments located in the Blue Ridge and Piedmont ecoregions of NC.

<u>Determining Small Stream Biological Criteria for Small Streams for Stream Restoration Success</u> <u>Monitoring</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101790

NC DENR John Dorney john.dorney@ncdenr.gov

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Abstract: Stream mitigation generally involves the restoration of a degraded stream through construction of a new channel or enhancement of an existing channel. Many of the restoration projects used for compensatory mitigation are located on small first or second order streams, as these streams have been most degraded in the past, and are more conducive to restoration than larger channels. Monitoring of the restored channel is then accomplished through annual measurements of channel cross-sections, longitudinal profiles and other metrics to demonstrate channel stability and proper stream function. However, no evaluation of functional uplift or water quality improvement is done, even though these are often stted as goals in restoration plans. Existing biological critera, using aquatic macroinvertebrates, that have already been developed and in use in North Carolina for water quality studies, are not applicable to these small stream restoration projects. Besides the physical stability measures, a new set of metrics is necessary to demonstrate whether a small (first or second order) stream restoration project has appropriate biological function. This grant will develop an appropriate suite of metrics and success critera to evaluate aquatic life for stream restoration projects o more accurately assess the success of the mitigation efforts.

Pennsylvania

MidAtlantic Wetland Workgroup (MAWWG) Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101820

The Pennsylvania State University Niki Page NLG4@PSU.EDU 814-863-1005 The Pennsylvania State University (PSU) will support the MidAtlantic Wetland Workgroup (MAWWG) by conducting quarterly meetings, providing a format for states to collaborate and to share ideas. In this capacity, PSU will maintain the MAWWG website and will develop a Wetland-specific Water Quality Standard Prototype template which will be available for MAWWG states to use. A revision of the Regional Floristic Quality Assessment Index will be developed and available on the MAWWG website. The MidAtlantic Wetland Workgroup participants include all Region 3 states, as well as the states of New Jersey, New York, North Carolina and Ohio.

Rhode Island

Monitoring and Assessment: Inter-validation and Testing of RI Rapid Assessment Methods (RIRAM) and Floristic Quality Assessment Index (FQAI) at Selected Wetlands
http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101602

Rhode Island Department of Environmental Management (RIDEM)

Carol Murphy, Principal Environmental Scientist

carol.murphy@dem.ri.gov

401-222-4700

The Rhode Island Department of Environmental Management will administer environmental programs for air, water, waste and pesticides with flexibility to direct resources where they are most needed to address environmental and public health priorities. RI will continue the development of its wetlands monitoring and assessment program by integrating the application of the refined Rapid Assessment Method with the Floristic Quality Assessment Index (FQAI) being developed regionally. The project will allow RIDEM to use Level 3 vegetation data to further validate the RIRAM and document its robustness for characterizing wetland conditions. The project will also result in preliminary validation of the regional FQAI using the Rhode Island-specific coefficients of conservatism and will test the utility of both the RIRAM and the FQAI at wetlands restored via RIDEM enforcement actions beyond the period of required monitoring. RIDEM expects to demonstrate that RIRAM is effective at screening for reintroduction of stressors at restored sites. This project will appply RIRAM and the FQAI to a minimum of thirty (30) wetlands during the 2011 field season. The new information generated will support further policy and program development. The project will be conducted via continued partnership with the Rhode Island Natural History Survey (RINHS).

South Carolina

<u>Development of monitoring and assessment tools for nitrogen and phosphorous in SC Coastal</u> Wetlands.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102230

SC Department of Natural Resources Dianne Greenfield greenfield@dnr.sc.gov 843-725-4823

Provide regulatory agencies with targeted information regarding biological responses to elevated nitrgen and phosphorus levels in SC coastal wetlands. State will engage in field monitoring of nutrients and key biological indicators; conduct field experiments to determine wetland specific phytoplankton responses to nutrient loading; and perform laboratory experiments to determine the effects of alterred nutrient ratios on phytoplankton growth.

Utah

Developing scientifically valid tools to assess condition of Utah's wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101766

Utah Geological Survey Mike Lowe, Program Manager mikelowe@utah.gov 801-537-3389

Recent wetland conservation efforts emphasize an overall increase in wetland condition, and no net loss of wetland extent. However, we currently have little monitoring and assessment data on wetland condition, and lack a successfully developed rapid assessment model. Within Utah, the Great Salt Lake ecosystem contains the vast majority of Utah's known wetlands, is a nationally recognized ecosystem of significance, and serves as a desert oasis for millions of migratory birds. To protect this extraordinary resource, and address current limitations in information and assessment tools, we propose three main objectives to build collaborative partnerships and integrate knowledge, tools, and effort for more effective wetlands management. Our first objective is to improve Utah's Level-2 monitoring and assessment tools. We will conduct a landscape-level HGM-based reclassification of GSL wetlands, for use as a sampling frame in future wetland assessments. We will test the ability of USA-RAM and UWAAM to evaluate the condition of two important wetland classes, and modify/refine these models for GSL wetlands. Our second objective is to develop Utah's Wetland Program Plan for 2011-2016, through coordination and collaboration with other state wetland-focused agencies. Our third objective is to increase Utah's wetland database and infrastructure capabilities. We will compile a spatial dataset of publicly and privately held wetland management units, and develop the wetlands component of the Utah Geological Survey's website into a wetlands clearinghouse (including direct links to all state Developing scientifically valid tools to assess condition of Utah's wetlands wetland projects and programs), to integrate scientific knowledge, work effort, and resources among wetland groups, and move toward more comprehensive ecosystemlevel management of wetlands.

Virginia

FY2011-2012 VA Development of Wetlant Program Plan, Database Improvements and Continuing Monitoring Strategy for Virginia

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101890

Virginia Department of Environmental Quality Mr. David Davis david.davis@deq.virginia.gov 804-698-4105

This multi-media PPG provides funding to support ongoing environmental management efforts to increase the number of people breathing cleaner air; reduce risk from toxic air polutants; improve water quality; reduce waste generation and increase recycling; cleanup and reuse contaminated land; manage hazardous waste; increase wetlands; assess and cleanup brownfields; and promote environmental stewardship. This amendment provides \$1,457,008 of Federal funds as allowed by the FY 2011 Continuing Resolution and adds the Wetland Development Grant Program.

West Virginia

West Virginia Watershed Assessment Pilot Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101870

WV DEP Dennis Stottlemyer dennis.o.stottlemyer@wv.gov 304-926-0499

West Virginia Department of Environmental Protection (WVDEP) objective is to design and test a process that assesses the condition of aquatic resources and the impacts to those resources within a watershed, including an assessment of cumulative impacts and integration of information with multiple sources within and outside of government agencies. Additionally, WVDEP will develop common and consistent strategies for various government agencies and non-governmental organizations to partner and utilize various protection and restoration tools to achieve goals established for the watershed.

2011

California

Episodic and Non-Perennial Streams in CA - Southern California Coastal Water Research Project http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102395

Southern California Coastal Water Research Project Eric Stein erics@sccwrp.org 714-755-3233

Develop an assessment framework for episodic and non-perennial streams in California. This will fill the need for an appropriate assessment tool for monitoring these streams that do not have constant flow.

Three-Tiered Monitoring - Santa Monica Bay Restoration Authority

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102394

Santa Monica Bay Restoration Authority Sean Bergquist sbergquist@santamonicabay.org 310-961-4891

Develop standard protocols for Level 3 Wetland Monitoring (intensive monitoring), especially for restoration projects at southern California coastal wetlands. The results will be used to improve wetland planning and restoration methods and improve wetland ecosystem function and health.

Wetland Assessment and Wetland Program Plan Development - Robinson Rancheria

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102393

Robinson Rancheria Mike Schaver mschaver@robinsonrancheria.org 707-725-0205

Monitor wetland plant and macroinvertebrates on the Robinson Rancheria to increase the understanding of the biological condition of the Rancheria's wetlands. Using this information, the applicant will produce a Wetland Program Plan to outline the development of their program.

Florida

Development of a functional assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater and brackish water ecosystems used for water quality treatment.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102412

Southwest Florida Regional Planning Council Liz Donley - ext. 234 ldonley@swfrpc.org 239-338-2550

Develop a functiona assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater and brackish water ecosystems used for water quality treatment. This method would be utilized for evaluating and crediting water quality improvements in Basin Management Action Plans to address non-attainment of Total Maximum Daily Loads.

I mproving Compensatory Mitigation in Tampa Bay Watersheds (Alafia, Hillsborough, and Little Manatee Rivers).

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102411

Environmental Protection Commission of Hillsborough County Dawn Hart - ext. 1243 hart@epchc.org 813-627-2600

Conduct a survey analysis of wetland mitigation areas within the Alafia, Hillsborough, and Little Manatee River watersheds, which discharge into Tampa Bay, an estuary of national significance. This project will identify factors that impeded success during the monitoring period, which corrective actions were needed to attain success and whether the corrective actions were effective.

Hawaii

WETLANDS PROTECTION DEVELOPMENT - Coral Reef Assessment and Monitoring Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102399

University of Hawaii Ku'ulei Rodgers kuuleir@hawaii.edu 808-236-7440

Evaluate and refine the Coral Reef Helath and Watershed Health Index of Biological Indicators (IBI) in conjunciton with and update of the Hawaii Coral Reef Assessment and Monitoring Program (CRAMP) data.

Illinois

Assessment of Wetland Quality on Illinois Public Lands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102332

University of Illinois at Urbana-Champaign Kathy Young gcoaward@uillinois.edu 217-333-2187

Assessment of wetland quality on Illinois public lands study will develop and implement a wetland rapid assessment methodology that evaluated the ecological health and function of seasonal an semi-permanent wetlands on publicly managed state properties in Illinois. This study will also develop an Index of Biological Integrity that incoprates information from three major biotic components: amphibians, reptiles and macroinvertebrates in seasonal and semi-permanent wetlands.

Iowa

Development of Riverine Wetland Condition Monitoring and Wetland Program Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102361

Iowa Department of Natural Resources Brandon Harland brandon.harland@dnr.iowa.gov 515-281-3150

Summary: Beginning in 2004, a successful effort was initiated by the Iowa Dept. of Natural Resources to build a statewide comprehensive wetland monitoring and assessment program. To date, the development of wetland monitoring protocols and the actual monitoring of wetlands has focused on the Prairie Pothole (depressional) wetlands found in north Iowa. This proposal seeks to build upon the wetland assessment methods developed so far in the form of a three year project to integrate and adapt our monitoring methods (biological, chemical, physical) for an important, largely unsampled category of wetlands found in Iowa; riverine wetlands. A second important component of the project is to develop a Wetland Project Plan (WPP) for Iowa. This component would continue to build the framework for a comprehensive wetland program in Iowa.

Kansas

Development of Wetland Program Plan & Continuation of Heritage Stream project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102363

Kansas Water Office Deb Baker debra.baker@kwo.ks.gov 785-296-0612

The two major activities are proposed: 1. Complete an EPA compliant Wetland Program Plan for Kansas. 2. Build upon an ongoing project concerning potential heritage streams and watersheds to conduct a paired watershed study to demonstrate the role of wetlands in watersheds with high quality samples, functional assessments, additional HUC watersheds with potential wetland identified and incorporation of findings from heritage stream watersheds into a Kansas Water Plan policy paper.

Maine

Developing Algal Indicators to Enhance Maine Wetland Condition Assessments

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102280

Maine Department of Environmental Protection Beth Connors

207-441-6139

The DEP Biological Monitoring Program will conduct analysis of algae monitoring data to enhance its ability to assess wetland condition. To date, DEP has focused on biocriteria development for wetland macroinvertebrates, and needs to build assessment capacity using additional biological assemblages. Algae are excellent environmental indicators, and provide an important complementary approach to current assessment methods since they are often more sensitive than macroinvertebrates for some stressors, such as excess nutrients and certain toxic pollutants. The Biomonitoring program has a substantial amount of existing wetland algae data, and needs to conduct a thorough analysis to develop metrics and species tolerance values in order to use these data to assess wetland condition. This process will involve intensive data management. DEP plans to collect additional monitoring data to help establish reference conditions and fill data gaps for certain geographic areas of the state. In addition, DEP will

explore future options to incorporate vegetative indicators into its monitoring and assessment program. This will likely involve application of the Floristic Quality Assessment Index developed through the New England Biological Assessment of Wetlands Workgroup, as well as methods sharing with other state agency partners. Final products will include new wetland algae data reports, including individual taxa lists and algal condition metrics

$\underline{\textbf{Development of a Wetland Program Plan for Penobscot Indian Nation Territories}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102284}$

Department of Natural Resources John Banks john.banks@penobscotnation.org 207-817-7330

The Penobscot Nation will create a Wetland Program Plan and subsequent Wetland Protection Plan for trust and reservation lands. The Penobscot Indian Nation currently has over 130,000 acres of land that have been returned to them as a result of the Maine Indian Land Claims settlement Act of 1980. Thousands of acres of wetlands located within Penobscot Nation territory current have minimal protection. The Penobscot Nations plans to increase the accuracy of wetlands delineated in the past through "ground truthing" and will consolidate various classifications into one system that is unique to the Penobscot Nation's cultural uses of wetlands. They will also work collaboratively with the University of Maine to incorporate new reasearch and protective measures into our Wetland Protection Plan as well as delineate new wetlands that can be added to their database. They will then share the outcomes with various tribes and agencies throughout the northeast.

Numeric Aquatic Life Use Criteria for Wetland Macroinvertebrates

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102550

Maine Department of Environmental Protection Jeanne DiFranco ieanne.l.difranco@maine.gov 207-822-6359

The DEP Biological Monitoring Program proposes to complete a linear discriminate model to assess wetland macroinvertebrates and predict aquatic life use attainment. This model will serve as the basis for numeric biocriteria under Maine's water quality standards. Through development of these tools, much of the preparatory analysis for numeric criteria has been completed. DEP intends to make aquatic life use determinations using numeric criteria for 305b/303d assessments by 2014. DEP will use numeric criteria to inform regulatory activities, identify impaired or threatened wetlands, and conduct watershed level assessments. These initiatives will involve intensive data management activities. DEP will collect additional monitoring data to help establish reference conditions and improve knowledge about wetlands where data are ambiguous or insufficient to make aquatic life attainment determinations. The Biological Monitoring Program will also update its standard operating procedures to include a field manual documenting procedures for determining the DEP Human Disturbance Score, a level II rapid stressor assessment tool. Final products include numeric criteria for macroinvertebrates, updated standard data reports updated aquatic life use listings for wetlands in the 2012 and 2014 Integrated Water Quality Monitoring and Assessment Reports, and a level II stressor assessment manual.

Penobscot River Watershed Floodplain Forests Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102281

Penobscot Nation Department of Natural Resources John Banks John.banks@penobscotnation.org 207-817-7330

The Maine Natural Areas Program will conduct a comprehensive field survey to map floodplain forest and associated rare plants within the Penobscot River Watershed. The rivers and waterways of the Penobscot River watershed are renowned for their fisheries opportunities for wildlife observation and recreation. Intact, underdeveloped forested floodplains that border the Penobscot River and its major tributaries provide the wildlife habitat, water quality protection, and floodwater storage functions that are critical to maintaining these uses and protecting neighboring communities from flooding. Relatively little survey work has been done to document the ecological condition and function of the riparian forests throughout the Penobscot watershed, and no formal surveys have been conducted on the numerous large islands within the Penobscot River. Working with landowners, MNAP will conduct remote sensing analysis and field surveys to map floodplain forest communities, document rare plants, and assess the overall quality and function of these forests. This project will increase our understanding of the extent and condition of this rare natural community type across the watershed, fill a gap in survey efforts help identify opportunities for mitigation, provide landowners, with important natural resource information and allow us to provide technical support to multiple ongoing initiatives currently focused on restoration, management and conservation planning within the Penobscot River Corridor.

Massachusetts

NEIWPCC/New England Bio Assessment of Wetlands Workgroup

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102279

New England Interstate Water Pollution Control Commission Theresa Portante tportante-lyle@neiwpcc.org 978-323-7929

NEIWPCC will improve and refine wetlands monitoring and assessment methods, and further develop and institutionalize NEIWPCC member states wetlands biomonitoring programs. Specifically, NEIWPCC will: facilitate the New England Biological Assessment of Wetlands Workgroup, support state travel to NEBAWWG meetings, provide technical support to the group, and continue the research and development of a Northeast Regional Floristic Quality Assessment Index that was initiated under the FY2008 Wetland Program Development Grant. In order to accomplish the task of continuing the development of a regional FQI, NEIWPCC will organize a workshop to: 1) Identify how the FQI can be utilized within the Northeast Region. 2) Discuss programs that are currently testing the FQI in the Northeast Region. 3) Discuss the CoC values and identify potential problems and solutions. 4) Build on lessons learned from above to develop a study design to test and calibrate the FQI across the region. 5) Discuss the utility, feasibility, and maintenance of a Northeast FQI website.

Wetland Monitoring & Assessment (M&A) Demonstration: Assessing Health of Existing, Created, and Restored, Forested Wetlands and Streams and Streams

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102551

Massachusetts Department of Environmental Protection Lisa Rhodes

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MassDEP will display their innovative wetland assessment approach in three demonstration projects. MassDEP will evaluate wetland mitigation success by assessing the biological condition of five forested wetland mitigation sites and simultaneously, conduct a broader assessment of mitigation success in MA based on the methodology of a 2001 UMass-Amherst study. MassDEP will apply their forest wetland assessment approach in Southeastern MA to test whether it will work in other ecoregions beyond central MA where it was developed. This approach will also strengthen their ability to assess ambient forested wetland conditions in the future. Last, MassDEP is partnering with The River and Stream Continuity

Project to demonstrate how already developed resources like the landscape level 1 model "CAPS" and MassDEP's Wetland Information Resource (Wire), can be used together to address significant impairments of fish and wildlife passage. The knowledge gained from these projects will improve WQS and decision-making tools for better wetland protection and restoration.

Wetland Monitoring and Assessment Demonstration: Assessing the Health of Existing, Created, and Restored, Coastal Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102278

The Commonwealth of Massachusetts Office of coastal Zone Management Christopher Garby christopher.garby@state.ma.us 617-626-1148

The main objective of this project is to bring to completion the development of the Massachusetts' wetlands monitoring and assessment program for salt marshes. This will be completed by conducting three major tasks. 1: Sampling of salt marsh sites, to verify, calibrate, and improve the Conservation Assessment and Prioritization System (CAPS), the EPA Level 1 (landscape level) model. 2) Conduct final analyses using field data collected at 175 sites to develop salt marshes indices of Biological integrity (IBIs) for the CAPS model; and 3) Re-sampling of salt marsh restoration sites that were sampled over 10 years ago using our assessment tools to determine whether the restoration sites that were sampled over 10 years ago whether the restoration efforts were successful. The Massachusetts Office of Coastal Zone Management (MCZM) will work with the Massachusetts Department of Environmental Protection (MassDEP) to develop strategies for using the salt marsh monitoring data for decision- making and to begin work on assessing climate change effects on coastal wetland systems.

Nebraska

Potential of Restoration/Conservation Efforts to Ameliorate Greenhouse Gas Emissions

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102365

Nebraska Game and Parks Commission Ted Lagrange Ted.LaGrange@nebraska.gov 402-471-5436

Although there is a federal policy of "no net loss" of wetlands, this does not take into account wetlands that exist on the landscape in hampered condition ad that only provide partial ecosystem services relative to their pristine condition. Conditional assessment of wetlands relative to provisioning of important ecosystem services has not been adequately addressed, especially in highly modified landscapes. Ecosystem services from High Plains wetlands and associated uplands include sediment and contaminant ameliorate, biomass production, food production, carbon storage and greenhouse gas (GHG) mitigation, ground-water recharge, floodwater storage, and biodiversity and wildlife habitat provisioning. There are several investigations that address production agriculture's effects on many of those services in High Plains wetlands. However, GHG emissions and carbon storage data re lacking for wetlands and associated watersheds. The study is designed to examine GHG emissions associated with playas and adjacent uplands across dominant land uses in the Nebraska western High Plains and RWB and therefore provide key information relative to effects of conservation practices and restoration on this service. GHG emissions will be assessed in playas and surrounding catchments in three dominant land use types in each region. The study directly addresses key core elements in Nebraska's EPA approved WPP and will provide vital input to direct conservation efforts to maximize provisioning of all ecosystem services and focus restoration potential

Nevada

<u>Finalizing a Nevada Wetland Program Plan and Assessing Biotic Integrity of the State's Priority Wetlands - Nevada DCNR- Natural Heritage Program</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102401

Nevada Department of Conservation and Natural Resources Jennifer Newmark jnewmark@heritage.nv.gov 775-684-2904

Assess approximately 150 springs in arid settings for water quality and biological factors. The data will then be used to build a model, understand reference conditions and determine the usefulness of a standard method for spring ecosystem monitoring. Develop a Wetland Program Paln for the Nevada natural Heritage Program.

<u>Pyramid Lake Paiute Tribe Wetlands Program: Refining Methods for Improving Wetland</u> Protection Efforts

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102400

Pyramid Lake Paiute Tribe Fannie Ely ely.fannie@plpt.nsn.us 775-574-0101

Identify how wetland program data can be used in the development of watershed planning efforts, document macroinvertebrate data analysis and assessment procedures, refine use of bioassessment metrics to assess wetland condition trends, evaluate and make changes to wetlands monitoring program, and wetland training and research.

New Hampshire

Advancing New Hampshire's Wetlands Program – Developing Water Quality Standards, Improving Assessments, and Enhancing Permitting Reviews

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102286

New Hampshire Department of Environmental Services Collis Adams Collis.adams@des.nh.gov 603-271-4054

The NHDES, working with its partners, will undertake a selection of activities from the 2011 Wetland Program plan that will provide immediate program improvements and serve as building blocks for future improvements. NHDES, with our partners, will evaluate alternative assessment methods and conduct additional research necessary to develop water quality standards for wetlands, advance NH wetland assessments and program activities, and strengthen protection requirements. Additionally, NHDES will develop protocols to incorporate new data from outside organizations to update the state GIS wetland coverage, demonstrate methods to improve the efficiency and scientific integrity of the wetlands permit review and decision processes, and evaluate the suite of regulated activities and permit types for opportunities to increase wetland protections and cross-program coordination.

North Carolina

<u>Develop North Carolina's Wetland Program Plan and Assess the Impact of Wetland Rules on the Extent of Waters of the State</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102415

NC Department of Environmental & Natural Resources Amanda Mueller amanda.mueller@ncdenr.gov 919-715-6823

NC Division of Water will establish a stakeholders group and develop a Wetland Program Plan for the State of NC. The Wetland Program Plan will be developed by experts from the public, private and university sectors in order to produce a comprehensive plan that my be utilized by all members of the state's scientific, education, regulated, and regulatory communities.

Development of Coefficient of Conservatism for Wetland Plants an Collaboration on Training, Data Analysis and Monitoring for the SE Wetlands Workgroup.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102416

NC Department of Environment & Natural Resources Rick Savage rick.savage@ncdenr.gov 919-733-5715

10 qualified regional botanists to assign Coefficientof Conservatism scores to approximately 2,500 wetland plants located in EPA Region 4 using a 0-10 raking system described in Taft et al. (1997). Project will also provide assistance to state wetlands programs by training state regulators, facilitating communication among wetland scientists, and encouraging the exchange of data, techniques, and methodologies to enhance wetlands monitoring and assessment programs through hosting an annual coordination meeting, providing bi-monthly webinar training and annual in-field training.

Ohio

Ohio Wetland Hydrologic Monitoring

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102341

Ohio EPA Jennifer Martin jennifer.martin@epa.state.oh.us 614-644-2867

The Ohio Environmental Protection Agency's National Wetland Program Development project's main purpose is to develop a dataset of reference and hydroperiods for different wetland types located throughout Ohio. Detailed groundwater and surface water measurements will be made using automated monitoring wells installed at numerous wetland sites. Intensive hydrologic information will be collected on a daily basis. The data will be compared to create a predictive hydrological model for each wetland type. Wetlands will be evaluated using different Ohio assessment techniques.

Oregon

Streamline and Upgrade Oregon's Rapid Wetland Assessment Protocol

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102292

Oregon Department of State Lands Anna Buckley anna.buckley@state.or.us 503-986-5321

The State of Oregon developed the Oregon Rapid Wetland Assessment Protocol (ORWAP) in 2009. This project addresses the need to: 1) incorporate needed upgrades to ORWAP to improve its speed and efficiency in the field and in the office; 2) analyze and adjust ORWAP indicators for its use as the preferred planning tool for local governments in identifying significant wetland resources in their local wetland protection programs; and 3) improve ORWAP's reference site data to normalize site scores to compare with USA-RAM results for its potential application in a state-wide monitoring and assessment effort for Oregon.

Rhode Island

<u>Update of the Wetland Monitoring Strategy and Application of Wetland Condition Indicators in Rhode Island (RIDEM)</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102520

Rhode Island Department of Environmental Management (RIDEM) Carol Murphy, Principal Environmental Scientist carol.murphy@dem.ri.gov

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This project will strengthen Rhode Island's Wetlands Monitoring and Assessment Program by updating the statewide Wetland Monitoring Plan and incorporating refined wetland condition indicators using information now available due to prior work, including development of the validated Rhode Island Assessment Method (RIRAM). The refinement of wetland indicators will contribute to an existing collaborative to build a suite of indicators supporting protection and restoration of the Narragansett Bay Region. Developing these indicators will draw upon prior wetland monitoring experience and included work to present existing data in new ways. This project provides planning to more strongly link wetland indicator, monitoring, and reporting activities.

South Carolina

<u>Department of SC Stream Function Assessment Methodology (SFAM) and a SC Wetland Program Plan.</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102418

South Carolina Department of Health & Env. Control Heather Preston prestohs@dhec.sc.gov 803-898-3105

Project objectives are: 1) To refine wetland ecosystem protection; restoration and management; 2) A focused and sustainable wetland program; and 3) Internal review of current SC wetland related statutes, regulations and program activities in the context of the Core Elements Framework.

Vermont

<u>Vermont Wetland Program Plan: Planning, Monitoring and Assessment and Enhancing Wetland Protection</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102560

Vermont Department of Environmental Conservation Alan Quackenbush Alan.Quakenbush@state.vt.us 802-241-3761 The main objective of this proposal is to select appropriate, grant-eligible actions from the Vermont Wetland Program Plan for each of the Core Elements in order to further strengthen and develop the overall Vermont Wetland Program. Monitoring and Assessment tasks are related to refining sampling and assessment protocols based on participation in the National Wetland Condition Assessment; updating the Quality Assurance Project Plan; establishing a network of reference sites for long-term monitoring; and development of a Floristic Quality Assessment Index . Regulatory tasks following adoption of new Rules and statutes include an emphasis on education and outreach activities; and revision and development of Best Management Practices. Restoration and Protection activities include strengthening and expanding restoration partnerships statewide; and identifying specific sites for restoration opportunities. Final products will include: updated sampling and assessment methods and protocols; updated QAPP; establishment of a long-term wetland monitoring project at selected reference sites; a FQAI for Vermont; education and outreach materials; training materials; revised and updated BMP's; an inventory of potential wetland restoration sites by watershed; a strategy for moving forward with Water Quality Standards that include wetlands.

Washington

<u>Wetlands Program Development Grant - Updating and Identifying Wetland Conservation</u> Priorities for Washington. Phase 2: Western & Eastern Washington

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102301

Washington Department of Natural Resources John Gamon john.gamon@dnr.wa.gov 360-902-1661

This project will expand the scope of up-dating and evaluating the extent and condition of Washington's Natural Heritage Wetlands, provide information to identify reference wetland sites or conditions, and provide important information to help protect Washington's high quality wetlands. This is Phase 2 of a three phase project designed to improve wetland data managed by the Washington Natural Heritage Program (WNHP) as it relates to the Washington Department of Ecology's Wetland Rating System. The Wetland Rating system is a systematic approach for categorizing wetlands that establishes state and local priorities for wetland protection standards, buffer requirements, and mitigation ratios. This project addresses Wetland Program Core Elements: Monitoring and Assessment and Voluntary Restoration and Protection. It also will strengthen Washington State's regulatory tools for protecting high quality wetland by serving as a resource for developing wetland protection plans as well as for selecting sites for voluntary restoration and protection.

Wisconsin

Building Capacity for Wetland Condition and Function Assessment in the Great Lakes Basins of Wisconsin

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102600

Wisconsin Department of Natural Resources Greg Searle greg.searle.@wisconsin.gov 608-266-9252

The project objective is to build a strong foundation for a scientifically based, feasible wetland monitoring program for Wisconsin's Great Lakes Basins and to improve our ability to assess the wetland floodwater attenuation function in an area where pressure on the wetland resource is high. It will provide critical elements essential to a successful monitoring program and complements the ongoing work in Great Lakes coastal wetlands. It consists of three components: Intensification Study Lab Analysis, Lake Superior

Basin Floristic Quality Assessment, Lake Superior Basin: Red Clay Plains Wetlands Flood Attenuation Model.

Pursuing Section 404 Assumption

2006

National

Building capacity for the ASWM to strengthen and expand state and other wetland programs http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859

Assoication of State Wetl; and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

2010

Michigan

Michigan Wetland Program-Regulatory and Outreach Refinements.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102170

Michigan Department of Natural Resources & Environment Sharon Maher mahers@michigan.gov 517-241-7991

This project will refine two aspects of the state's wetland program. First, support from the Michigan Department of Attorney General is necessary to ensure that proposed modifications to Michigan's wetland regulatory authority are consistent with the requirements of both state law and the Clean Water Act. In 2008, EPA Region 5 defined modifications necessary to maintain consistency between Michigan's 404 Program and EPA requirements given changes in state and federal law. Development of revisions to state statutory language, administrative rules, and department procedures is ongoing. Direct legal assistance will help to facilitate this process. Secondly, a need for improved education and outreach has been identified. Outreach has been described as an overarching component of the wetland program Core Essential Elements. Improved communication with the public is a high priority given recent challenges to Michigan's

404 Program. During 2009, the scope and responsibilities of Michigan's wetland program were questioned by the Governor and the Legislature in light of serious state budgetary shortfalls. Although the program was funded for an additional three years, the DNRE will work closely with a stakeholders' Advisory Council to identify possible program improvements. Particularly during this period, outreach will be important to inform the public about proposed regulatory changes, and to respond to interest in multiple aspects of wetland management. Partners in this effort will include the Michigan Wetlands Association and the Association of State Wetland Managers – who will cosponsor a statewide wetland conference with DNRE in 2011. The Michigan Association of Home Builders will also be a partner in outreach efforts..

Restoration and Protection

2006

Alaska

$\underline{\textbf{Landscape Suitability Mapping and Developer Certification Program}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100262}$

Homer Soil and Water District Lindsay Winkler lindsay@homerswcd.org 907-235-8177

This project created tools, training, and incentives needed by property owners to include landscape systems in their development projects. The program integrated existing geospatial environmental data into a GIS-based suitability map illustrating the relationships between ecological, social, and human-induced land patterns. An education and certification program built around the suitability map will train and provide voluntary incentives for developers to incorporate landscape systems into their designs.

California

Robinson Rancheria Wetland Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100398

Robinson Rancheria Ronda Mottlow mottlow@robinsonrancheria.org 707-275-0205

The purpose of this project is to further develop the Robinson Rancheria Wetland Protection Program.

Colorado

Survey of Critical Wetlands in Boulder County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100961

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Information on the Colorado Natural Heritage Program is at http://www.cnhp.colostate.edu. Individual CNHP documents and reports, including this WPDG project and other county wetland surveys, are available online at http://www.cnhp.colostate.edu/download/reports.asp. Information on CNHP's database and requesting CNHP data are at

http://www.cnhp.colostate.edu/exchange/request.asp. Note: Subgrant dollars are the actual EPA award for this individual project. Project category dollar amounts are estimates only and represent an equal division among the project categories.

Survey of Critical Wetlands in Rio Blanco County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100970

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Information on the Colorado Natural Heritage Program is at http://www.cnhp.colostate.edu. Individual CNHP documents and reports, including this WPDG project and other county wetland surveys, are available online at http://www.cnhp.colostate.edu/download/reports.asp. Information on CNHP's database and requesting CNHP data are at

http://www.cnhp.colostate.edu/exchange/request.asp. Note: Subgrant dollars are the actual EPA award for this individual project. Project category dollar amounts are estimates only and represent an equal division among the project categories.

Idaho

Development of a Comprehensive Wetlands Protection Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100394

Shoshone-Bannock Tribes Elese D. Teton, Tribal Water Engineer eteton@shoshonebannocktribes.com 208-239-4580

Shoshone-Bannock Tribes will develop important components of a comprehensive wetlands protection program. These components would build the Tribes' capacity to protect and restore the Reservation's surface waters by continuing development of wetland protection capabilities through regulation, monitoring and assessment, restoration, outreach, and through coordination and partnership with other Tribal programs and interested parties.

Massachusetts

Conservation Assessment and Prioritization System (CAPS): An Innovative Approach for Identifying and Protecting Wetlands Wildlife Habitats of Potential Regional or Statewide Importance MA DEP

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100419

MA DEP Wetlands and Waterways Program Lealdon Langley, Director lealdon.langley.state.ma.ua 617-574-6882 The State of Massachusetts and UMASS Amherst will collaborate to produce maps based on a computer software program for 50 communities in the western part of the state. These maps will be used to improve state and local wetland regulator's ability to document, avoid, minimize and mitigate, important wetland wildlife habitat impacts. They will also help to measure improvements by establishing a baseline of information. The maps will assist in implementing the Massachusetts Wetlands Protection Act by better defining areas that provide "important" habitat functions for wildlife. The maps will also help set conservation priorities.

Missouri

Restoration and Protection of Missouri River Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100281

University of Missouri Clayton Bodgett blodgettc@missouri.edu

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Focusing mainly on the Missouri River bottoms, from Atchison to Kansas City, this project uses remotely sensed information together with fine-resolution site type modeling data to compare earlier National Wetlands Inventory data sets to identify areas of potential wetland restoration by mapping abiotic site types and flooding potential using multiple environmental data layers (e.g. soil variables, elevation relative to river level, landform) within a geographic information system. It will quantify and set priorities for both conservation and restoration based on analyses of data created earlier in the project, including vegetation patch size and configuration, proximity to public lands and roads, distance among patches, and possibly other data suggested by meeting with partners during the start-up phase of the project.

Montana

<u>Confederated Salish and Kootenai Tribes - Wetlands Program Development and Watershed-Based</u> <u>Monitoring and Assessment of Reservation Wetlands</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100517

Confederated Salish and Kootenai Tribes Richard Janssen, Manager, Environmental Protection Division richj@cskt.org 406-883-2888

This project supports the Confederated Salish and Kootenai Tribes' Wetland Conservation Plan and watershed-based Wetland Monitoring and Assessment Strategy. Program goals and objectives are to protect and conserve wetland and riparian areas within the Flathead River watershed of western Montana and meet the goals of stopping loss of wetland quantity and long-term, increasing wetland quality by restoring Reservation wetlands and riparian areas. This project supports these program objectives and goals by monitoring and assessing wetland health in the Jocko River watershed.

Critical Lands Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101101

Flathead Lakers Contanza von der Pahlen

406-883-1341

The Critical Lands project was initiated by the Flathead Lakers to build partnerships and promote collaboration among natural resource agencies, conservation organizations, and landowners to conserve lands that are essential to protecting and improving water quality in the Flathead Watershed. This project will protect wetlands and riparian corridors in the watershed by: securing voluntary conservation agreements on private and state lands; improving information and mapping for priority conservation areas for birds to enhance ability to fund conservation projects in these critical areas; enhancing the capacity of project partners to accomplish watershed-scale critical lands planning and conservation, and strengthening collaboration and coordination by hosting partner meetings. Specific areas of focus include the Foys Bend Project and the Owen Sowerwine Natural Area. The Flathead Lakers will also work with partners to develop a long-term conservation plan to protect priority wetlands and riparian areas and develop and submit the Phase 2 of the Glaciated Valleys of Northwest Montana Project NAWCA standard grant application. The project includes four major tasks: 1) strengthen collaboration and coordination for critical lands conservation; 2) design Fops Bend Conservation Project; 3) protect Owen Sowerwine Natural Area; and 4) develop a long-term Critical Lands Conservation Plan.

New Hampshire

Establishing Baseline Data for Stream Continuity and Restoration Opportunities in the Ashuelot River Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100420

NH Department of Environmental Services Collis Adams, Bureau Administrator cadams@des.state.nh.us 603-271-2147

The NH DES will work in partnership with NH Fish and Game and The Nature Conservancy to identify restoration opportunities and conservation actions along the Ashuelot River and its tributaries. Specifically, DES will use permit data and intermittent stream data to help with the inventory process. A GIS trained ecologist will develop a data layer of permitted culvert crossings. The information will be used to develop and implement effective and comprehensive programs for improving stream continuity, creating a link with transportation and aquatic ecosystem restoration, and completing the State's first watershed scale assessment of habitat fragmentation and restoration priorities.

New Mexico

Rapid Assessment Project, Wetlands Action Plan, and Mesilla Valley Wetland Projects

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100277

New Mexico Environment Department Maryann McGraw maryann.mcgraw@state.nm.us 505-827-0581

Three projects were funded in this grant:: 1. Rapid Assessment (formerly Hydrogeomorophic modelint)Project - \$428,036 2. Wetlands & Riparian Corridors, Phase II - \$101,663 3. Messilla Valley (formerly Riverside Recreation Area Restoration) - \$91,369

Oregon

Rouge Valley Wetlands Conservation Effort

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100264

Rouge Valley Council of Governments Craig Harper charper@rvcog.org 541-423-1369

Development of local landuse planning tools (i.e, ordinance, landuse restrictions, education, etc.) for Jackson County to use to promote greater compliance with wetland regulations, identify potential mitigation sites and faciliation for development of a Regional General Permit for vernal pool areas.

National

A demonstration pilot to implement wetlands protection strategies into community landuse practices

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100890

Southeast Watershed Forum Christine Olsenius co@southeastwaterforum.org 615-562-1960

This grant supports local governments and watershed groups. There are 4 demonstration pilots that this grant supported. It delivered 4 training workshops in 12 different cities. And then focused on 4 communities to work with to upgrade land use practices. This project also developed GIS analytical tools that watershed groups, land trusts and local governments can use to help formulate land use upgrades. The grant was used to write-up the 4 pilots in the form of cases studies that highlight good process, obstacles to change and drivers for wetland protection and outcomes. Growth and development pressures are impacting water quality, wetlands and water supplies, yet many communities are not integrating or coordinating water supply and quality in their local land use decisions. This grant provided training that identifies what land use planners and decision makers should know about water availability, variability and

sustainability, and how they can collect and organize that information to support land use decisions. Specific community case studies will showcase County Master Plans that have protected reservoirs for Maryland's largest water system (serving 1.8 million people in six counties), through land preservation, the use of urban growth boundaries, resource conservation zoning, and subdivision/development regulations. Another case study will showcase Conservation Preservation zoning ordinances and Comprehensive Water Resource Protection ordinances for protecting wetlands and water resources in coastal communities facing the highest rates of development in GA and LA.

 $\underline{\textbf{Building capacity for the ASWM to strengthen and expand state and other wetland programs}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859}$

Assoication of State Wetl;and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

Exploring opportunities to integrate state wildlife action plans into improved wetland conservation and restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100911

Environmental Law Institute Ms. Jessica Wildinson wildinson@eli.org 202-558-3100

Environmental Law Institute (ELI) held a working meeting of state wetland and willife program representatives in partnership with the Association of Fish and Wildlife Agencies and the Association of State Wetlands Managers. The forum was designed to identify opportunities for state wetland programs to utilize wildlife action plans to advance wetland conservation, research, and management activities.

Protecting Vulnerable Wetlands and Aquatic Resources through Buffers

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100910

Environmental Law Institute Ms. Jessica Wilkinson wilkinson@eli.org 202-558-3100

Environmental Law Institute (ELI) will support the protection of wetlands and other aquatic resources through research on state and local laws, regulations, and ordinances developed to restrict development and other activities in the areas that buffer these resources then evaluate the range of available tools, and finally create and disseminate model buffer program examples. This project will benefit state, tribal, and local government agencies because it provides them with the latest resources, tools, and ideas on current buffer regulations and ordinances.

2007

Colorado

<u>Developing Statewide Strategies to Improve Effectiveness in Protecting and Restoring Colorado's</u> Wetland Resource

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100523

Colorado Division of Wildlife, Wetland Wildlife Conservation Program Brian Sullivan

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The Colorado Wetlands Program is a voluntary, incentive-based program to protect wetlands and wetland-dependent wildlife on public and private land. Statewide strategies are needed to better guide and coordinate these efforts toward strategic endpoints. This project will provide a scientific foundation for setting statewide strategic goals and priorities to more effectively protect, sustain and restore the ecological health of Colorado's wetland ecosystems by creating a wetland profile that describes the types, abundance, and ecological condition of wetlands in Colorado. This profile will then be used to formulate statewide strategies for setting wetland protection and restoration priorities. CDOW will develop a wetland geospatial database accessible via the web and this database will be used to develop the wetland profiles and spatial frame for wetland watershed surveys. CDOW will partner with the Colorado Natural Heritage Program (CNHP) to conduct a pilot probabilistic survey of wetland condition for the Rio Grande Headwaters watershed using the recently-developed Ecological Integrity Assessment Scorecard.

 $\underline{\textbf{Development of a Regional Restoration and Protection Program for Mountain Fens: Phase 4}}\\ \underline{\textbf{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100521}}$

Colorado State University, Department of Forest, Rangeland and Watershed Stewardship David Cooper dcooper@rm.incc.net 970-491-5430

This project will extend an EPA-funded fen inventory and assessment development program to the next phase: restoration and protection. We will develop protocols for restoring and protecting fens from the most common disturbances observed in previous assessments of fens in the San Juan Mountain region. These methods will provide guidance for state and federal land managers, local governments, and others throughout Region 8 and the western US. Our products will include a detailed report and database and a field manual of common fen types, common

disturbances, and restoration and management protocols. We will train land managers and local government officials through workshops to enable implementation of fen protection and restoration programs. We will also produce a document with a range of wetland protection ordinance language that could be used by local governments to develop wetland and fen protection programs. This program will serve as a model for fen wetland programs throughout the mountainous western United States.

<u>Survey of Critical Wetlands and Riparian Areas in Chaffee County, Colorado http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100522</u>

Chaffee County Don Reimer, Planning Director dreimer@chaffeecounty.org 719-530-5565

Chaffee County will partner with the Colorado Natural Heritage Program (CNHP) to conduct a targeted survey and condition assessment of the County's wetlands and riparian areas. This project provides baseline information on the status and location of biologically significant wetlands in the headwaters of the Arkansas River within Chaffee County, an area experiencing increased recreation and residential development. Project activities include: 1) building partnerships through the formation of an Advisory Group; 2) identification of potential wetlands to survey; 3) coordination with on-going wetland projects; 4) field survey and condition assessment of wetlands; and 5) identification of potential conservation areas and synthesis of results. Results will be interpreted and disseminated to parties that can implement conservation of critical wetland resources. Data collected will also be used to support calibration and validation of newly developed statewide wetland assessment methods: Vegetation Index of Biotic Integrity and Ecological Integrity Scorecards. Project lead is Stephanie Neid, Ecologist, Colorado Natural Heritage Program, Colorado State University.

Florida

Recovery and regeneration of forested wetlands following timber harvest: Evaluation of Best Management Practices in Florida

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100386

University of Florida Kimberly Bohn kkbohn@ifas.ufl.edu 850-983-5771

This will be a study for the recovery and regeneration of forested wetlands following timber harvest. This study seeks to monitor, document, and analyze BMPs recently developed for matt logging. Though BMPs are generally non-regulatory, loggers and foresters employ these recommendations to protect ecosystem integrity during forestry operations.

Missouri

Creating a MetroGreen Alliance

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100303

Mid America Regional Council (MARC) Jennifer Blattman iblattman@marc.org 816-474-4240

To create a MetroGreen Alliance, a regional organizational framework to facilitate wetland and resource conservation in the bi-state Kansas City region. The Alliance will adapt the Chicago Wilderness structure to Kansas City, building from previously successful local and regional wetland and water quality protection efforts. The Alliance will create a metro-wide network of organizations dedicated to the conservation restoration and connection or habitat, water quality, biodiversity and associated green infrastructure.

Montana

$\underline{\textbf{Chippewa Cree - 2007 Wetland Program Development Grant}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100530}$

Chippewa Cree Tribe Kieth Gopher keith@cct.rockyboy.org 406-395-4147

The 2007 wetland project for the Chippewa Cree Tribe will conserve and restore wetlands on the Rocky Boy's Indian Reservation in alighnment with national goals of the Environmental Protection Agency of "no net loss" and focus of assessment of wetland conditions to achieve a net increase of total wetlands by 2011. The Chippewa Cree Tribe is currently implementing a comprehensive wetlands program to accurately assess and delineate Tribal wetlands through a rotating basin approach. Program objectives for FY07 will include; a fen wetlands protection demonstration project, public education (to include a fen identification workshop and a wetlands segment in an educational video), field testing a Tribal assessment method on wetlands monitoring sites, draft narratives for wetlands water quality standards, and continuing to aquire baseline data, including satellite imagery, of wetland sites on the reservation.

North Carolina

Development of Hydrologic Performance Criteria for Wetlands Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100387

North Carolina State University **Matt Ronning**

919-515-2444

This proposal is to develop an operational regional data set for the hydrologic regime of a wetland community type that is commonly restored in compensatory mitigation. A regional baseline for all elements that define success of a restoration project chacteristic of wetland oak flatsof the coastal plain region of North Carolina will be developed.

Oregon

Oregon Explorer Wetlands Conservation Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100400

Oregon State University Jimmy Kagan jimmy.kagan@oregonstate.edu 503-731-3070

Develop information on the condition of Oregon's most biologically significant wetlands, focus conservation and restoration actions in these priority areas, and develop methodology to intergrate wetland ifnromation into a user friendly tool for use in a Wetlands Portal.

National

A Scalable Inventory Approach for Comprehensive Wetland Protection

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100891

Center for Watershed Protection Karen Cappiella kc@cwp.org 410-461-8323

The purpose of the Wetlands & Watersheds Article Series is to expand the Center's current watershed protection guidance, tools, and resources to provide guidance to local communities on how to integrate wetlands into larger watershed protection efforts. The audience for the articles includes local natural resources managers and land planners who can benefit from guidance on local tools for protecting wetlands.

<u>Natural Resource Enterprise Development on Non-industrial Private Lands as a Market-driven</u> Approach Promoting Wetland Conservation and Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100880

Ducks Unlimited Mr. Chris Cole ccole@ducks.org

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Ducks Unlimited, Inc. in collaboration with Mississippi State University will be expanding, on a national scale, a project previously funded by the Wetlands Division of USEPA Headquarters (HQ) in the Southeast that educates non-industrial private landowners of the economic incentives available to promote wetland and other marginal land conservation and restoration on their properties through the development of fee-access wildlife and fisheries recreation enterprises by holding education workshops. These private landowner workshops will enable state program

managers to more effectively target restoration dollars for the prevention, reduction, and elimination of pollution into wetlands and other aquatic resources by increasing the collaboration between interested and knowledgeable private landowners and wildlife managers on resource management decisions.

Wetlands Restoration and Enhancement of the National Wetlands Mapper

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100870

The Center for Urban Watershed Renewal, Inc Ms. Amanda Davis adavis@cuwr.org 978-741-4669

The Center for Urban Watershed Renewal (CUWR), in partnership with the states of WI and CA, the US Fish and Wildlife Service, Virginia Tech and the Conservation Management Institute, is proposing to 1) Assist states with high resolution wetlands restoration data in transferring their data into National Wetland Inventory maps and 2) Facilitate the creation of an additional layer of information supported by the Wetlands Master Geodatabase and online Wetlands Mapper that would show wetlands restoration projects that have been completed. The national publicly available web-based Wetlands Mapper currently does not show any specific layers with regards to wetlands restoration. This project would assist states in adhering to the National Wetlands Mapping Standard, as well as developing a new layer of information available to the public on wetlands restoration.

2008

Arizona

Ak-Chin Indian Community Wetland Protection Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100393

Ak-Chin Indian Community Kendra Tso, Director, Environmental Protection Department ktso@ak-chin.nsn.us 520-568-1159

The purpose of the project is to develop a wetland protection program through monitoring and assessment of Ak-Chin's wetland resources, and development of a Tribal Wetland Protection Ordinance and Anti-Degradation Policy, and a Wetland Restoration Plan.

Delaware

Wetland Loss Patterns in Delaware

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100329

Department of Natural Resources and Environmental Control (DNREC) Amy Jacobs

ajacobs@state.de.us 302-672-1153

The goal of the project is to determine the amount, locations, and types of wetlands that have been lost in the past 15 years, and the ecosystem services value of wetlands. We will then use this information as a basis for increased outreach to the public about wetlands. High quality data in combination with information that is easily understandable by the general public in concert with targeted outreach will increase wetland acreage through greater participation in voluntary restoration programs and the development of more comprehensive regulations and mitigation requirements.

Florida

<u>Development of a Coordinated Watershed Approach to Compensatory Mitigation in the Tampa</u> Bay Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101781

Tampa Bay Estuary Program Lindsay Cross lcross@tbep.org

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This project furthers the restoration and protection of freshwater wetland habitats in the Tampa Bay, Florida, watershed by exploring the linkage between the TBEP's CCMP and federal, state, and local wetland regulatory requirements for compensatory mitigation. The project develops and pilots implementation of a federal-state-local partnership to coordinate publicly-funded freshwater wetland habitat restoration, and regulatory compesnatory mitigation activities in the Tampa Bay watershed. It provides the following benefits: --Development of a watershed and basin-specific goals for wetland habitat restoration, enhancement, establishment and preservation. --Development of watershed and basin-specific targets and performance standards for compensatory mitigation. -- Coordination of habitat restoration and compensatory mitigation activities on identified priority sites and projects within the Tampa Bay watershed. --Development and implementation of a coordinated, watershedwide reporting mechanism for quantitatively documenting permitted wetland impacts and wetland gains through publiclyfunded restoration and compensatory mitigation. -- Development and implementation of a coordinated, watershedwde monitoring and assessment program for documenting the success of wetland habitat restoration and compensatory mitigation projects. --Improved federal-state-local interagency coordination related to wetland resource regulation, restoration, and management, as established in a MOU/A with the project partners.

 $\underline{ \mbox{Hydrologic Variability in Isolated Forested Wetlands across a Land Use Intensity Gradient}_{\mbox{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100802}$

University of Florida, School of forest Resources and Conservation Matthew J. Cohen, Ph.D mjc@ufl.edu 352-846-3490

The objective of this project is to assess the impact of land development spanning from forested to urban land uses on the hydrology of isolated wetlands, focusing on the hydrologic dynamics and loss of water storage capacity at the landscape scale. Twelve representative wetlands are selected spanning a gradient of land use intesitiy and hydrology monitored (stage, flow direction) in each using a network of wells. Detailed information about the direction of flow (into, out aor through the wetland) and duration of inundation are obtained to infer surface-groundwater relations, which is key to understanding hydrology of isolated wetlands. A combination of field surveys, national wetland inventory data, and high resolution topographic data (lidar) are used to estimate wetland area and bathymetric storage. Land use data are used to quantify land development intensity around wetlands and their drainage computing area. Field observations are linked to surveys of landscape storage volume to predict losses of landscape scale wetland hydrologic services based on knowledge of wetland total volume, and observations of how storage changes with urbanization. This information will assist local and regional land use lanning and regulation by making explicit hydrologic storage and flow services accruing from isolated wetlands that are lost because of land use change. rke

Montana

<u>Developing a Management and Restoration Strategy for the Manning Lake Wetlands Complex http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101060</u>

Fort Peck Tribes, Fish and Game Department Jeanne Spaur jeannespaur@yahoo.com 406-768-5305

The Fort Peck Tribes are working toward the protection, management, and restoration of the Manning Lake Wetland Complex. First we will work with the Montana Natural Heritage Program to develop maps of the complex area examining wetland types, ground cover, and land use. Secondly we will expand upon our work to identify and prioritize acquisition, management, and restoration opportunities. Thirdly we will partner with Montana Natural Heritage Program, Montana Department of Environmental Quality, the Confederated Salish and Kootenai Tribes, and the Fort Peck Tribes' Office of Environmental Protection to develop wetland monitoring strategies, building upon current work. Finally, we will develop a wetland management reference collection through collaboration with other tribal, state, and federal wetland programs. Outputs will include: 1) ground-truthed, detailed maps of all wetlands, ground cover, and land use within the MLWC; 2) a list of identified and prioritized restoration, management, and acquisition opportunities; 3) a Reservation-specific rapid assessment protocol for wetland function and condition monitoring; 4) an inclusive plant species-list; 5) a vegetation map of the MLWC; 6) a baseline bird and amphibian list species-list; 7) baseline water quality data; and 8) a collection of wetland management reference publications.

Montana Department of Environmental Quality - 2008 Wetland Program Development Grant II http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101062

Montana Department of Environmental Protection, Wetland Program Lynda Saul

lsaul@mt.gov 406-444-6652

The MDEQ Wetland Program Development II proposal's main objectives are to strengthen state wetland data and build capacity for wetland monitoring and assessment at the local, state, and tribal level. We propose to develop four interrelated components to achieve these objectives: 1) evaluate DEQ's 401 certification program, 2) support significant nexus jurisdictional determinations, 3) identify wetland and floodplain protection priorities, and 4) host a Region 8 wetland program capacity building workshop. Final products will include: 1) a final report evaluating Montana's 401 certification program including recommendations for program improvement for increased wetland and vulnerable waters protection, 2) maps and other information along with metadata and training to help determine jurisdiction in CWA issues, 3) a comprehensive floodplain mapping plan for vulnerable floodplain wetlands and development of a Floodplain Mapping Advocacy Team and 4) a successful, well attended Region 8 Wetland Program Capacity Building Workshop that includes a strong focus on wetland monitoring and assessment.

Watershed-Based Monitoring and Assessment of Reservation Wetlands and Jurisdictional Determination Tools.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100469

Confederated Salish and Kootenai Tribes, Division of Environmental Protection Clint Folden clintf@cskt.org
406-675-2700

Two year, FY09 and FY10, WPDG funding will assist the Confederated Salish and Kootenai Tribes (CSKT) to continue to build core elements of the Tribes' Wetland Conservation Program. Comprehensive program development during this grant period will include: watershed-based Wetland Monitoring and Assessment in the Flathead River and Camas watersheds; continued development of GIS linked project tracking and evaluation database; completion of enhanced NWI and riparian mapping to assist with jurisdictional determination; and promotion of sound wetland conservation activities through effective wetland education and outreach activities. Program and CSKT Wetland Conservation Plan (1999) goals are consistent with National Strategic Plan and Region 8 priorities. Products will include watershed-based wetland condition reports, GIS-linked project tracking tools to share with other stakeholders, assessment of NWI and hydrologic connectivity; and publication of 'Aquatic Weeds and their Native Look-a-likes' field guides and other education materials for use in outreach activities.

Nevada

<u>Fallon Paiute Shoshone Tribe - Wetlands Baseline Monitoring and Assessment http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100362</u>

Fallon Paiute Shoshone Tribe Richard Black, Environmental Diretor richard@enviro-fpst.org 775-423-0590

The purpose of this project is to further develop the Tribe's ability to monitor and assess their wetlands, in order to better track and document the change in wetland acreage and condition. The Tribe will also monitor past wetland restoration projects to determine their effectiveness.

Moapa Band of Paiutes - Wetland Inventory and Evaluation of Desert Springs Wetlands http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100389

Moapa Band of Paiutes Darren Daboda d_daboda@yahoo.com 702-865-2787

The purpose of the project is to increase the understanding of the Moapa Band of Paiutes Tribe's wetlands through monitoring, increase the tribal members' understanding of their wetlands through outreach, and selection of erosion control restoration methods. The Tribe will map the wetlands at Hogan Springs and Little Hogan Springs, monitor groundwater, surface flow and surface water quality, vegetation, and wildlife. They will demonstrate revegetation techniques for effectiveness for erosion control.

New York

Refinement of the USC Wetland Program for "At Risk" Wetlands, especially those ephemeral or isolated in the headwater regions of the Upper Susquehanna Basin.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101490

Tioga County Soil and Water Conservation District James Curatolo jac3@htva.net 607-546-2528

Tioga Soil and Water Conservation District will develop a method to predict the occurrence of vernal pool wetlands and develop site selection procedures to prioritize wetland restoration and enhancement of these wetlands in the Chemung and Susquehanna River watersheds in New York. A vernal pool is a wetland in a depression in the land that lacks a defined surface water outlet. In the Northeast vernal pools fill with water with the rising ground water table of the fall and winter seasons and/or fill with winter and spring snow melt and rain. These important wetlands are some of the most vulnerable because they are small, isolated, and often dry, and therefore unrecognizable. Tioga Soil and Water Conservation District will prepare communication strategy findings to the community and municipal entities to enhance wetland protection. Historically, clearing, plowing and tile draining agricultural fields has reduced the number and acreage of small vernal pools throughout New York. Where fallow agricultural land is reverting to forest, as in the Susquehanna Basin, the new forests lack the micro-topography necessary to form small depressional pockets that function as seasonal ephemeral wetlands.

North Carolina

Hydrologic Connectivity, Water Quality Function and Biocriteria of Coastal Plain Geographically Isolated Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100809

NC DENR Virginia Baker

919-715-3475

The goal of the project is to expand work underway on isolated wetlands in eight NC and SC Coastal Plain counties. The results will provide a better understanding of the condition of isolated wetlands and their ecological functions, which is needed to better protect them at the state and national levels.

North Dakota

<u>Development of Watershed Approaches to Wetland Mitigation and Restoration in the Prairie Pothole Region</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100824

University of North Dakota Bruce Smith bsmith@aero.und.edu 701-777-3196

The project will develop a watershed-based framework to improve mitigation and restoration planning and effectiveness monitoring by using Geographic Information System (GIS) to: 1) Build watershed-scale landscape profiles; 2) Characterize reference and impacted wetlands according to flow pathways; 3) Identify potential ground and surface-water connectivity between wetlands and navigable waters in a watershed; 4) Conduct intensive field sampling to determine the effects of mitigation and restoration on soils; and 5) Collaborate with ND Department of Transportation and ND Game and Fish to incorporate watershed assessments into resource managment plans.

Oregon

Oregon Wetlands Explore Conservation Tools - Phase II

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100322

Oregon State University Jimmy Kagan jimmy.kagan@oregonstate.edu 503-731-3070

Expand the capabilities of the Oregon Wetland Explorer to improve the effectiveness of wetland restoration and increase the number of restored and protected wetlands in Oregon.

Pennsylvania

PSU Wetlands Assessment and Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100333

Penn State University Rob Brooks rpb2@psu.edu 814-863-1596

This project will compile, interpret and communicate reference data from the region for use in designing and evaluating restoration and mitigation performance. This will aid in the progression toward the development of comprehensive monitoring and assessment programs resulting in improved protection and restoration of wetland resources for multiple state agencies and stakeholders in improving wetland mitigation.

National

Developing Wetlands Monitoring & Restoration Strategies for Climate Change

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100855

Association of State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The project will provide direction on how to monitor and assess changes in wetlands induced by climate change and then how to apply wetland restoration techniques to minimize and offset those changes. States, tribes, and local governments are increasingly aware of the need to manage wetlands for climate change and they recognize this will largely be done in the context of existing programs. The purpose of this project is to identify tools and information available to help them make decisions, about 1) using wetlands monitoring and assessment to measure changes and 2) identifying wetlands restoration techniques and practices that can be applied to mitigate the impacts of climate change. In this context ASWM proposes to work with partners to develop a comprehensive national and international bibliography and other materials about wetlands and climate change and make them available on the internet. In addition it will undertake two pilot projects, one on the west coast and the other on the east coast. The goal of this project is to assemble information about wetlands in one place accessible on the web and organized to be useful to wetlands professional at the state, tribal, and local level. In addition the two pilot studies will show how information already available can be applied to analyze and plan wetland restoration. The Wetlands Conservancy, the Oregon Natural Heritage Information Center and the North Carolina Department of Environment and Natural Resources will partner with ASWM to carry out the pilot studies.

2009

California

Yurok Tribe - Klamath River Estuary Wetlands Restoration Planning

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100787

Yurok Tribe Kathleen Sloan ksloan@yuroktribe.nsn.us 707-482-1822

Yurok Tribe will assess estuarine wetlands, monitor wetland water quality and refine prioritization of wetlands for protection. They will fill data gaps regarding the importance of the Klamath River's estuarine habitat quality in salmon restoration. A restoration plan will be developed.

Colorado

Setting Mitigation in the Watershed Context: Developing a Multi-Tiered Approach to Improve Compensatory Mitigation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101040

Colorado Natural Heritage Program, Colorado State University Joanna Lemly Joanna.Lemly@colostate.edu 970-491-2127

1) Developed standard operating procedures (SOPs) for implementing the watershed approach (WA) to wetland mitigation in Colorado based on three tiers of data intensity. 2) Carry out all three tiers of the WA in a demonstration project area within the northern Front Range corridor. Work in the demonstration project area will include (a) creating a historic wetland profile by digitizing original NWI maps from the 1970-80s, (b) developing a current wetland profile through photo-interpretation of the most recent air photography available, (c) determining change in the wetland profile over time by comparing the historic and current profiles, and (d) assessing condition of the existing wetlands using a spatially balanced random sample survey design and the FACWet and EIA Scorecard methodologies. 3) Developing Tier 1 wetland profiles for each of the major river basins in Colorado to serve as a starting place for regulators to begin implementing the mitigation approach in a short timeframe.

Florida

<u>Climate Change Vulnerability Assessment and Adaptation Opportunities for Salt Marsh Types in Southwest Florida</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101637

Southwest Florida Regional Planning Council Elizabeth Donley idonley@swfrpc.org 239-338-2556

the Charlotte Harbor National Estuary Program will inventory and map the physical extent of the five types of salt marsh present within the CHNEP Study Area. Researchers will then identify significant potential effects on these salt marsh ecosystems from anticipated climate change. An assessment of significant potential effects will be developed as well as identificant of opportunities for avoidance, minimization, mitigation and adaptation that could be implemented. An interactive GIS mapping product depicting the project outputs will be uploaded to the CHNEP website for use by researchers, local governments and the public.

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> <u>Joseph Sound, Pinellas County, FL</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

<u>Performance Partnership Grants: Seminole Tribe of Florida Tribal Wetland Program</u> <u>Development Project</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101615

Seminole Tribe of Florida Craig Tepper

954-965-4380

the Tribe will develop a wetland management program for the Big Cypress, Brighton and Immokalee Reservations, develop Tribal capacity and assistal Tribal stakeholders to develop

regulation regarding Tribal wetlans. Activities will expand the Wetland Management Plan to include the Immokalee Seminole Indian Reservation, identify, integrate, and expand Tribal efforts in the area of wetland management by identifying at-risk wetlands, integrate water quality and wetland efforts by conducting a study of aquatic species and conducting a study of water quality in the mitigation areas, mapping wetlands and developing a wetland geo-database and educating Tribal stakeholdrs, among others.

Iowa

$\frac{\textbf{Tools Development for the Iowa Wetland Action Plan}}{\text{http://iaspub.epa.gov/pls/grts/f?p=}101:150:::NO::P150_GRT_SEQ:100819}$

Tools Development for the Iowa Wetland Action Plan Vince Evelsizer vince.evelsizer@dnr.iowa.gov

Iowa Department of Natural Resources will develop a Wetland Action Plan in a watershed context. The development of this project will enable Iowa Department of Natural Resources to have the mechanisms in place to better track the progress for both wetland quality and quantity. The project would inlcude: 1) the interactive Priority Wetlands Mapping Tools; 2) establish wetlands website; and 3) complete and update National Wetlands Inventory mapping for the entire state of Iowa.

Kansas

Development of a Statewide Wetland Restoration and Prioritization Process for Kansas http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101080

Kansas Water Office Deb Baker

785-296-3185

Utilizing Kansas' state comprehensive plan, Kansas Wetlands and Aquatic Resources Plan, the Kansas Water Office is working to develop a comprehensive, standardized process for identifying, assessing and prioritizing wetland and vulnerable aquatic resources in the state of Kansas. They are developing a wetland assessment and prioritization method in two pilot watersheds intended to complement and implement high priority watershed based goals, projects and policies statewide: • Recognition of the importance of wetlands in overall proper functioning of watersheds; • Acknowledgement of the loss of approximately 50% of pre-settlement wetlands in the state, contributing to today's degraded watesheds • Importance of comprehensive wetland assessments in Watershed Restoration and Protection Strategy (WRAPS) plans; • Lack of up-todate information about the location, condition and function of wetlands in watersheds of the state; and • Need for a standardized method to allow the state and local watershed groups to identify and prioritize wetlands for restoration, protection and enhancement. This process is intended to customize and refine existing wetland assessment methodologies to create a working

standard for all agencies and watershed planning and stakeholder groups in the state of Kansas. This methodology is intended to allow state and local watershed groups to identify and prioritize wetlands for restoration, protection and enhancement. Inherent in the methodology is a consideration of individual and composite wetland function at watershed scales, while also allowing for assignment of functional priority to drive the identification of implementation projects by local stakeholder or agency expert groups, depending on resource objectives. They are building on functional assessment capabilities developed with FY-08 WPDG by incorporating field-based qualitative functional metrics described in the Wetland Evaluation Technique (WET method; Adamus et al. 1991) into Tiner's GIS-based, landscape-level Watershed-based Preliminary Assessment of Wetland Functions approach (W-PAWF; Tiner 2005). Aerial photography from 2007 was evaluated to provide coverage of areas on the landscape that were wet that spring/summer. This together with the existing layers and topographic wetness index (TWI) modeling has greatly improved the ability of the process method to provide a prioritization of potential wetlands. This project is expected to enhance the ability of local watershed groups to assess their watersheds for wetland presence, condition and function. With this information, resources will be more effectively targeted resulting in increased and more effective wetland protection. By accomplishing the goals of the project decision makers at both the local and state levels will gain an increased appreciation of wetlands, not only for sediment reduction, but for other functions.

Michigan

SE Lake Michigan Setting Wetland Restoration Priorities at the Local Level

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101471

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Montana

<u>Developing a Framework for Integrating Wetland Considerations into Watershed Restoration</u> Plans

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101054

Montana Department of Environmental Quality, Wetland Program Stephen M. Carpenedo SCarpenedo2@mt.gov 406-444-3527

Developing a framework for integrating wetland considerations into watershed restoration plans is a project designed to highlight the contribution of wetlands to the functions of the broader aquatic ecosystem and how wetland restoration can be used to achieve watershed restoration goals and objectives. The goals of the project are: 1) develop two comprehensive watershed restoration plans; 2) increase the capacity of local governments and watershed groups to develop comprehensive watershed restoration plans; 3) demonstrate and develop a framework outlining the steps, techniques and tools necessary for incorporating wetlands into the Nine Elements of

watershed restoration planning; 4) demonstrate how the incorporation of wetlands into watershed restoration plans can contribute to reducing pollutant loads identified in the TMDL planning process; and 5) expand the incorporation of wetlands into watershed restoration plans through the transfer of knowledge gained in the demonstration watersheds.

$\underline{\textbf{Restoration Handbook for Wetlands and Riparian Areas in North-Central Montana}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150::::NO:::P150_GRT_SEQ:101052}$

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 406-444-3380

Although there are several print and electronic resources available to managers and stakeholders wishing to undertake voluntary or mitigation-based restoration activities, they do not provide comprehensive guidelines for the restoration of specific wetland ecological communities and systems endemic to particular areas. The purpose of this project is to develop, publish and distribute a wetland and riparian area restoration handbook for north-central Montana. This publication will be the first in a series of regionally-specific handbooks that will provide a comprehensive framework for innovative technologies to enhance restoration results of degraded natural wetlands and newly created wetland mitigation sites. The output will be a wetland restoration publication specifically geared toward the north-central ecoregion of Montana. It will include a narrative of ecological reference sites, a restoration site suitability screen to support decision making about success potential, specific restoration guidelines developed for north-central Montana wetland systems and an overview of restoration activities

North Carolina

North Carolina Wetlands Assessment Method (NC WAM) comprehensive training effort http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101690

North Carolina Dept of Environment and Natural Resources DWQ John Dorney John.Dorney@ncmail.net 919-733-9646

This grant will result in comprehensive training of state and federal agency staff (including staff from neighboring states) in the use of NC WAM and Surface Water Identification Training and Certification (SWITC) method. NC WAM is the new rapid wetland assessment method developed by a team of wetland scientists from NC DWQ, USEPA, USACE, NCDOT, NC Natural Heritage Program, and NC EEP. The method allows state and federal agencies to modify monitoring, permitting, and mitigation programs to reflect wetland quality in addition to acreage. An essential part of the 4-day training will be to emphasize proper use of the field manual.

Oregon

Oregon State University Wetlands Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100797

Oregon State University James Kagan jimmy.kagan@oregonstate.edu 503-731-3070

Expand the capacity of the Oregon Wetland Explorer tool to improve effectiveness of wetland restoration. This project will support 1) the statewide expansion of a wetland prioritization and mitigation developed for the Willamette Valley; 2) development of a wetland prioritization frameworks for Oregon's closed Lakes Basin; 3) creation of an on-line tool for all of Oregon's basins; 4) connection and integration of the Explorer information with current ecosystems services tools; and 5) a pilot project using wetlands spatial data to assess wetland status and trends in the Willamette Valley.

Strategy for the Future of Habitat Restoration in the Columbia River Estuary

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101190

Lower Columbia River Estuary Partnership Catherine Corbett Corbett@lcrep.org 503-226-1580

The Lower Columbia River Estuary Partnership will ehance their existing habitat prioritization framework with new analyses to create an ecosystem-based restoration strategy that identifies high priority areas in the estuary for acquisition and habitat restoration. This grant used primarily EPA headquarter funding, but was administered out of EPA Region 10. \$20,000 of the EPA Grant Dollars for this grant was contributed by EPA Region 10.

Rhode Island

<u>Development of a Rhode Island Statewide Freshwater Wetland Restoration Strategy: Phase 3 http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101151</u>

Rhode Island DEM Office of Water Resources Carol Murphy carol.murphy@dem.ri.gov 401-222-4700

The Rhode Island Department of Environmental Management will undertake a multi-faceted project to further develop and promote a statewide strategy for the restoration of freshwater wetlands. The project will target activities involving the restoration of wetlands and the buffer areas surrounding regulated wetlands and build capacity to report more comprehensively on environmental indicators related to wetland restoration. In addition, the project will build capacity for restoration through an expanded program of outreach involving the transfer of information to local entities including both governmental and non-governmental organizations.

2010

Colorado

Lower South Platte River Basin Wetland Profile and Condition Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101769

Colorado Natural Heritage Program Joanna Lemly joanna.lemly@colostate.edu 970-491-2172

Through this project, the Colorado Natural Heritage Program will: 1) Create a digital map of wetlands in the Lower South Platte River basin; 2) Research habitat requirements of target wildlife species; 3) Identify reference condition wetlands in the basin; and 4) Conduct a statistically valid, field-based survey of wetland conditions in the basin.

Illinois

Assessment of Ecological Function of Created Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102150

Board of Trustees University of Illinois Kathy Young gcoaward@uillinois.edu 217-333-6323

Assessment of Ecological Function of Created Wetlands Study will develop a sampling methodology that will evaluate overall health and function of created seasonal wetlands in the state of Illinois. Aslo, develop an Index of Biological Integrity that incorporates information from two major biotic components (amphibians and plants) and one major abiotic component (water quality) of seasonal wetlands.

Iowa

Improving a Watershed Scale Model to Integrate Wetlands into Watershed Planning

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101900

Iowa State University Michelle Soupir msoupir@iastate.edu 515-294-2307

Iowa State University will increase and improve wetland protection and restoration efforts by developing a tool to integrate wetland protection efforts into watershed plans designed to improve water quality. The objectives are to improve the wetland hydrologic and water quality processes in a watershed scale model; conduct scenarios to optimize placement of new wetlands

and prioritize restoration efforts on a watershed scale; and disseminate results broadly. The final product will be an improved version of Soil and Water Assessment Tool (SWAT) that better represents the functions of wetlands in a watershed. The revised version of SWAT will be fully integrated with the existing software and available to the public through the official SWAT website. Training materials including theoretical documentation and user guidance will be developed for the new SWAT wetland module. Workshops will be hosted within Region 7 states to provide training on the wetland module and to educate decision makers on methods to integrate wetland protection and restoration efforts into watershed planning.

Kansas

Kansas Water Office Program Development Grants

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101651

Kansas Water Office Debra Baker debra.baker@kwo.kc.gov 785-296-3185

This project is for the acquisition of light detection and ranging (LiDAR) data in priority watersheds in the state to identify existing and potential wetland sites for protection and restoration.

Maine

Bangor Area Suitability for Development Study and Regional Stormwater Management Plan for Wetland Protection

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101560

Maine State Planning Office Elizabeth Hertz, Senior Planner elizabeth.hertz@maine.gov 207-287-8061

Working with Interactive GIS and a collaborative stakeholder process, project partners will develop suitability for development maps and regional stormwater plans that protect wetlands and other aquatic resources. This project will provide a prioritization for wetland protection and restoration based on the impacts from current development and the risk from new development within the seven towns that are members of the Bangor Area Storm Water Group (BASWG). Training and education will be provided to promote the use of Low Impact Development (LID) practices for single lot development. This project will use a watershed approach to identify and assess areas most suited for development and most critical for conservation and/or restoration; this knowledge will be used to identify and prioritize restoration actions for wetlands already impacted by stormwater and those most highly valued for protection and will be integrated into local plans and ordinances. Using education and outreach, local stakeholders will gain the knowledge necessary to develop a watershed-based plan for the regulation and protection of wetlands and will be informed about the value of using LID in single lot development.

Identifying Opportunities for Wetland Mitigation in Maine

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101570

Maine Department of Conservation (MENAP) Molly Docherty, Director molly.docherty@maine.gov 207-287-8045

Development of Maine Natural Areas Program (MNAP) In Lieu Fee (ILF) survey project began three years ago with field surveys for wetland restoration and preservation opportunities in southern, central, and downeast biophysical regions. MNAP's ILF survey project was initially developed to identify projects that could use mitigation funds from MDEP's ILF program and compile the information in a database accessble to state agencies, land trusts, and other organizations interested in wetland protection. Since the inception of MNAP's survey project, MDEP's ILF program has become well established and the first round of Maine Natural Resources Conservation Program (MNRCP) grants totaling \$1.7 million have been awarded to land trusts, state agencies, towns, and provate organizations. Within the next 18 months, MDEP will submit a Compensation Planning Framework (CPF) to the Army Corps as part of their revised ILF instrument to come into compliance with the EPA-Corps Compensatory Mitigation Rule. The CPF will further guide the implementation of MDEP's ILF program and identify goals and objectives for wetland compensation. As MDEP's ILF program continues to evolve and grow, so will the needs for wetland survey information. Under the WPDG funds, MNAP will meet these new information needs while building upon the methods and database already developed. Specifically, MNAP will expand the survey area in response to availability of mitigation funds and identified need, increase support, enhance the ILF Database and associated web-based mapping application to complement other state restoration initiatives and continue to provide technical support and data to the MNRCP.

Michigan

 $\underline{\textbf{Michigan Wetland Program-Regulatory and Outreach Refinements.}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102170}$

Michigan Department of Natural Resources & Environment Sharon Maher mahers@michigan.gov 517-241-7991

This project will refine two aspects of the state's wetland program. First, support from the Michigan Department of Attorney General is necessary to ensure that proposed modifications to Michigan's wetland regulatory authority are consistent with the requirements of both state law and the Clean Water Act. In 2008, EPA Region 5 defined modifications necessary to maintain consistency between Michigan's 404 Program and EPA requirements given changes in state and federal law. Development of revisions to state statutory language, administrative rules, and department procedures is ongoing. Direct legal assistance will help to facilitate this process. Secondly, a need for improved education and outreach has been identified. Outreach has been described as an overarching component of the wetland program Core Essential Elements.

Improved communication with the public is a high priority given recent challenges to Michigan's 404 Program. During 2009, the scope and responsibilities of Michigan's wetland program were questioned by the Governor and the Legislature in light of serious state budgetary shortfalls. Although the program was funded for an additional three years, the DNRE will work closely with a stakeholders' Advisory Council to identify possible program improvements. Particularly during this period, outreach will be important to inform the public about proposed regulatory changes, and to respond to interest in multiple aspects of wetland management. Partners in this effort will include the Michigan Wetlands Association and the Association of State Wetland Managers – who will cosponsor a statewide wetland conference with DNRE in 2011. The Michigan Association of Home Builders will also be a partner in outreach efforts...

Minnesota

 $\underline{ \textbf{Fond du Lac Reservation Wetland Restoration Plan Development}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102161}$

Fond du Lac Band of Lake Superior Chippewa Wayne Dupuis waynedupuis@fdlrez.com 218-878-7106

The Fond du Lac Band of Lake Superior Chippewa's goal is to develop a Wetland Restoration Plan (the Plan) for the entire Reservation, to be used to guide the Reservation's Resource Management Division staff, as well as potential partners, in all aspects of wetland restoration. Although the Reservation has a large wetland resource of over 44,000 acres, a number of these wetlands have been severely degraded or lost through various human activities, including forest clearing for farming practices, road construction, drainage ditch construction and maintenance (the Fond du Lac Reservation contains a 47-mile judicial ditch system), poor forest management practices, introduction of invasive species, and other development. The Plan seeks to identify potential restoration sites using existing Geographic Information Systems (GIS) datasets both inhouse and obtained from other sources; evaluate their current condition through wetland delineation, wetland condition assessment, and identification of potential sources of wetland degradation or loss; develop design elements to restore the site including size of restored wetland area, type of plant communities desired, and hydrology necessary to maintain the restored wetland over time; identify potential partners including property owners and other land/resource management agencies; identify potential funding sources for wetland restoration; evaluate restoration successes and track results through database creation and GIS, and evaluate the overall success of the Plan using developed success criteria in the Plan.

Missouri

University of Missouri - Columbia Wetland Program http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101910

Curators of the University of Missouri Dr. Timothy Matisziw

matsziwt@missouri.edu 573-882-1423

The project proposes a framework for better modeling of and reasoning about connectivity in aquatic resources and how changes in connectivity (particularly by altering the landscape) may influence the vulnerability of wetlands, streams, and inhabitant species. Three types of connectivity are essential and will be considered in this framework: 1)biological connectivity - corresponding to species movement potential; 2) chemical connectivity - the chemical relationship among water resources; and 3) hydrological connectivity - the hydrologic connection linking aquatic resources. The influences of barriers such as transportation infrastructure, landcover, terrain, and topography on potential connectivity among impact of proposed landuse changes to measures of biological, chemical, and hydrologic connectivity will also be developed. In conjunction with these efforts, capability to evaluate the impact of potential best managment practices (BMPs) and emerging remediation technologies will be integrated.

Montana

Montana In Lieu Fee Aquatic Resource Mitigation Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101760

Montana Department of Environmental Quality Lynda Saul lsaul@mt.gov 406-444-6652

This proposal's main objective is to increase the amount of wetland, riparian, and stream restoration and protection in Montana by creating a Montana In Lieu Fee (ILF) Aquatic Resource Mitigation Program. The ILF program would offer a practical third-party compensatory mitigation option for 404-permit applicants whose projects impact wetlands, streams, riparian areas, and other regulated aquatic resources. This proposal differs from a similar proposal last year in that: 1) the Montana Army Corps of Engineers (ACOE) Regulatory Office has begun to require mitigation for stream-related impacts; and, 2) a nonprofit entity will constitute the ILF program sponsor. The proposed ILF program will complement current and future mitigation banks by offering an additional mitigation option for crediting in all Montana watersheds. In developing this ILF program, MT DEQ will: 1) work with ACOE to establish an ILF Interagency Review Team (IRT); 2) develop and secure IRT review and comment on an ILF program prospectus; 3) work through Trout Unlimited's Montana Water Project (TU) to establish a subsidiary nonprofit entity to administer the ILF program; and, 4) develop an ILF program instrument and work with the ACOE and IRT to finalize the instrument. TU is an excellent partner for this work because of their leadership in water, stream, and watershed conservation in Montana and legal and policy expertise. As a final product, this grant provides seed money to develop the ILF program which, by the close of the grant, will be self sustaining and operating on 404-impact fees emanating from the program.

Nebraska

<u>Developing LiDAR-Derived Wetland Maps to Assess Conservation Design Practices for Playa</u> Wetlands in Rainwater Basin

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101860

University of Nebraska Board of Regents University of NE-Lincoln Zhenghong Tang ztang2@unl.edu 402-472-9281

To provide topgraphically correct, 3-D wetland maps to prioritize wetland conservation efforts and assess wetland conservation design practices.

North Carolina

<u>Determining Small Stream Biological Criteria for Small Streams for Stream Restoration Success</u> <u>Monitoring</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101790

NC DENR John Dorney john.dorney@ncdenr.gov

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Abstract: Stream mitigation generally involves the restoration of a degraded stream through construction of a new channel or enhancement of an existing channel. Many of the restoration projects used for compensatory mitigation are located on small first or second order streams, as these streams have been most degraded in the past, and are more conducive to restoration than larger channels. Monitoring of the restored channel is then accomplished through annual measurements of channel cross-sections, longitudinal profiles and other metrics to demonstrate channel stability and proper stream function. However, no evaluation of functional uplift or water quality improvement is done, even though these are often stted as goals in restoration plans. Existing biological critera, using aquatic macroinvertebrates, that have already been developed and in use in North Carolina for water quality studies, are not applicable to these small stream restoration projects. Besides the physical stability measures, a new set of metrics is necessary to demonstrate whether a small (first or second order) stream restoration project has appropriate biological function. This grant will develop an appropriate suite of metrics and success critera to evaluate aquatic life for stream restoration projects o more accurately assess the success of the mitigation efforts.

Wisconsin

<u>Developing a Wetland Change Analysis for Wisconsin and Building Compliance Montoring Efforts</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102172

Wisconsin Department of Natural Resources Greg Searle greg.searle@wisconsin.gov 608-266-9252 The multi-agency, multi-partner WI Wetland Team has set goals for increasing the quantity and quality of wetlands in its strategic plan, "Reversing the Loss." Accurate and comprehensive geospatial data on wetland extent and type are needed to compare with past data of similar quality to document changes in wetland quantity and type in a target area. Phase 1 of the project provide a geospatially-based quantitative summary of the important wetland changes taking place on the landscape. Phase 2 will use the data to conduct a thorough investigation to study the causes of the forces driving wetland changes both within and outside the regulatory arena. It will formulate conclusions and recommendation to the Wetland Team for reducing wetland loss and disturbances while increasing wetland quantity and quality through restoration in the target areas.

National

<u>Advancing State & Local Wetland Program Capacity to Prioritize Wetland Restoration Potential</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102144

Environmental Law Institute Jessica Wilkinson wilkinson@eli.org 202-558-3100

Environmental Law Institute (ELI) will provide a critical platform for advancement of the watershed approach to compensatory mitigation decision-making and strategic protection of wetlands through state and local voluntary restoration and protection programs. The project will identify and analyze the methods developed by state and local wetland programs to identify and prioritize wetlands with high restoration potential or conservation value. ELI will outline existing model approaches, highlights tools or methods that are transferable or adaptable to other settings, and describes data gaps preventing implementation of these approaches in individual states.

2011

Connecticut

<u>Build and Refine an Effective Comprehensive Training Program for Wetland Management and Protection in Connecticut</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102553

Connecticut Department of Energy and Environmental Protection Darcy Winther

860-424-3063

The objective of this project is to build and refine an effective, comprehensive 2012 Municipal Inland Wetland Commissioners Training Program. (MIWCTP) The main tasks involved are: developing a program curriculum consisting of basic, advanced, and specialized training for municipal officials and the public; the development, examination and refinement of a publicly accessible introductory on-line training platform; the refinement of a publicly accessible website in which education and outreach documents are made available including the development of a

"frequently asked question" section; and the tracking of CT municipal inland wetlands agencies regulatory decisions and the evaluation of the regulatory decision monitoring database infrastructure and assessment method. The final products will be the 2012 MIWCTP, which will include participant curriculum text packets and other guidance; a publicly accessible introductory on-line training platform; an updated and refined publicly accessible website; a statewide inland wetlands and watercourses status and trends report; and a proposal recommending refinements/modernization of a regulatory decision monitoring data management system infrastructure and assessment method to ensure support of training program objectives, monitoring program goals, and reporting compliance.

Florida

Development of a functional assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater and brackish water ecosystems used for water quality treatment.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102412

Southwest Florida Regional Planning Council Liz Donley - ext. 234 ldonley@swfrpc.org 239-338-2550

Develop a functiona assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater and brackish water ecosystems used for water quality treatment. This method would be utilized for evaluating and crediting water quality improvements in Basin Management Action Plans to address non-attainment of Total Maximum Daily Loads.

<u>Improving Compensatory Mitigation in Tampa Bay Watersheds (Alafia, Hillsborough, and Little Manatee Rivers).</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102411

Environmental Protection Commission of Hillsborough County Dawn Hart - ext. 1243 hart@epchc.org 813-627-2600

Conduct a survey analysis of wetland mitigation areas within the Alafia, Hillsborough, and Little Manatee River watersheds, which discharge into Tampa Bay, an estuary of national significance. This project will identify factors that impeded success during the monitoring period, which corrective actions were needed to attain success and whether the corrective actions were effective.

Iowa

Development of Remote Sensing Technologies for Farmed Wetlands in the Prairie Pothole Region

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102360

Iowa Department of Natural Resources Jim Giglierano james.giglierano@dnr.iowa.gov 319-335-1594

Approximately 95% of nearly 4 million acres of wetlands located in Iowa's portion of the Prairie Pothole Region (PPR) are drained and farmed primarily for row crops. Many of these wetland basins are too wet to produce consistent crop yields and too dry to function as normal wetlands. In Iowa, very little information documents the location and extent of privately built tile drainage infrastructure used to remove water from the landscape. Likewise, there is little geospatial information that documents the yearly change in crop cover within drained wetlands basins, and how much of that change is due to water. This proposal seeks funds to develop and test remote sensing technologies to characterize tile drainage and detect land cover changes for drained wetlands in the PPR of Iowa. The first project component will focus on developing and demonstrating a large scale production methodology to map the location and characteristics of private tile lines used in the PPR. The second component will develop and test remote sensing/GIS procedures to detect disturbances of cropland due to water within identified drained wetland basins over a period of about 8 years using crop compliance imagery. Together, these two methodologies will form the basis of a business plan for mapping and characterizing drained wetlands to be implemented by natural resource management agencies and partners in Iowa. Once these two geospatial data sets are available and shared, natural resource management agencies and partners will be better able to assess drained wetlands, prioritize and plan restoration, and develop better management practices.

 $\underline{\textbf{Navigating the Waters: A Wetland Development Guide Working with Women Landowners}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102359}$

Iowa State University Rebbeca Christoffel christof@iastate.edu 515-294-7429

Women own or co-own 47% of Iowa farmland and 54% of leased farmland1. This 3½ year project is designed to improve wetland restoration by strengthening and expanding upon agencies' existing conservation outreach to women agricultural landowners (WALs) through the creation of a replicable program model, Navigating the Waters. Increased understanding of the generational, group, and individual identities of WALs will provide guidance for identifying processes and designing tools to better address their needs while motivating them to support and engage in wetland restoration. A concept map of barriers to WALs restoring wetlands, network analysis, and a WALs survey will provide data to guide the development and evaluation of strategies and tools to help WALs learn about wetland restoration. Listening Circles and Field Days facilitated through the Women, Food and Agriculture Network (WFAN) will offer a platform for WALs and agencies to interact and learn from each other. Through this model, both WALs and agency staff will build trust and develop partnerships that can increase their

capacities to create, protect, and manage wetlands. This project will result in social, ecological, and physical improvements documented through social networks, biodiversity, and water quality measures. Navigating the Waters will serve WALs and agency staff in increasing wetlands and incorporate action and expert knowledge that can be replicated in other areas in Region 7.

Maine

Identifying Wetland Mitigation Opportunities in Maine

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102283

Maine Natural Areas Program Lisa St. Hilaire lisa.st.hilaire@maine.gov 207-287-8046

A 2007 project initiated by Maine Natural Area Program was developed to conduct systematic and ecologically –based field inventories of wetlands to identify restoration and conservation opportunities in South- Central Maine. MNAP's In Lieu Fee (ILF) survey project was initially developed in order to identify projects that could use mitigation funds being collected through the Maine Department of Environmental Protection's ILF program. MNAP's is proposing to continue that 2007 project to provide technical resources and make use of newly developed wetlands data, for an additional two years. Specifically MNAP will: continue field survey to identify wetlands restoration and preservation opportunities, conduct outreach efforts to identify survey sites and leverage voluntary restoration or protection, ground truth a newly developed wetlands model, maintain MNAP's ILF Database and web-based mapping application to complement other state restoration initiatives, and continue to provide technical support to Maine Natural Resources Conservation Program, which allocates ILF Funds

Massachusetts

Mapping and Protecting Vulnerable Wetlands: A Replicable Approach to Improving Stormwater Quality through Community Outreach

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102552

Massachusetts Department of Environmental Protection Nancy Lin nancy.lin@state.ma.us 617-556-1109

A 2010 WPD grant resulted in the development of unique vulnerable wetlands maps that were connected with outreach efforts for the Upper Charles River Watershed Communities. MassDEP will apply this methodology to additional stressed watersheds in Massachusetts to evaluate its effectiveness in different geographic locations and other- at-risk basins. They will identify elements of this approach that are transferrable to other states interested in protecting their vulnerable wetlands from stormwater and non point source pollution. MassDEP believes this approach and map products are replicable and will be a valuable tool nationwide to plan stormwater infrastructure that improves the protection of wetlands and water quality. Also, this

approach can help further EPA's Healthy Watershed Initiative. The grant will allow MassDEP to conduct pilot demonstration projects in communities over two years. By broadening the scope of the integrated vulnerable wetlands mapping and outreach effort across the state, and refining the scope, MassDEP can determine its utility for other watersheds.

Missouri

Green Infrastructure Design and Sustainable Corridor Planning in Kansas City

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102364

Mid America Regional Council Tom Jacobs tjacobs@marc.org 816-701-8253

To develop and apply advanced green infrastructure planning tools within six priority corridors identified as critical elements of the Regional Sustainable Development Plan for the Kansas City Region. Work will leverage significant investment from the HUD-DOT-EPA interagency partnership on Sustainable Communities. MARC proposes to enhance the Natural Resources Inventory through the valuation of ecosystem services associated with mapped land cover types; to apply this data to assess the GI conservation and restoration opportunities in six multijurisdictional transportation corridors; to develop a conceptual GI plan for one corridor subwatershed; to assess local priority barriers to GI in one corridor; to assess equity dimensions of GI in one urban core corridor; and implement multi-faceted public and professional education on GI tools and strategies.

Nebraska

Potential of Restoration/Conservation Efforts to Ameliorate Greenhouse Gas Emissions http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102365

Nebraska Game and Parks Commission Ted Lagrange Ted.LaGrange@nebraska.gov 402-471-5436

Although there is a federal policy of "no net loss" of wetlands, this does not take into account wetlands that exist on the landscape in hampered condition ad that only provide partial ecosystem services relative to their pristine condition. Conditional assessment of wetlands relative to provisioning of important ecosystem services has not been adequately addressed, especially in highly modified landscapes. Ecosystem services from High Plains wetlands and associated uplands include sediment and contaminant ameliorate, biomass production, food production, carbon storage and greenhouse gas (GHG) mitigation, ground-water recharge, floodwater storage, and biodiversity and wildlife habitat provisioning. There are several investigations that address production agriculture's effects on many of those services in High Plains wetlands. However, GHG emissions and carbon storage data re lacking for wetlands and associated watersheds. The study is designed to examine GHG emissions associated with playas

and adjacent uplands across dominant land uses in the Nebraska western High Plains and RWB and therefore provide key information relative to effects of conservation practices and restoration on this service. GHG emissions will be assessed in playas and surrounding catchments in three dominant land use types in each region. The study directly addresses key core elements in Nebraska's EPA approved WPP and will provide vital input to direct conservation efforts to maximize provisioning of all ecosystem services and focus restoration potential

New Hampshire

<u>Integrated and comprehensive Aquatic resource Habitat Restoration and Protection Program in</u> New Hampshire

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102285

New Hampshire Department of Environmental Services Linda Magoon linda.magoon@des.nh.gov 603-271-4061

New Hampshire DES will develop a unified compliance approach by developing reporting and investigation protocols in partnership with the Watershed Management Bureau, Natural Heritage Bureau, NH Fish and Game Department, and UNH Cooperative Extension. With this effort, DES will establish more efficient processes for the following activities: 1) Integrated reporting and investigation of potential violations: 2) evaluation and application of success criteria for projects restored through mitigation and enforcement actions, including a comparison of the newly-revised NH method, the Ecologically Integrity Assessment v 2.5 developed by the Natural Heritage Bureau, and the Floristic Water Quality; 3) development of a protocol to determine priority sites to inspect and inform the public of high-value restoration and protection areas. Across all of these activities DES will provide information to municipalities and other stakeholder through comprehensive outreach and education about aquatic resource habitat restoration and protection across the state.

North Carolina

<u>Develop North Carolina's Wetland Program Plan and Assess the Impact of Wetland Rules on the Extent of Waters of the State</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102415

NC Department of Environmental & Natural Resources Amanda Mueller amanda.mueller@ncdenr.gov 919-715-6823

NC Division of Water will establish a stakeholders group and develop a Wetland Program Plan for the State of NC. The Wetland Program Plan will be developed by experts from the public, private and university sectors in order to produce a comprehensive plan that my be utilized by all members of the state's scientific, education, regulated, and regulatory communities.

Oregon

Oregon Wetlands Explorer Statewide Wetland Prioritization Tool

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102290

Portland State University John Christy john.christy@pdx.edu 503-725-9953

Project proposes to create a state-wide prioritization tool through the utilization of the already established Oregon Wetlands Explore website. This will provide an effective state-wide tool to assist in the selection of sites for mitigation and restoration, while improving success in defining and achieving desired future conditions for conservation projects. In addition, project will provide wetland resources (historical wetlands, stream channels and vegetation types for 57 townships in the Harney Basin in SE Oregon

Wisconsin

Stockbridge-Munsee Community Wetland Program Development Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102344

Stockbride-Munsee Luke Hennigan water@mohican-nsn.gov 715-793-4818

The Stockbridge-Munsee Community (SMC) Wetland Program Development project will improve the Tribes ability to protect and restore wetlands within the HUC12 watersheds that cover the Stockbridge-Munsee reservation. The funds will be used to hire professional staff, develop a wetland program plan, develop protocols for delineation and assessment, form partnerships with multiple agencies and citizens, and increase staff knowledge base. The successful completion of project tasks will create a fully functioning wetland program that can be expanded to cover additional wetland core elements. Draft the SMC Wetland Program Plan (WPP) Provide staff with training Determine a mechanism and then analyze the extent of potential restoration sites throughout regional watersheds Monitor and assess wetland quality at pre/post restoration sties and reference sites Fully fund a position for two years focused on WPP development and other wetland tasks

State / Tribal / Watershed Wetlands Strategies

2006

Idaho

$\underline{\textbf{Statewide Wetlands Conservation Program for Idaho}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100266}$

Idaho Department of Fish and Game Walt Poole walt.poole@idfg.idaho.gov 208-287-2714

Idaho Department of Fish and Game will lead a collaborative and comprehensive effort to develop a statewide wetlands conservation program for Idaho. The benefits of a statewide wetlands program would include providing strategic direction on wetland management, monitoring, and inventory; leveraging financial resources and existing funds to implement priority wetland conservation work; guiding and coordinating technical assistance to all stakeholders; providing more effective wetlands conservation and managment statewide; and, increasing stakeholder involvement in development and implementation of the program.

2007

California

San Jose State University - Central California Coast Wetland Assessment and Reporting **Framework**

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100315

San Jose State University - Moss Landing Marine Laboratory Gage Dayton, PhD

831-771-4428

The purpose of this project is to develop a common framework for the assessment and public reporting of wetland resources on the Central Coast of California.

Colorado

Developing Statewide Strategies to Improve Effectiveness in Protecting and Restoring Colorado's **Wetland Resource**

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100523

Colorado Division of Wildlife, Wetland Wildlife Conservation Program Brian Sullivan

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The Colorado Wetlands Program is a voluntary, incentive-based program to protect wetlands and wetland-dependent wildlife on public and private land. Statewide strategies are needed to better guide and coordinate these efforts toward strategic endpoints. This project will provide a scientific foundation for setting statewide strategic goals and priorities to more effectively protect, sustain and restore the ecological health of Colorado's wetland ecosystems by creating a wetland profile that describes the types, abundance, and ecological condition of wetlands in Colorado. This profile will then be used to formulate statewide strategies for setting wetland protection and restoration priorities. CDOW will develop a wetland geospatial database accessible via the web and this database will be used to develop the wetland profiles and spatial frame for wetland watershed surveys. CDOW will partner with the Colorado Natural Heritage Program (CNHP) to conduct a pilot probabilistic survey of wetland condition for the Rio Grande Headwaters watershed using the recently-developed Ecological Integrity Assessment Scorecard.

Montana

<u>CSKT Wetlands Program Development and Watershed-Based Monitoring and Assessment of</u> Reservation Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100531

Confederated Salish and Kootenai Tribes Lisa Shourds lisas@cskt.org 406-275-2898

This grant will assist the CSKT in strengthening regulatory and non-regulatory wetlands protection activities through the development of an intergovernmental wetland project tracking database and ArcIMS tools linked to updated NWI, improve coordination of wetland and water quality protection and conservation activities, update components of the CSKT Wetland Conservation Plan thereby strengthening core elements of the Tribes' wetland conservation programs, assist in funding and managing updates to NWI and riparian layers, and facilitate tracking of wetland condition and conservation goals and development of wetlands water quality standards through continuing implementation of a rotating watershed-based WMAS. The Program will complete assessment and analysis of wetland condition and mitigation project effectiveness in the Jocko River watershed, and promote sound wetland conservation activities through effective wetland education and outreach efforts.

Montana Department of Environmental Quality - 2007 Wetland Program Development Grant http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100525

MDEQ Lynda Saul lsaul@mt.gov 406-444-6652 The Montana Wetland Program Development project goal is to build wetland protection, restoration, and net gain capacity at the state, local government and community level using three interrelated components: 1) Coordinate and enhance wetland program development and net gain strategies in conservation focus areas, 2) Support local governments and communities with science-based information, education scholerships, and training and outreach, and 3) Provide access to Montana's wetland information, mapping, and assessment and monitoring tools.

Ruby River Corridor Protection Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100524

Ruby Valley Conservation District Greg Kudray gkudray@mt.gov 406-444-0915

This award provide funding to build capacity to protect manage and restore wetlands, through assessment and development of a comprehensive program. This project involving wetland identification, assessment, mapping and a GIS conservation planning database project is an integral part of a comprehensive watershed planning and protection process in the Ruby River Watershed in Southwest Montana. The project will complete the ground work for a broad based, locally driven land use planning and conservation model that will provide the basis for establishing protection strategies along the wetland and riparian corridor. The results will strengthen the capacity of local agencies to develop local land use regulations based on the natural resource assessments.

2008

California

<u>California Stream and Wetland Protection Policy Development Pilot - Association of Bay Area Governments</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100390

Association of Bay Area Government Paula Trigueros

510-622-2499

This project will complete the Basin Plan adoption process for the North Coast and San Francisco Bay Regional Water Quality Control Boards' Stream and Wetland Protection Policy, develop a permit checklist for stream and wetland restoration projects, and develop model language for local land use planning tools. The geographic location of this project is California's North Coast and Bay Area regions.

<u>California Wetland and Riparian Policy Development - California State Water Resources Control</u> Board

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100388

California State Water Resources Control Board Bill Orme

916-341-5464

The California State Water Resources Control Board (CA SWRCB) will establish a state policy to protect wetlands from dredging and filling and from other activities impacting water quality. The CA SWRCB staff will take the Stream and Wetland Policies proposed for adoption at the North Coast and Bay Area Regional Water Quality Control Boards and develop a resolution for the CA SWRCB's adoption. The geographic location for this project is statewide.

2009

Florida

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> Joseph Sound, Pinellas County, FL

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

<u>Performance Partnership Grants: Seminole Tribe of Florida Tribal Wetland Program</u> Development Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101615

Seminole Tribe of Florida Craig Tepper

954-965-4380

the Tribe will develop a wetland management program for the Big Cypress, Brighton and Immokalee Reservations, develop Tribal capacity and assistal Tribal stakeholders to develop regulation regarding Tribal wetlans. Activities will expand the Wetland Management Plan to include the Immokalee Seminole Indian Reservation, identify, integrate, and expand Tribal efforts in the area of wetland management by identifying at-risk wetlands, integrate water quality and wetland efforts by conducting a study of aquatic species and conducting a study of water quality in the mitigation areas, mapping wetlands and developing a wetland geo-database and educating Tribal stakeholdrs, among others.

Montana

<u>Fort Belknap Indian Community - 2009 Wetland Program Development Grant http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100783</u>

Fort Belknap Indian Community Julia Doney, President pres_jdoney@ftbelknap-nsn.gov 406-353-2205

(1) Refine the Aquatic Resource Protection Ordinance (ARPO), by developing regulatory enforcement criteria for the protection of vulnerable wetland resources, that will protect, sustain, and restore the health of critical natural habitats and ecosystems. Currently our ARPO has no enforcement authority written into it. Final Product will be to complete implementation of regulatory enforcement Measures including a Penalty Matrix. This project will link these outcomes and outputs to the Agency's Strategic Plan. (2) Development of Wetland Monitoring Surveys in Peoples Watershed, our priority Watershed. Currently our wetland assessment sites are in need of monitoring surveys, to measure the health and condition of "At Risk" wetlands, so that a monitoring strategy can be developed. Final Product will be to develop Monitoring Survey that gives an increased understanding of a wetland's condition.

2010

Arizona

<u>Development of a Comprehensive Wetland Program - Salt River Pima-Maricopa Indian</u> Community

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101618

Salt River Pima-Maricopa Indian Community Nicole Charlie nicole.charlie@srpmic-nsn.gov 480-362-7646

The overall project is to develop a focused and sustainable Community Wetlands Program. This will establish baseline conditions of as many wetlands and riparian areas as possible, and the plan will help develop a systematic approach to preserving, improving, and ultimately increasing acreage of these areas in the community. The Wetlands Program will provide the framework for the Tribe to manage and monitor all wetlands within the Community. The Wetland Program administrator will develop internal and external partnerships in order to provide an understanding of of wetlands and the role they play within the community. Educational opportunities will also be provided to all community members about wetlands and wetlands protection.

Arkansas

<u>Development of a Wetland Program Plan for Arkansas containing the National Priority Areas set</u> forth by the EPA

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102190

Arkansas Natural Resources Commission Ken Brazil ken.brazil@arkansas.gov 501-682-3991

Project will develop a Wetland Program Plan (WPP) for the state of Arkansas. The WPP will outline the goals and actions the state of Arkansas will take to implement the Priority Areas identified by EPA. Core elements to be addressed include: Monitoring and Assessment; Voluntary Restoration and Protection; Regulation; and Water Quality Standards for Wetlands

Vermont

Developing Core Elements of a Comprehensive Wetlands Program in Vermont

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101605

Vermont Department of Environmental Conservation (VTDEC) Alan Quackenbush alan.quackenbush@state.vt.us 802-241-3761

Through a multi-media performance partnership grant, the Vermont Department of Environmental Conservation will administer environmental programs for air, water, and waste throughout the state directing resources as appropriate to address environmental and public health priorities. The objective of this project is to build and refine four Core Elements of

Vermont's Wetland Program. In particular, this project will focus on the following Core Elements of the USEPA's Enhanced State and Tribal Initiative; Monitoring and Assessment, Regulatory, Voluntary Restoration and Protection, and Water Quality Standards for wetlands.

National

 $\underline{\textbf{Developing Comprehensive Approaches to Wetland Program Development with States and Tribes}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102040}$

Association of State Wetland Managers, Inc. Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project is to support the development of state and tribal wetland plans by assisting states and tribes in creating short, but comprehensive wetland plans that integrate the core element framework (CEF) into a cohesive multi-year approach to building the capacity of states and tribes to achieve no net loss of wetlands. EPA's recently established ESTP initiative encourages states and tribes to develop wetland plans. ASWM will assist states and tribes nationally by encouraging peer-to-peer sharing, identifying best practices for developing plans, and assisting states and tribes in identifying and overcoming institutional and programmatic barriers to integration of the four core elements in wetland plans. This will be accomplished by hosting webinars, conference calls and workshops for states and tribes, summarizing case studies and providing new material on ASWM's webpages. ASWM will encourage peer-to-peer support among states and tribes and the development of formal and informal workgroups to address specific issues. ASWM will invite states and tribes as well as EPA regions, Corps districts, and other federal agencies and contributing partners to participate in the project and support the development of comprehensive state and tribal wetland programs. ASWM will leverage existing contact lists and long-term working relationships with states, tribes, EPA HQ and regions, and other federal agencies to conduct this project.

2011

California

Science and Policy Support for the Development of the California Wetland Area Protection Policy http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102396

Aquatic Science Center Lawrence Leung josh@sfei.org 510-746-7356

Provide the scientific and policy background information and analysis to support the development of the California Wetland Area Protection Policy. The Policy will include the statewide beneficial uses to protect wetland-related functions, and a stream definition for regulatory use.

$\underline{\textbf{Wetland Assessment and Wetland Program Plan Development - Robinson Rancheria}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102393}$

Robinson Rancheria Mike Schaver mschaver@robinsonrancheria.org 707-725-0205

Monitor wetland plant and macroinvertebrates on the Robinson Rancheria to increase the understanding of the biological condition of the Rancheria's wetlands. Using this information, the applicant will produce a Wetland Program Plan to outline the development of their program.

Delaware

Advancement of Wetland Knowledge Regarding Functionality

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102580

Delaware Department of Natural Resources and Environmental Control Mark Biddle mark.biddle@state.de.us 302-739-9939

This project will assist the Delaware Department of Natural Resources and Environmental Control (DNREC) to focus on advancing wetland knowledge regarding functionality and worth of ecosystem services.

Indiana

Develop a Wetlands Program Plan and Agency Strategy for Wetlands in Indiana

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102334

Indiana Department of Environmental Management Michael Mendyk mmendyk@idem.in.gov 317-233-8850

Develop an agency wetland strategy, which will build the capacity of the existing program and develop partnerships with both state and local agencies. The strategy will create education and outreach opportunities for schools, stakeholders and other interesting parties on the importance and benefits of wetlands. The objectives of the workplan include: 1)Developing the core elements for a successful Wetland Program Plan (WPP). 2)As part of a successful WPP, IDEM will develop a strategy to research, investigate, experiment, train, demonstrate, survey and study the causes, effects, extent, prevention, reduction, and elimination of water pollution in waters of the State.3) Provide support for IDEM's current 401 Certification program. 4) Provide training opportunities to IDEM staff.5)Utilize interns or contracted assistance for the Wetlands Section in the IDEM. 6) Develop an education and outreach program on the importance of Wetlands.

Iowa

Development of Riverine Wetland Condition Monitoring and Wetland Program Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102361

Iowa Department of Natural Resources Brandon Harland brandon.harland@dnr.iowa.gov 515-281-3150

Summary: Beginning in 2004, a successful effort was initiated by the Iowa Dept. of Natural Resources to build a statewide comprehensive wetland monitoring and assessment program. To date, the development of wetland monitoring protocols and the actual monitoring of wetlands has focused on the Prairie Pothole (depressional) wetlands found in north Iowa. This proposal seeks to build upon the wetland assessment methods developed so far in the form of a three year project to integrate and adapt our monitoring methods (biological, chemical, physical) for an important, largely unsampled category of wetlands found in Iowa; riverine wetlands. A second important component of the project is to develop a Wetland Project Plan (WPP) for Iowa. This component would continue to build the framework for a comprehensive wetland program in Iowa.

Kansas

<u>Development of Wetland Program Plan & Continuation of Heritage Stream project</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102363

Kansas Water Office Deb Baker debra.baker@kwo.ks.gov 785-296-0612

The two major activities are proposed: 1. Complete an EPA compliant Wetland Program Plan for Kansas. 2. Build upon an ongoing project concerning potential heritage streams and watersheds to conduct a paired watershed study to demonstrate the role of wetlands in watersheds with high quality samples, functional assessments, additional HUC watersheds with potential wetland identified and incorporation of findings from heritage stream watersheds into a Kansas Water Plan policy paper.

North Carolina

<u>Develop North Carolina's Wetland Program Plan and Assess the Impact of Wetland Rules on the Extent of Waters of the State</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102415

NC Department of Environmental & Natural Resources Amanda Mueller amanda.mueller@ncdenr.gov 919-715-6823 NC Division of Water will establish a stakeholders group and develop a Wetland Program Plan for the State of NC. The Wetland Program Plan will be developed by experts from the public, private and university sectors in order to produce a comprehensive plan that my be utilized by all members of the state's scientific, education, regulated, and regulatory communities.

Oregon

Multi-City/County Water Resource Assessment Project Phase III

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102295

Lane County Council of Governments Denise Kalakay dkalakay@lcog.org 541-682-7415

This project proposes to provide a rigorous development and natural resource planning strategies (related to wetland and riparian resources) for 4 small cities in Oregon to maximize the benefits for natural resource protection by developing and improving policies at the local level. The proposed work builds upon work done under a previous EPA grant (through the Western Estuaries Initiative LCOG was able to develop local wetland inventories and conduct functional assessments of those wetlands for 8 cities in 3 counties). This project will attempt to work with 4 of those cities to develop an enhanced land use action kit for their use as well as develop community outreach materials about water resource protection.

Pennsylvania

Advance state of the art science tools and their application to the Commonwealth of Pennsylvania's wetland program.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102581

The Pennsylvania State University Sue Lavan sal5@ems.psu.edu 814-865-7650

The Pennsylvania State University Grant will link specific core elements of the Pennsylvania Wetland Program Plan. The grant will be used to advance state of the art science tools and their application to the Commonwealth of Pennsylvania's wetland program. The work will contribute significantly to monitoring and assessment, regulatory activities, and restoration and protection of wetland systems. Work will be used to prioritize watersheds with regard to differential amounts of wetland stressors.

Virginia

$\underline{ \textbf{Advance the Commonwealth's Wetland Program Development Efforts}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102570}$

VA Department of Environmental Quality Patty Walsh

EPA Wetlands Program Development Grant funds authorized by Section 104(b)(3) of the Clean Water Act have been awarded to the Virginia Department of Environmental Quality (VA DEQ) to advance the Commonwealth's wetland program development efforts. This grant will allow the VA DEQ to: 1) modify the Wetland Data Viewer to incorporate linear projects for NEPA review and permitting; 2) incorporate Virginia's approved mitigation banks into the Wetland Data Viewer to ensure that impact assessments and mitigation crediting lead to replacement of aquatic resources with similar structural, functional or condition attributes; 3) continue to recalibrate the wetland assessment models to ensure scientific validity; and 4) update the monitoring and assessment strategy and develop online reference manuals/training modules for effective decision-making and improved wetland resource management.

Washington

Development of a Tribal Wetland Program Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102530

Cowlitz Indian Tribe Rudy Salakory rsalakory@cowlitz.org 360-575-6227

The Cowlitz Indian Tribe is unique in that they are one of the few tribes in Washington State without a land base or reservation. The Cowlitz Tribe proposes to use the concept of "First Foods" in their development of a Tribal Wetland Program Plan (WPP) to guide their restoration focus efforts on their usual and accustomed areas that occur throughout western Washington State and northern Oregon.

Vulnerable Wetlands

2006

Montana

 $\underline{ \textbf{Fort Belknap Indian Community - Wetlands Management Program}}_{ \ \ \, \text{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100519}$

Fort Belknap Indian Community Julia Doney

$\underline{\textbf{Mapping and Analysis of Geographically Isolated Wetlands}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101130}$

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 404-444-3380

This project will fill data and information gaps by mapping, analyzing, and surveying geographically isolated wetlands in Montana. The Montana Natural Heritage Program (MTNHP) will use existing NWI maps, wetland maps being produced under a pilot mapping and change detection project, NAIP color IR photography, and maps created specifically for this project to assess the scope, condition and status of isolated wetlands including ephemeral and intermittent streams. An analysis of wetland acreage, types, functions and values will be compiled and wetland types and/or geographic areas most in need of protection will be prioritized. Using NatureServe and MTNHP databases, wetland types, associations and species at risk will be identified. HGM functions will be assigned to mapped wetlands using a GIS model created under an earlier WPDG, enabling an analysis of functions at risk. Field surveys will be conducted to identify high-quality reference wetlands. High quality reference wetlands will be entered into the MTNHP and State databases. Models developed will guide the acquisition of additional digitized NWI data and/or creation of new digital maps from IR photos. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

Northern Cheyenne - Comprehensive Wetland Monitoring and Assessment Program http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100518

Northern Cheyenne Tribe David Millegan

The goal of the Northern Cheyenne Tribe's Wetland Program is to ensure that Reservation wetland resource management achieves no net loss and to provide protection to vulnerable wetlands, with the ultimate goal of a net gain of wetlands. This project supports enhancement of the Northern Cheyenne Tribe's wetland monitoring and assessment program through several tasks. Information will be gathered to develop management strategies to control non-native, invasive wetland species. This project will also evaluate the cumulative effect of wetland loss and restoration. This project also supports Northern Cheyenne coordination with the USACE and EPA pursuant to the USACE/EPA Memorandum of Agreement on Mitigation, 1990.

Oregon

Rouge Valley Wetlands Conservation Effort

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100264

Rouge Valley Council of Governments Craig Harper charper@rvcog.org 541-423-1369

Development of local landuse planning tools (i.e, ordinance, landuse restrictions, education, etc.) for Jackson County to use to promote greater compliance with wetland regulations, identify potential mitigation sites and faciliation for development of a Regional General Permit for vernal pool areas.

National

 $\underline{\textbf{Building capacity for the ASWM to strengthen and expand state and other wetland programs}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859}$

Assoication of State Wetl; and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

2007

California

<u>California Stream and Wetland System Protection Policy Pilot Project - Association of Bay Area</u> Governments

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100316

Association of Bay Area Governments Paula Trigueros ptrigueros@waterboards.ca.gov 510-622-2499

This project is to develop a comprehensive Stream and Wetlands System Protection Policy.

2008

Colorado

Advancing the Protection of Playa Wetlands Through Effective Buffers

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100853

Rocky Mountain Bird Observatory Alison Cariveau Alison.Cariveau@rmbo.org 970-482-1707

The project objective is to advance the protection of geographically isolated playa wetlands, the most numerous wetland type in the Shortgrass Prairie. Building on previous work in eastern Colorado and western Nebraska, Rocky Mountain Bird Observatory (RMBO) will compile a reference network of playas and produce an assessment of the number of playas and acres with protected status, both necessary components of statewide wetlands programs. In addition, RMBO, will focus directly on buffer projects designed to mitigate sedimentation, the primary threat to the persistence and proper functioning condition of playas. The information provided by the project's activities will guide efforts to protect and increase wetland resources in the short grass prairie habitat of the western U.S. by helping decision-makers determine which conservation and protection activities are needed for playa wetlands in the West to yield the greatest retention and improvement in functional wetland acreage over the long-term. Outputs include: 1) creation of a reference network of playas in native prairie that include playas representing undisturbed characteristics for quality comparisons to restored playas; 2) using existing playa data collected by RMBO and USGS collaborators in the Playa Lakes Joint Venture to model the hydrological function of playas, including those that are enrolled in buffer programs; 3) analysis of data and interpretation for wetland managers, including private landowners and resource professionals, which will be developed into guidelines for best management practices to be shared with partners and made widely accessible via the internet; and 4) three workshops within the study area, in which wetland conservation practitioners will learn about how buffer characteristics affect wetland function, with discussion as to how to implement buffer projects to best restore full functional capacity to playas. This project will yield greater protection for playa wetlands, which are vulnerable due to their geographic isolation. The number of playas protected by buffers will increases within the geographic region of this project.

Massachusetts

NEIWPCC Vulnerable Wetlands Conference

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100319

New England Interstate Water Pollution Control Commission Kerry Strout kstrout@neiwpcc.org 978-323-7929

The New England Interstate Water Pollution Control Commission (NEIWPCC) proposes to organize a one-day conference addressing the Protection of Vulnerable Wetlands and Aquatic Resources in the wake of the United States Environmental Protection Agency and United States Arm Corps of Engineers joint June 5, 2007 Legal memo entitled: Clean Water Act Jurisdiciton Following the United States Supreme Court's Decision in Rapanos v. United States & Carabell v. United States. The themes of this conference will address: geographically isolated wetlands at risk due to recent changes in the legal landscape surrounding the Clean Water Act, guidance impacts via case studies from the Northeast states, and stakeholder and municipal interaction in light of these changes. Participants will be a regional audience of wetland professionals.

New Hampshire

Enhance Protection of Critical at Risk and other Priority Wetlands in New Hampshire

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100320

New Hampshire Natural Heritage Bureau Donald M. Kent, Administrator donald.kent@dred.state.nh.us 603-271-2215

The project's primary goal is to enhance protection of critical, at risk, and other priority wetlands in New Hampshire by improving the quantity, quality, and effectiveness of information used for regulatory and non-regulatory wetland protection activities. The project has three objectives. First, adapt and apply a Ecological Integrity Assessment (EIA) method to quantify the current status of known critical and at-risk wetlands using a method recently developed by NatureServe and member Natural Heritage programs. Second, conduct wetland inventories to identify undocumented critical and at-risk wetlands in watersheds subject to intense development pressure; Merrimack, Saco, and Piscataqua River. Interpreted wetland maps will be developed, intensive field inventories conducted, and the results documented in the Natural Heritage Bureau's (NHB) Biotics database. Third, disseminate project results through targeted workshops.

National

Assessing and Evaluating the Portfolio of Vulnerable Wetland and Aquatic Resources http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100858

Environmental Law Institute Loretta Reinersmann reinersmann@eli.org 202-939-3800

ELI will help state and local governments fill jurisdictional gaps and protect wetland and aquatic resources by identifying the kinds of wetlands and aquatic resources no longer being found to be jurisdictional and not subject to state review under §401 of the Clean Water Act (CWA). ELI will determine for each state what kinds of aquatic resources are not coming under federal jurisdiction, their general distribution, and the types of functions they provide. Effective gapfilling and understanding of the functions at risk requires a practical understand of what wetland and aquatic resource types, in actual practice, are falling outside the regulatory framework. The information provided by the project's activities will guide efforts across the country by helping state/tribal/local government decision-makers to effectively gap-fill by wetland and aquatic resource types that are, in actual practice, are falling outside the federal regulatory framework. Gant outputs include: 1) examining a sampling of jurisdictional determinations across the U.S. to determine what aquatic resource types and geographical areas are being excluded from federal jurisdictions; 2) taking the aquatic resource types identified through this approach and through rigorous analysis of the scientific literature related to these resources in specific geographic area and determining the functions that are associated with these resources that are subject to risk; and 3) carrying out a detailed assessment across the U.S. of vulnerable wetland and aquatic resource types and their associated functions, which will be published and otherwise disseminated by ELI.

2009

Florida

<u>Climate Change Vulnerability Assessment and Adaptation Opportunities for Salt Marsh Types in Southwest Florida</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101637

Southwest Florida Regional Planning Council Elizabeth Donley idonley@swfrpc.org 239-338-2556

the Charlotte Harbor National Estuary Program will inventory and map the physical extent of the five types of salt marsh present within the CHNEP Study Area. Researchers will then identify significant potential effects on these salt marsh ecosystems from anticipated climate change. An assessment of significant potential effects will be developed as well as identificant of opportunities for avoidance, minimization, mitigation and adaptation that could be implemented. An interactive GIS mapping product depicting the project outputs will be uploaded to the CHNEP website for use by researchers, local governments and the public.

Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St. Joseph Sound, Pinellas County, FL

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

Maine

<u>Conservation Planning for Tidal Marsh Migration Due to Sea Level Rise http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100792</u>

Maine Department of Conservation Natural Areas Program Molly Docherty molly.docherty@maine.gov 207-287-8045

The goal of this project is to minimize net loss of tidal marsh habitat and its incumbent functions and values by identifying and initiating conservation planning for landscapes that will be needed to accommodate marsh migration.

Montana

A Profile and Assessment of Riparian Forests, Shrublands, and Wetlands along Montana's Large Rivers

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101051

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 406-444-3380

The Montana Natural Heritage Program (MTNHP) plans to produce a comprehensive landscape profile and Level I assessment of riparian forests, shrublands, and wetlands along Montana's large river systems. Although the Clean Water Act protects the wetland component of these ecosystems from direct dredge and fill activities, it offers no protection to surrounding riparian features where soils, vegetation, or hydrology do not meet the jurisdictional thresholds of "waters of the United States." As a result, flooplain wetlands are often ecologically isolated from the dynamics that create and sustain them. This project will apply GIS-based landscape profiling and Level I assessment tools to characterize riparian and wetland condition along each reach of every large river in Montana. This statewide, reach-by-reach condition characterization will give local planners, watershed groups, and resource managers geographically-specific data to use in watershed plans, conservation efforts, and TMDL development. To ensure broad dissemination and use of results, we have planned a comprehensive outreach strategy involving map packages tailored to each county and watershed, fact sheets, web information, presentations, and a minimum of four workshops, one geared toward local, regional, and tribal planners, one to floodplain managers, one to watershed groups, and one to GIS professionals. The Level I assessment tools, training materials and templates will be broadly transferable to other wetland programs in Region 8 states.

Ohio

Tinkers Creek Watershed Wetland Assessment and Prioritization Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100815

Cuyahoga County Board of Health Jil Lis jlis@ccbh.net 216-201-2001

"The Cuyahoga County Board of Health will perform a study to further develop the wetland program for the Tinkers Creek Watershed in the context of creating water quality improvements by implementing these wetlands as best management practices. They will develop a scientifically valid approach to watershed planning that will protect, prevent and reduce pollution to wetlands and other aquatic resources."

2010

North Carolina

Assessing Impacts Due to Small Impoundments in North Carolina to Support 401 Certification Policies

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101800

North Carolina DENR John Dorney john.dorney@ncdenr.gov

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Abstract: The objective of this proposed project is to collect chemical, physical, and biological water quality assessment data to support 401 Certification permitting decisions and addition of appropriate permitting conditions when issuing 401 Certifications in regards to small, artificial impoundments in NC. Currently, NC does not require mitigation for impounded stream reaches due to flooding and includes minimal conditions in 401 Certifications that are issued for small, private impoundments. This contradicts NC Division of Water Quality (NCDWQ) mitigation and restoration policies, since DWQ provides stream mitigation credits for dam removal projects. There are also concerns that these impoundments can lead to water quality degradation to the point that they can no longer be considered a change of use but a loss of use (e.g. aquatic life use support). Results from a large-scale, probabilistic study of small impoundments by the Tennessee Department of Environment and Conservation (TN DEC 2006) indicated that the impoundments had adverse affects on the physical, chemical, and biological components downstream. Thee are concerns that similar impacts occur in NC as well. During regulatory review of 401 applications, DWQ has insufficient data on small impoundments within NC to use as justification for inclusion of additional permit conditions based on concerns over these types of environmental risks. This study is intended to address these criticisms and also determine if existing data (such as the Tennessee study) are applicable to small, private impoundments located in the Blue Ridge and Piedmont ecoregions of NC.

Water Quality Standards

2006

Colorado

Southern Ute - Monitoring and Water Quality Standards Development for Wetlands Protection http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100515

Southern Ute Indian Tribe, Environmental Programs Division Michiko Burns mburns@southern-ute.nsn.us 970-563-0135

This project will further water quality sampling and database development for the development of wetland water quality standards for the Southern Ute Tribe. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

Northern Mariana Islands

Coral Reef Biological Criteria Development for the Commonweatlh of Northern Mariana Islands http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100365

Commonweath of Northern Mariana island - Division of Env. Quality

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This project will develop biological criteria for the nearshore coral reef ecoystems of the Commonwealth of Northern Mariana Islands

National

Building capacity for the ASWM to strengthen and expand state and other wetland programs http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859

Assoication of State Wetl; and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

2007

Montana

Chippewa Cree - 2007 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100530

Chippewa Cree Tribe Kieth Gopher keith@cct.rockyboy.org 406-395-4147

The 2007 wetland project for the Chippewa Cree Tribe will conserve and restore wetlands on the Rocky Boy's Indian Reservation in alighment with national goals of the Environmental Protection Agency of "no net loss" and focus of assessment of wetland conditions to achieve a net increase of total wetlands by 2011. The Chippewa Cree Tribe is currently implementing a comprehensive wetlands program to accurately assess and delineate Tribal wetlands through a rotating basin approach. Program objectives for FY07 will include; a fen wetlands protection demonstration project, public education (to include a fen identification workshop and a wetlands segment in an educational video), field testing a Tribal assessment method on wetlands monitoring sites, draft narratives for wetlands water quality standards, and continuing to aquire baseline data, including satellite imagery, of wetland sites on the reservation.

Utah

<u>Completion of Site Specific Nutrient Standards for Farmington Bay Wetlands, Great Salt Lake Basin Wetlands Reference Network, and Phase I Wetlands Mercury Assessment</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100529

Utah Department of Environmental Quality, Division of Water Quality Jeff Ostermiller jostermiller@utah.gov 801-538-6370

See proposal for project description. Proposal attached as project deliverable.

2008

Tennessee

Using Thecamoebians as Bioindicators of Water Quality in the Clinch and Powell River Watershed http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEO:100811

Middle Tennessee State University Melissa Lobegeier (MTSU) mlobeg@mtsu.edu 615-878-2403

Devlop a method of using the shelled invertebrate group, thecamoebians, as Bioindicators of water quality on a watershed level in the Clinch and Powell River Watershed. These organisms will be used as a new cost-effective bioassessment of watershed conditions and water quality. (MKJ)

National

Wetlands Assessment Technical Assistance Center: EPA Region 4

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100852

Research Triangle Institute Kimberly Sherrill ksherrill@rti.org

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This grant is to develop and implement the Southeastern Wetland Assessment Technical Assistance Center (SEWATAC) to provide the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee with technical assistance and workgroup support for collecting, managing and analyzing wetland monitoring and assessment data. The workgroup's focus will be on rapid wetland assessment methods, statistically-based data analysis, and methods for collecting wetland assessment data for parameters such as vegetation, soils, hydrology, aquatic insects, amphibians, algae, and water chemistry. Technical assistance will be provided through a Webinar-based apporach, field training visits to participating states, and telephone and Web-based statistical assistance.

2009

Florida

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> Joseph Sound, Pinellas County, FL

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

<u>Performance Partnership Grants: Seminole Tribe of Florida Tribal Wetland Program</u> Development Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101615

Seminole Tribe of Florida Craig Tepper

954-965-4380

the Tribe will develop a wetland management program for the Big Cypress, Brighton and Immokalee Reservations, develop Tribal capacity and assistal Tribal stakeholders to develop regulation regarding Tribal wetlans. Activities will expand the Wetland Management Plan to include the Immokalee Seminole Indian Reservation, identify, integrate, and expand Tribal efforts in the area of wetland management by identifying at-risk wetlands, integrate water quality and wetland efforts by conducting a study of aquatic species and conducting a study of water quality in the mitigation areas, mapping wetlands and developing a wetland geo-database and educating Tribal stakeholdrs, among others.

<u>Commonwealth of the Northern Mariana Islands -Coral Reef and Sea Grass Monitoring and Biological Criteria Development</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101210

CNMI Division of Environmental Quality Frank Rabauliman frankmrabauliman@deq.gov.mp 679-664-8555

Build upon previous coral reef work and establish monitoring in the Saipan Lagoon for seagrass-macroalgae seasonal cycles, impacts of disturbance and to determine the impacts of land-based pollution. In addition, CNMI will develop and incorporate seagrass biocriteria regulations into DEQ water quality standards.

National

Water Quality Standards in State Wetlands Programs

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101461

Association for State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

This project will provide states with best practices for developing and implementing water quality standards for wetlands to improve implementation of the 401 certification programs nationally. It will summarize current use of water quality standards for wetlands in the 50 states, conduct case studies of three mature programs, and undertake in-depth analyses of best management practices for three states in the early stages of developing wetland water quality standards.

2010

North Carolina

Assessing Impacts Due to Small Impoundments in North Carolina to Support 401 Certification Policies

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101800

North Carolina DENR John Dorney john.dorney@ncdenr.gov

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Abstract: The objective of this proposed project is to collect chemical, physical, and biological water quality assessment data to support 401 Certification permitting decisions and addition of appropriate permitting conditions when issuing 401 Certifications in regards to small, artificial impoundments in NC.

Currently, NC does not require mitigation for impounded stream reaches due to flooding and includes minimal conditions in 401 Certifications that are issued for small, private impoundments. This contradicts NC Division of Water Quality (NCDWQ) mitigation and restoration policies, since DWQ provides stream mitigation credits for dam removal projects. There are also concerns that these impoundments can lead to water quality degradation to the point that they can no longer be considered a change of use but a loss of use (e.g. aquatic life use support). Results from a large-scale, probabilistic study of small impoundments by the Tennessee Department of Environment and Conservation (TN DEC 2006) indicated that the impoundments had adverse affects on the physical, chemical, and biological components downstream. Thee are concerns that similar impacts occur in NC as well. During regulatory review of 401 applications, DWQ has insufficient data on small impoundments within NC to use as justification for inclusion of additional permit conditions based on concerns over these types of environmental risks. This study is intended to address these criticisms and also determine if existing data (such as the Tennessee study) are applicable to small, private impoundments located in the Blue Ridge and Piedmont ecoregions of NC.

<u>Determining Small Stream Biological Criteria for Small Streams for Stream Restoration Success</u> <u>Monitoring</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101790

NC DENR John Dorney john.dorney@ncdenr.gov

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Abstract: Stream mitigation generally involves the restoration of a degraded stream through construction of a new channel or enhancement of an existing channel. Many of the restoration projects used for compensatory mitigation are located on small first or second order streams, as these streams have been most degraded in the past, and are more conducive to restoration than larger channels. Monitoring of the restored channel is then accomplished through annual measurements of channel cross-sections, longitudinal profiles and other metrics to demonstrate channel stability and proper stream function. However, no evaluation of functional uplift or water quality improvement is done, even though these are often stted as goals in restoration plans. Existing biological critera, using aquatic macroinvertebrates, that have already been developed and in use in North Carolina for water quality studies, are not applicable to these small stream restoration projects. Besides the physical stability measures, a new set of metrics is necessary to demonstrate whether a small (first or second order) stream restoration project has appropriate biological function. This grant will develop an appropriate suite of metrics and success critera to evaluate aquatic life for stream restoration projects o more accurately assess the success of the mitigation efforts.

South Carolina

<u>Development of monitoring and assessment tools for nitrogen and phosphorous in SC Coastal Wetlands.</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102230

SC Department of Natural Resources Dianne Greenfield greenfield@dnr.sc.gov 843-725-4823

Provide regulatory agencies with targeted information regarding biological responses to elevated nitrgen and phosphorus levels in SC coastal wetlands. State will engage in field monitoring of nutrients and key biological indicators; conduct field experiments to determine wetland specific phytoplankton responses to nutrient loading; and perform laboratory experiments to determine the effects of alterred nutrient ratios on phytoplankton growth.

Utah

<u>Building Utah's Great Salt Lake Wetlands Monitoring, Assessment and Water Quality Standards</u> Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101764

Utah Department of Environmental Quality, Division of Water Quality Jodi Gardberg jgardberg@utah.gov 801-536-4372

The overarching goal of this WPDG is to develop methods that quantify the condition of Great Salt Lake wetlands. To accomplish this goal, UDWQ proposes three primary tasks: 1) augment, test and finalize the existing Multi-Metric Index (MMI) that uses multiple lines of evidence to quantify the condition of impounded Great Salt Lake (GSL) wetlands, 2) collect and analyze data from 50 randomly selected impounded wetlands to determine average condition and key stressors, and 3) develop a similar monitoring and assessment framework for the GSL fringe wetlands. The focus on developing methods of wetland condition is consistent with both EPA and Utah's goals and objectives. In particular, tools developed through this proposed research will focus efforts to develop wetland-specific standards (both numeric criteria and uses), help quantify current conditions to create a benchmark for CWA §401 & §404 "no net loss" goals, and help expand UDWQ's routine monitoring and assessment programs to include wetlands. Also, the research will continue to strengthen recently formed collaborative partnerships with the Utah Geographic Survey, which will increase the efficiency and effectiveness of meeting the management goals of both agencies.

2011

Florida

Development of a functional assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater and brackish water ecosystems used for water quality treatment.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102412

Southwest Florida Regional Planning Council Liz Donley - ext. 234 ldonley@swfrpc.org 239-338-2550

Develop a functiona assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater and brackish water ecosystems used for water quality treatment. This method would be utilized for evaluating and crediting water quality improvements in Basin Management Action Plans to address non-attainment of Total Maximum Daily Loads.

North Carolina

<u>Develop North Carolina's Wetland Program Plan and Assess the Impact of Wetland Rules on the Extent of Waters of the State</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102415

NC Department of Environmental & Natural Resources Amanda Mueller amanda.mueller@ncdenr.gov 919-715-6823 NC Division of Water will establish a stakeholders group and develop a Wetland Program Plan for the State of NC. The Wetland Program Plan will be developed by experts from the public, private and university sectors in order to produce a comprehensive plan that my be utilized by all members of the state's scientific, education, regulated, and regulatory communities.

Wetland Delineation, ID and Mapping

2006

Colorado

Survey of Critical Wetlands in Boulder County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100961

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Information on the Colorado Natural Heritage Program is at http://www.cnhp.colostate.edu. Individual CNHP documents and reports, including this WPDG project and other county wetland surveys, are available online at http://www.cnhp.colostate.edu/download/reports.asp. Information on CNHP's database and requesting CNHP data are at

http://www.cnhp.colostate.edu/exchange/request.asp. Note: Subgrant dollars are the actual EPA award for this individual project. Project category dollar amounts are estimates only and represent an equal division among the project categories.

Survey of Critical Wetlands in Rio Blanco County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100970

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Information on the Colorado Natural Heritage Program is at http://www.cnhp.colostate.edu. Individual CNHP documents and reports, including this WPDG project and other county wetland surveys, are available online at http://www.cnhp.colostate.edu/download/reports.asp. Information on CNHP's database and requesting CNHP data are at

http://www.cnhp.colostate.edu/exchange/request.asp. Note: Subgrant dollars are the actual EPA award for this individual project. Project category dollar amounts are estimates only and represent an equal division among the project categories.

Kansas

Mapping and Characterization of Playa Basins

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100580

University of Kansas Main Campus Dr. William C. Johnxon

wcj@ku.edu 785-864-5548

Playa Basins of the High Plains of western Kansas are the primary wetlands of this region. The project is to map and characterize the playas and develop a protocol for assessment of wetland functions. Creating the first comprehensive databse for playa wetlands on the High Plains of western Kansas and developing a regional subclass-specific guidebook for applying the Hyrdogeomorhpic (HGM) Approach to assessing wetland functions of Playa Basin Depressional wetlands on the High Plains Playa depressional wetlands in western Kansas.

Maine

Improving Houlton Band of Maliseet's (HBMI) Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100415

Houlton Band of Maliseet Indians Sharri Venno, Environmental Planner/David Lombard envplanner@maliseets.com 207-532-4273

The Houlton Band of Maliseet Indians will develop an energy management and conservation strategy, which will include energy management and conservation education outreach to their housing and governmental staff, tribal leaders, and tribal community.

Montana

Development of a GIS Level I Assessment Tool

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101131

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 404-444-3380

This project will develop a GIS Level I assessment tool that will identify and refine landscape-level metrics for preliminary assessment of site-level wetland condition. This project is part of Montana Natural Heritage Program's (MTNHP) three-year project to update and expand digital wetland mapping for watersheds with significant development pressures. Six of nine ecological sections of Montana (Flathead Valley, Northern Rockies, Rocky Mountain Front, Northwest Glaciated Plains, Bitterroot Valley and Belt Mountains) will be covered by the GIS Level I Assessment Tool. There are five tasks associated with this project: 1) identify landscape-level assessment metrics to produce a preliminary assessment of site-level wetland condition; 2) develop a probabilistic sampling strategy for model refinement; 3) computer test the model; 4) field test and refine the model; and 5) develop a Level I GIS tool that can be used by ArcMap users to evaluate wetlands. The probabilistic sampling strategy incorporates a stratification approach by geographic area and wetland type, and uses GIS to query 24K USGS quads identifying at least 20 sites of the 15 most prevalent unaltered wetland type in each geographic

area. The prototype model will be tested and refined by classifying condition these sites and randomly selecting a small subset to examine using orthophotos and National Agricultural Imagery Program color IR photos. The subset will be entered into a blind database and field-assessed using a rapid assessment tool. Results from the Level I and Level II assessments will be compared to determine the accuracy and sensitivity of individual parameters. This user-friendly Level I GIS model will be disseminated to wetland planners and managers in Montana and will run with datasets readily available from the Montana State Library's Natural Resource Information System (NRIS), enabling identification of high-quality wetland areas for conservation, protection, monitoring, or mitigation. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

Mapping and Analysis of Geographically Isolated Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101130

Montana Natural Heritage Program, Montana State University Linda Vance livance@mt.gov 404-444-3380

This project will fill data and information gaps by mapping, analyzing, and surveying geographically isolated wetlands in Montana. The Montana Natural Heritage Program (MTNHP) will use existing NWI maps, wetland maps being produced under a pilot mapping and change detection project, NAIP color IR photography, and maps created specifically for this project to assess the scope, condition and status of isolated wetlands including ephemeral and intermittent streams. An analysis of wetland acreage, types, functions and values will be compiled and wetland types and/or geographic areas most in need of protection will be prioritized. Using NatureServe and MTNHP databases, wetland types, associations and species at risk will be identified. HGM functions will be assigned to mapped wetlands using a GIS model created under an earlier WPDG, enabling an analysis of functions at risk. Field surveys will be conducted to identify high-quality reference wetlands. High quality reference wetlands will be entered into the MTNHP and State databases. Models developed will guide the acquisition of additional digitized NWI data and/or creation of new digital maps from IR photos. Note: Project category dollar amounts are estimates only and represent an equal division among the project categories.

$\underline{\textbf{Wetland Monitoring in the Milk River Watershed on the Blackfeet Indian Reservation}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100520}$

Blackfeet Tribe Gerald Wagner

The Montana Department of Transportation is planning several major highway improvements on the Blackfeet Reservation, and many of these will impact wetlands on the Reservation. Work tasks under this Wetland Program Development Grant will include refining the current Montana Department of Transportation's wetland rapid assessment method to include vegetation monitoring and field testing the revised Level 2 Rapid Assessment Method and Level 3 Vegetation Monitoring Method for assessing wetland condition. The current Wetland Program Quality Assurance Project Plan will be revised to incorporate selected vegetation monitoring.

The project will identify reference wetlands and impacted wetlands based on data that has already been collected. The project will also monitor 12-24 wetlands in the Milk River watershed. These tasks support continued development and enhancement of the Blackfeet Tribe's Wetlands Program.

North Dakota

Remote Wetland Landscape Profiles for Agricultural Wetland Assessment and Monitoring http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100982

University of North Dakota, John D. Odegard School of Aerospace Offer Beeri beeri@aero.und.edu 701-777-6095

Utah

Groundwater Modeling to Assess the Effects on Wetlands, Salt Lake Valley, Utah http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101021

nttp://iaspub.epa.gov/pis/grts/t?p=101:150::::NO::P150_GR1_SEQ:10102.

Utah DNR, Utah Geological Survey Mike Lowe mikelowe@utah.gov 801-537-3389

See proposal for project description. Proposal attached as project deliverable.

Vermont

Identification, Classification and Conservation of Vermont Dwarf Shrub Bog and Poor Fens http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100261

VT Department of Fish and Wildlife Non-Game and National Heritage Program Eric Sorenson eric.sorenson@state.vt.us 802-241-3700

The Vermont Department of Fish and Wildlife Non-Game and National Heritage Program will conduct a statewide inventory of Dwarf Shrub Bog and Poor Fens peatland types, which are vulnerable to changes in water quality making it imperative to maintain forested buffers and to control changes to surface runoff. Both are rare wetland types in Vermont vulnerable to loss of protection under State and Federal laws.

West Virginia

Wetland Mapping Refinement

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100383

West Virginia Division of Natural Resources Walter Kordek waltkordek@wvdnr.gov 304-637-0245

This grant supports the recipient to refine existing National Wetland Inventory maps, develop a statewide wetland predictive model and use the model to map probability of wetland occurrence. The model will also guide the effort to identify and delineate additional wetlands using higher resolution imagery not previously available. All wetlands in the inventory will be classified using Hydrogeomorphic criteria and valued (alevel 1 landscape assessment on all wetlands statewide).

National

Building capacity for the ASWM to strengthen and expand state and other wetland programs http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859

Assoication of State Wetl;and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

2007

Arkansas

Arkansas Natural Resource Commission Ken Braxil ken.braxil@arkansas.gov 501-683-3980

The purpose of this project is to accomplish the following in the St. Francis watershed: (1)Create a detailed hydrogeomorphic (HGM) wetland classification and mapping-criteria matrix, (2)apply that matriz to creat e a GIS map of all HGM wetland types, and 3) reconcile these efforts and the

previously mapped watersheds into a single Delta wide GIS coverage, allowing it to be used as a consistent tool for wetland restoration, assessment, planning, and monitoring.

Geomorphology Mapping in Ouachita River Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100295

Arkansas Natural Resources Commission Ken Brazil ken.brazil@arkansas.gov 501-682-3980

The purpose of this project is for Development of Geomorphology Mapping in the Ouachita River Watershed in the Coastal Plain Region of Arkansas and to create a detailed geomorphic map of the multiple Pleistocene terraces and Holocene environments.

California

Yurok Tribe - Wetland Program Development http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100452

Yurok Tribe Kevin McKernan

707-482-1350

The Yurok Tribe will develop a wetlands tracking and mitigation system.

Colorado

Developing Statewide Strategies to Improve Effectiveness in Protecting and Restoring Colorado's **Wetland Resource**

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100523

Colorado Division of Wildlife, Wetland Wildlife Conservation Program Brian Sullivan

The Colorado Wetlands Program is a voluntary, incentive-based program to protect wetlands and wetland-dependent wildlife on public and private land. Statewide strategies are needed to better guide and coordinate these efforts toward strategic endpoints. This project will provide a scientific foundation for setting statewide strategic goals and priorities to more effectively protect, sustain and restore the ecological health of Colorado's wetland ecosystems by creating a wetland profile that describes the types, abundance, and ecological condition of wetlands in Colorado. This profile will then be used to formulate statewide strategies for setting wetland protection and restoration priorities. CDOW will develop a wetland geospatial database accessible via the web and this database will be used to develop the wetland profiles and spatial frame for wetland watershed surveys. CDOW will partner with the Colorado Natural Heritage

Program (CNHP) to conduct a pilot probabilistic survey of wetland condition for the Rio Grande Headwaters watershed using the recently-developed Ecological Integrity Assessment Scorecard.

Survey of Critical Wetlands and Riparian Areas in Chaffee County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100522

Chaffee County Don Reimer, Planning Director dreimer@chaffeecounty.org 719-530-5565

Chaffee County will partner with the Colorado Natural Heritage Program (CNHP) to conduct a targeted survey and condition assessment of the County's wetlands and riparian areas. This project provides baseline information on the status and location of biologically significant wetlands in the headwaters of the Arkansas River within Chaffee County, an area experiencing increased recreation and residential development. Project activities include: 1) building partnerships through the formation of an Advisory Group; 2) identification of potential wetlands to survey; 3) coordination with on-going wetland projects; 4) field survey and condition assessment of wetlands; and 5) identification of potential conservation areas and synthesis of results. Results will be interpreted and disseminated to parties that can implement conservation of critical wetland resources. Data collected will also be used to support calibration and validation of newly developed statewide wetland assessment methods: Vegetation Index of Biotic Integrity and Ecological Integrity Scorecards. Project lead is Stephanie Neid, Ecologist, Colorado Natural Heritage Program, Colorado State University.

Montana

<u>A Reference Network for Assessment and Monitoring of Montana's Herbaceous Wetlands</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100527

MNHP Linda Vance livance@mt.gov 406-444-3380

This project expands Montana's wetland assessment capacity by creating a statewide network of reference wetlands reflecting the full gradient of human-induced disturbance. MNHP will use these reference networks to refine their rapid assessment tools, and to promote a broader understanding of wetland resources. This increased assessment and monitoring capacity will improve the ability to assess and prioritize management activities, track changes in condition over time, and evaluate the performance of wetland protection and restoration projects.

Chippewa Cree - 2007 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100530

Chippewa Cree Tribe Kieth Gopher keith@cct.rockyboy.org 406-395-4147

The 2007 wetland project for the Chippewa Cree Tribe will conserve and restore wetlands on the Rocky Boy's Indian Reservation in alighnment with national goals of the Environmental Protection Agency of "no net loss" and focus of assessment of wetland conditions to achieve a net increase of total wetlands by 2011. The Chippewa Cree Tribe is currently implementing a comprehensive wetlands program to accurately assess and delineate Tribal wetlands through a rotating basin approach. Program objectives for FY07 will include; a fen wetlands protection demonstration project, public education (to include a fen identification workshop and a wetlands segment in an educational video), field testing a Tribal assessment method on wetlands monitoring sites, draft narratives for wetlands water quality standards, and continuing to aquire baseline data, including satellite imagery, of wetland sites on the reservation.

<u>Incorporating a Level 1 Functional Assessment into Regional Planning, Wetland Conservation, and Public Education</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100526

Montana Natural Heritage Program Greg Kudray gkudray@mt.gov 406-444-0581

Build on NWI-HGM mapping funded by a broad partnership to create Level 1 assessment tools useable at a beginner to expert level. An easy to use freely distributed DVD will enable citizens to recognize vulnerable wetlands, see wetland functions in their landscape, and relate personal values to wetland protection and restoration. Education and outreach efforts will focus on community, government, and conservation practitioner levels through three workshops with level appropriate goals addressing education, policy development, policy development, assessment tool use, and conservation planning. A web-based wetland assessment and information system will be developed to serve regional users and as a model for statewide and other regional efforts.

National

Wetlands Restoration and Enhancement of the National Wetlands Mapper

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100870

The Center for Urban Watershed Renewal, Inc Ms. Amanda Davis adavis@cuwr.org 978-741-4669

The Center for Urban Watershed Renewal (CUWR), in partnership with the states of WI and CA, the US Fish and Wildlife Service, Virginia Tech and the Conservation Management Institute, is proposing to 1) Assist states with high resolution wetlands restoration data in transferring their data into National Wetland Inventory maps and 2) Facilitate the creation of an additional layer of information supported by the Wetlands Master Geodatabase and online

Wetlands Mapper that would show wetlands restoration projects that have been completed. The national publicly available web-based Wetlands Mapper currently does not show any specific layers with regards to wetlands restoration. This project would assist states in adhering to the National Wetlands Mapping Standard, as well as developing a new layer of information available to the public on wetlands restoration.

2008

Arizona

Navajo Nation Wetlands Monitoring, Assessment and Mapping

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100470

Navajo Nation S. Deb Misra

928-871-7996

The purpose of this project is to continue to monitor, map and assess the wetlands on Navajo Nation lands, in order to prioritize wetland protection needs and inform wetland decision-making. The geographic extent of this project includes the wetlands across the entire Navajo Nation.

Colorado

Basinwide Wetland Profile of the North Platte River Basin in Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100358

Colorado Division of Wildlife, Wetland Wildlife Conservation Program Brian Sullivan brian.sullivan@state.co.us 303-291-7158

Wetlands in Colorado continue to be impacted by multiple human uses such as water diversions, resource extraction, and rapid urbanization. Scientifically grounded information about the status and trends of Colorado's wetland resource is integral to implementing effective strategies for wetland protection, restoration, and management, including compensatory mitigation. This project will create a wetland profile of the North Platte River Basin in Colorado that will document the spatial distribution of wetland types and ecological condition and will relate that information to potential threats and stressors. The project objectives are to: (1) compile existing spatial data on wetlands in the North Platte River Basin and determine the best approach to filling data gaps; (2) conduct a statistically valid, field-based survey of wetland condition in the basin; (3) model the distribution of wetland condition throughout the basin using collected field data and additional spatial data on potential threats and stressors; and (4) determine optimal metrics for measuring key habitat features for wetland-dependant wildlife species. This information is necessary to prioritize on-the-ground efforts for efficient and effective conservation and management.

Survey of Critical Wetlands and Riparian Areas in Gilpin County, Colorado

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100412

Colorado Natural Heritage Program, Colorado State University Denise Culver Denise.Culver@colostate.edu 970-491-2998

The Colorado Natural Heritage Program/Colorado State University (CNHP) in partnership with Gilpin County proposes to conduct a prioritized survey and conditional assessment of the County's wetlands, including vulnerable riparian and geographically isolated wetlands. On-the-ground research will identify locations of significant wetland resources. Results will be interpreted and disseminated to parties that can implement conservation of critical wetland resources into ongoing countywide heritage and land-use planning targeting significant wetland resources. Additionally, data collected will be used for calibration and validation of the Vegetation Index of Biotic Integrity and Ecological Integrity Scorecards.

 $\underline{ \mbox{Hydrologic Variability in Isolated Forested Wetlands across a Land Use Intensity Gradient}_{\mbox{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100802}$

University of Florida, School of forest Resources and Conservation Matthew J. Cohen, Ph.D mjc@ufl.edu 352-846-3490

The objective of this project is to assess the impact of land development spanning from forested to urban land uses on the hydrology of isolated wetlands, focusing on the hydrologic dynamics and loss of water storage capacity at the landscape scale. Twelve representative wetlands are selected spanning a gradient of land use intesitiy and hydrology monitored (stage, flow direction) in each using a network of wells. Detailed information about the direction of flow (into, out aor through the wetland) and duration of inundation are obtained to infer surface-groundwater relations, which is key to understanding hydrology of isolated wetlands. A combination of field surveys, national wetland inventory data, and high resolution topographic data (lidar) are used to estimate wetland area and bathymetric storage. Land use data are used to quantify land development intensity around wetlands and their drainage computing area. Field observations are linked to surveys of landscape storage volume to predict losses of landscape scale wetland hydrologic services based on knowledge of wetland total volume, and observations of how storage changes with urbanization. This information will assist local and regional land use lanning and regulation by making explicit hydrologic storage and flow services accruing from isolated wetlands that are lost because of land use change. rke

Kansas

<u>Development of a Statewide Wetlands Restoration and Protection Process</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100346

Kansas Water Office Deb Baker

785-296-0162

This project will develop a comprehensive, standardized process for identifying, assessing and prioritizing wetland and vulnerable aquatic resources in the state of Kansas. This process is intended to customize and refine existing wetland assessment methodologies to create a working standard for all agencies and watershed planning and stakeholder groups in the state of Kansas.

Missouri

Remote Sensing of Wetlands and Impervious Surface

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100347

University of Missouri-Kansas City Professor Wei (Wayne) Ji jiwei@umkc.edu 816-235-2981

The project will detect, map and assess vulnerable wetlands in relation to impervious surface impact in major watersheds of the Kansas City metropolitan area based on satellite remote sensing and GIS analysis using high-resolution satellite imagery to generate maps of wetlands and impervious surfaces/other major land covers in the study area, representing the current condition around 2008 and the historical condition in, tentatively, a selected year of the early 1990's.

Montana

<u>Landscape Level, Rapid and Detailed Wetland Assessment on the Blackfeet Indian Reservation</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100467

Blackfeet Tribe Environmental Office Mary Clare Weatherwax mweatherwax@3rivers.net 406-338-7421

In 2007 a new rapid assessment and vegetation monitoring method were added to our monitoring protocol. Using data that has already been collected, the wetlands program will identify reference wetlands and impacted wetlands in the Saint Mary and Birch Creek watersheds and develop a sampling analysis plan to monitor 12 to 24 selected wetlands in these two watersheds. Finally, the Wetlands Program will conduct wetland monitoring in the Saint Mary and Birch Creek watersheds, using the MDT functional assessment method, measuring physical water quality parameters, and contracting with a botanist to perform the vegetation monitoring. Monitoring will improve the Tribe's capacity to target, measure and report water quality improvement on a water body and watershed basis. This will also help with enforcement of the Tribe's Aquatic Lands Protection Ordinance and the development of more specific wetlands Water Quality Standards.

Montana Department of Environmental Quality - 2008 Wetland Program Development Grant II

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101062

Montana Department of Environmental Protection, Wetland Program Lynda Saul lsaul@mt.gov 406-444-6652

The MDEQ Wetland Program Development II proposal's main objectives are to strengthen state wetland data and build capacity for wetland monitoring and assessment at the local, state, and tribal level. We propose to develop four interrelated components to achieve these objectives: 1) evaluate DEQ's 401 certification program, 2) support significant nexus jurisdictional determinations, 3) identify wetland and floodplain protection priorities, and 4) host a Region 8 wetland program capacity building workshop. Final products will include: 1) a final report evaluating Montana's 401 certification program including recommendations for program improvement for increased wetland and vulnerable waters protection, 2) maps and other information along with metadata and training to help determine jurisdiction in CWA issues, 3) a comprehensive floodplain mapping plan for vulnerable floodplain wetlands and development of a Floodplain Mapping Advocacy Team and 4) a successful, well attended Region 8 Wetland Program Capacity Building Workshop that includes a strong focus on wetland monitoring and assessment.

Nevada

Fallon Paiute Shoshone Tribe - Wetlands Baseline Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100362

Fallon Paiute Shoshone Tribe Richard Black, Environmental Diretor richard@enviro-fpst.org 775-423-0590

The purpose of this project is to further develop the Tribe's ability to monitor and assess their wetlands, in order to better track and document the change in wetland acreage and condition. The Tribe will also monitor past wetland restoration projects to determine their effectiveness.

Moapa Band of Paiutes - Wetland Inventory and Evaluation of Desert Springs Wetlands http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100389

Moapa Band of Paiutes Darren Daboda d_daboda@yahoo.com 702-865-2787

The purpose of the project is to increase the understanding of the Moapa Band of Paiutes Tribe's wetlands through monitoring, increase the tribal members' understanding of their wetlands through outreach, and selection of erosion control restoration methods. The Tribe will map the wetlands at Hogan Springs and Little Hogan Springs, monitor groundwater, surface flow and

surface water quality, vegetation, and wildlife. They will demonstrate revegetation techniques for effectiveness for erosion control.

North Dakota

<u>Defining and Locating Reference Condition Wetlands in Unique Ecosystems of North Dakota</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100823

North Dakota Department of Health, Division of Water Quality Mike Ell mell@nd.gov 701-328-5214

This award provides funding to build capacity to protect, manage, and restore wetlands, through assessment and development of a comprehensive wetlands program. This project will involve: 1) developing Geographic Information System (GIS) screening tools to identify candidate reference wetlands; 2) ground-truthing candidate sites using National and ND Rapid Assessment Methods; 3) field sampling a subset of sites using the Index of Plant Community Integrity; and 4) analysis of data to develop a reference site network for the 2011 National Wetland Condition Assessment.

South Carolina

Map Inventory and Assessment System for Geographically Isolated Wetlands in the Upper Piedmont and Foothills of South Carolina

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100810

Clemson University Dr. Robert F. Baldwin baldwi6@clemson.edu 864-656-4857

This grant given to Clemson University which will enable them to deliver a fine-scale map inventory and field assessment system for geographically isolated wetlands in the urbanizing, Upper Piedmont region of SC. Methods will also be developed to fill gaps in wetland mapping and data collection to faciliate the development of wetland assessment programs and other core elements of a comprehensive wetland program. Clemson will also develop training materials and tools to help local decision makers integrate wetland protection into watershed plannning. (MKJ) CLOSED

Vermont

<u>Strengthening and Refining Vermont's Wetland Protection and Monitoring Programs</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100454

Vermont Department of Environmental Conservation Alan Quackenbush alan.quackenbush@state.vt.us 802-241-3761 The Vermont Department of Environmental Conservation (DEC), Wetlands Division is committed to updating the Vermont Wetland Inventory Maps. These maps are critical for wetlands protection in Vermont because they are the basis of the wetlands regulatory program. The DEC will update the inventory maps using data from newly digitized National Wetlands Inventory maps, town wetland maps, the Wetlands Project Database and from wetland natural community inventories conducted by the Vermont Fish and Wildlife Nongame and Natural Heritage Program. Updated maps will provide a new baseline of the state wetland resources, and will be used to track wetland status and trends of wetland area (quantity) and quality. Wetland attributes, related to wetland type, function and condition, will be added to enhance the maps, based upon protocols under development. As a part of the wetlands monitoring and assessment program, DEC will continue the development of protocols for assessing wetland condition. These protocols will be used to help update the Vermont Water Quality Monitoring Strategy. Also proposed is the development of Best Management Practices (BMPs) for restoration and mitigation projects to ensure their long-term success.

2009

Colorado

<u>Survey of Critical Wetlands and Riparian Areas in Teller County, Colorado.</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100821

Colorado Natural Heritage Program, Colorado State University Denise Culver denise.culver@colostate.edu 970-491-2998

Colorado Natural Heritage Program (CNHP) in partnership with Teller County and the Coalition for the Upper South Platte proposes to conduct a prioritized survey and conditional assessment of the County's wetlands, including vulnerable riparian and geographically isolated wetlands, utilizing standard CNHP and NatureServe methodology described in detail in the Project task descriptions below. On-the-ground research will identify locations of significant wetland resources. Results will be interpreted and disseminated to parties that can implement conservation of critical wetland resources into ongoing countywide heritage and land-use planning targeting significant wetland resources. Additionally, data collected will be used for calibration and validation of the Vegetation Index of Biotic Integrity and Ecological Integrity Scorecards. All activities to be undertaken during this project are development, program building activities and are outside the scope of existing regulatory requirements.

Florida

<u>Performance Partnership Grants: Seminole Tribe of Florida Tribal Wetland Program</u> Development Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101615

Seminole Tribe of Florida Craig Tepper the Tribe will develop a wetland management program for the Big Cypress, Brighton and Immokalee Reservations, develop Tribal capacity and assistal Tribal stakeholders to develop regulation regarding Tribal wetlans. Activities will expand the Wetland Management Plan to include the Immokalee Seminole Indian Reservation, identify, integrate, and expand Tribal efforts in the area of wetland management by identifying at-risk wetlands, integrate water quality and wetland efforts by conducting a study of aquatic species and conducting a study of water quality in the mitigation areas, mapping wetlands and developing a wetland geo-database and educating Tribal stakeholdrs, among others.

SE Lake Michigan Setting Wetland Restoration Priorities at the Local Level

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101471

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North Dakota

<u>Intensification of the National Wetland Condition Assessment in the Prairie Pothole Region of North Dakota</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101000

North Dakota Department of Health, Division of Water Quality Mike Ell mell@nd.gov 701-328-5214

The major objectives of this project are to: 1) assess the National Wetland Condition Assessment (NWCA) wetlands selected with three tiered regional specific assessment methods; 2) develop models relating existing wetland assessment data from regional studies to ecosystems services; 3) compare the NWCA data/results to the regional specific methods data/results; 4) increase NWCA sample size if needed; 5) collect additional data that will aid in deriving ecosystem services and identify possible issues related to human health; and 6) calibrate/validate an ecoststem service correlation model to correspon with the data obtained from the national survey.

Ohio

<u>Tinkers Creek Watershed Wetland Assessment and Prioritization Project</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100815

Cuyahoga County Board of Health Jil Lis jlis@ccbh.net 216-201-2001 "The Cuyahoga County Board of Health will perform a study to further develop the wetland program for the Tinkers Creek Watershed in the context of creating water quality improvements by implementing these wetlands as best management practices. They will develop a scientifically valid approach to watershed planning that will protect, prevent and reduce pollution to wetlands and other aquatic resources."

Utah

Applying Utah's Wetland Ambient Method to At-Risk Wetlands in Western Utah http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101023

Utah DNR, Utah Geological Survey Mike Lowe mikelowe@utah.gov 801-537-3389

A regional ground-water model indicates that proposed large-scale ground-water development in Nevada near the Utah-Nevada state line will cause significant decreases in ground-water levels in Snake Valley, Utah. These decreased ground-water levels will cause decreased flow from springs supporting unique wetland communities in Snake Valley. These desert wetlands include marsh-like and wet-meadow communities dominated by water-tolerant plants such as sedges (Carex spp.), spikerush, (Eleocharis spp.), rushes (Juncus spp.), bulrush (Schoenoplectus spp.), and cattails (Typha spp.), and provide habitat for several sensitive species (for example least chub [Iotichthys phlegothontis], Columbia spotted frog [Rana luteiventris], and longitudinal gland springsnail [Pyrgulopsis anguina]). Often associated with perennial water supplies or headwater streams, these communities, called ciénegas by early Spanish explorers, are found where saturated soil conditions persist throughout the year. The objective is to document baseline wetland extent and conditions and establish a wetland landscape profile prior to the start of the large-scale pumping. This will be accomplished by using GIS and remote sensing to conduct a Level 1 landscape assessment of wetlands using the hydrogeomorphic classification system, which will be verified in the field. We will then expand UWAAM (Level 2 rapid assessment), which was developed for wetlands around Great Salt Lake and the eastern Great Basin, for its applicability in the Bonneville Basin and assess the condition of up to eight field-identified reference wetlands in Snake Valley. This will be the first time UWAAM is field tested and the results will provide a wetland landscape profile and classification for Snake Valley. This project will build state capacity, build our wetlands database, improve Utah's monitoring strategy, and help land management agencies develop plans for maintaining the extent and condition of wetlands despite falling ground-water levels and decreased spring flow.

Wisconsin

Building Wetland Assessment and Monitoring Capacity, Phase 4 http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101250

http://iaspub.epa.gov/pls/grts/f'?p=101:150:::NO::P150_GRT_SEQ:101250

Wisconsin Department of Natural Resources Tom Bernthal Thomas. Bernthal@wisconsin.gov 608-266-3033

1. Wetland Condition Intensification Study--Lake Michigan tributary basins 2. Ephemeral Ponds Mapping and Monitoring--add 3 SE Wisconsin Counties--Washington, Walworth and Waukesha 3. Wetlands Activity Tracking, including a geospatial data base adding after-project wetland cover type and better covering transportation projects--Statewide

2010

Colorado

Lower South Platte River Basin Wetland Profile and Condition Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101769

Colorado Natural Heritage Program Joanna Lemly joanna.lemly@colostate.edu 970-491-2172

Through this project, the Colorado Natural Heritage Program will: 1) Create a digital map of wetlands in the Lower South Platte River basin; 2) Research habitat requirements of target wildlife species; 3) Identify reference condition wetlands in the basin; and 4) Conduct a statistically valid, field-based survey of wetland conditions in the basin.

Survey of Critical Wetland and Riparian Areas in Jefferson County

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101770

Colorado State University Denise R. Culver Denise.Culver@colostate.edu 970-491-2998

The Colorado Natural Heritage Program/Colorado State University (CNHP) in partnership with Jefferson County Open Space Department proposes to conduct a prioritized survey and conditional assessment of the County's wetlands, including riparian and geographically isolated wetlands. This survey will continue to build upon the past county-wide wetland survey and assessment projects by CNHP. Additionally, the project will add information to the Statewide Wetlands Strategy, a partnership between CNHP and the Colorado Department of Natural Resources and its Division of Wildlife. The U.S. Fish and Wildlife Service National Wetland Inventory maps will be digitized as a first step to determine wetland acreage and type (Cowardin et al. 1979). Field research will validate the mapping units as well as assess the quality and condition of the wetland resources. Results will be interpreted and disseminated to parties that can implement conservation and restoration of critical wetland resources into ongoing land-use planning targeting significant wetland resources. Additionally, data collected will be used for calibration and validation of the Vegetation Index of Biotic Integrity and Ecological Integrity

Scorecards. Deliverables include hard and electronic copy of final report, list of prioritized potential wetland conservation areas, and accompanying spatial dataset.

Maine

Development of Numeric Biological Criteria for Maine Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101601

Maine Department of Environmental Protection Biological Monitoring Program Jeanne DiFranco jeanne.L.difranco@maine.gov 207-822-6359

The ME DEP Biological Monitoring Program will develop wetland-specific numeric tiered aquatic life use criteria for wetland macroinvertebrates. The criteria will be based on a statistical model to predict attainment of monitored wetlands with water quality classes assigned by the Maine legislature. The model will focus on emergent marsh habitat, including rivervine and lake/pond fringe wetlands. Numeric biocriteria will enable the Biological Monitoring Program to provide consistent, scientifically sound, and legally defensible information on wetland condition and aquatic life use attainment to a wide variety of state, federal and tribal programs, nongovernmental organizations, etc. Results may be used with increasing frequency to inform permit/licensing decisions, wetland protection, restoration and management prorities. Total Maximum Daily Loads development, mitigation design, etc. Also, this project includes the development of a Wetland Program Plan in accordance with EPA's Enhanced State and Tribal Program (ESTP) initiative. MEDEP expects that a state plan will help guide development of a comprehensive wetland program and provide a vehicle for better communicaion among multiple state agencies and organizations involved in wetland protection and management. By documenting these various efforts along with priorities for the next five to six years, it will be possible to identify areas of overlap, opportunities for collaboration and gaps where additional focus may be needed.

Massachusetts

<u>Protecting Vulnerable Wetlands: A Pilot Community Outreach Approach to Improving Stormwater Quality</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101670

Massachusetts Department of Environmental Protection Lealdon Langley lealdon.langley@state.ma.us 617-574-6882

The Massachusetts Department of Environmental Protection (MassDEP) will develop guidance that assists pilot communities in the Upper Charles River Watershed in planning and determining appropriate stormwater control options that will protect vulnerable wetlands. Information will be provided by MassDEP that offers methods for implementing Total Maximum Daily Loads (TMDLs) and templates to prepare and develop stormwater management plans in pilot

urbanizing communities. Also, pilot communities will be educated about vulnerable wetlands (e.g., headwater streams and vernal pools), where they are located in their towns/cities, and how they serve the public interests of their community and the Commonwealth. Because adequate protection of vulnerable wetlands is difficult without clear guidance on how to identify and locate these valued resources, wetlands technical staff will develop guidance for vulnerable wetlands identification and delineation with respect to TMDLs and Municipal Separate Storm Sewer Systems (MS4) areas in pilot watershed communities.

Montana

Characterization of the Manning Lake Wetland Complex

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101840

Fort Peck Tribes Office of Environmental Protection Jeanne Spaur, Project coordinator/wildlife biologist jeannespaur@yahoo.com 406-768-2329

The Fort Peck Tribes are working toward the protection, management, and restoration of the Manning Lake Wetland Complex (MLWC). Characterization of the MLWC will be accomplished through 2 primary goals: 1) determining hydrologic functionality and 2) developing vegetation composition and small vertebrate species diversity monitoring strategies. First, Refuge staff will work with the Tribal non-point source department to develop a strategy to attempt to characterize MLWC hydrological dynamics through the qualification and quantification of water gains and losses and wetland function. Secondly, partnerships will continue with Montana Natural Heritage Program's Wetland division and the Natural Resource Conservation Service to expand upon previous vegetation species association work to develop species composition, canopy cover, and grazing effects monitoring strategies and to analyze data. We will then partner with Montana Natural Heritage Programs' Zoology division and the Phil Wright Memorial Museum to develop small vertebrate species monitoring strategies, building upon current work and baseline species lists. Final products include: 1) detailed description of MLWC water budget, 2) designed vegetation species composition and canopy cover study; 3) data regarding effects of grazing to vegetation associations and wetlands; 4) increased list of small vertebrate population list and presence; 5) increased breeding bird presence and population list; 6) baseline list of reptile presence and population; and 7) baseline list of reptile presence and population.

North Dakota

Spatial Variation in Multi-Element Fingerprints for Rapid Chemical Assessment of Soils in North Dakota Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101768

North Dakota Department of Health Mike Ell mell@nd.gov 701-328-5210

The goal of the proposed project is to develop a wetland condition assessment tool which is based on an assessment of the multi-element composition (i.e., chemical fingerprint) of wetland soils. Once established, this method can provide a fast, cost-effective means of assessing and monitoring the biogeochemical quality of wetlands in a manner complementary to existing biological and chemical approaches. The work will be carried out in North Dakota, and includes wetlands of the Prairie Pothole Region (PPR) being sampled as part of the National Wetland Condition Assessment and riparian wetlands of the Missouri and Red River of the North. It further includes the under-researched wetlands on the Tribal lands of the Standing Rock Sioux Tribe. This work will therefore not only benefit the USEPA but also Standing Rock, one of the largest Native American reservations in the Nation. Soil samples will be collected from approximately 200 wetlands during two phases. During phase 1, the main sampling of PPR wetlands will be carried out, as well as exploratory surveys across the less-studied wetlands. During phase 2, the information obtained from the exploratory work will be used to optimize sampling approaches for the wetlands other than those of the PPR. The products of this study will include: (1) the first ever comprehensive database in the world of multi-element fingerprints of wetlands across a range of landscapes; (2) an assessment of the suitability of multi-element fingerprinting for rapid, chemical assessment of quality of wetlands, complementary to existing wetland condition assessment approaches; (3) the production and dissemination of project results and information through agency reports and scientific publications; and (4) training and education of university students and the general public in wetland science and management..

Ohio

A Regional Ecosystem monitoring and assessment program for the Lake Erie-Allegheny Plateau (LE-AP) Region

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102030

Cleveland Metroparks John Mack jjm@clevelandmetroparks.com 440-331-8569

Cleveland Metroparks will provide the following work to enhance the wetlands and communities in accordance to Section 104(b)(3) of the Clean Water Act. The work plan that was issued by Cleveland Metroparks will aim to 1) advance the mapping of terrestrial and aquatic ecosystems and current land cover throughout the Lake Erie - Alleghany Plateau (LE-AP) project area of northern Ohio, northwest Pennsylvania, and western New York, 2) using this advanced mapping product to develop an agreed upon regional ecosystem monitoring and assessment program through a series of meetings and workshops, 3) to extend the Vegetation IBI-Forest which is calibrated for forested wetlands in LE-AP to non-wetland forest plan communities that are associated with high quality wetlands and streams in the region.

2011

Maine

Preventing Maine's Best Wetlands from Slipping Through the Cracks

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102282

Maine Natural Areas Program Lisa St. Hilaire lisa.st.hilaire@maine.gov 207-287-8046

The objective of this project is to expand the efforts of "Preventing Maine's Wetlands from Slipping Through the Cracks" into northern and eastern Maine, where there are similarly rare and exemplary wetlands that lack sufficient data for use in environmental review or land use planning. There are a wide range of wetland types in northern and eastern Maine that are insufficiently documented ranging from rare enriched fens to common cedar swamps. The objective of this project is to document these sites using methods and mapping precision sufficient to make them suitable for use in regulatory and planning review.

Michigan

Wetland/Water Resource Program for Native American Tribes in Michigan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102402

Inter-Tribal Council of Michigan

tsutter@itcmi.org 906-632-6896

The Inter-Tribal Council of Michigan (ITCM) is proposing to establish their own Wetland and Water Resource Program that will serve to provide training and workshop opportunities to Michigan Tribal Wetland Staff during the grant period. ITCM goals are to establish community water quality standards and ordinances designed for the purpose of protecting specific wetlands and water bodies.

Ohio

Monitoring and Restoring Urban Wetlands to Increase Ecosystem Services in Northeast Ohio http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102342

Cleveland Metroparks Jennifer Grieser jmg2@clevelandmetroparks.com 440-331-8679

The Ohio Environmental Protection Agency's National Wetland Program Development project's main purpose is to develop a dataset of reference and hydroperiods for different wetland types located throughout Ohio. Detailed groundwater and surface water measurements will be made using automated monitoring wells installed at numerous wetland sites. Intensive hydrologic information will be collected on a daily basis. The data will be compared to create a predictive

hydrological model for each wetland type. Wetlands will be evaluated using different Ohio assessment techniques.

Wetland Regulatory Policy and Planning

2006

Idaho

$\underline{ \textbf{Development of a Comprehensive Wetlands Protection Program}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100394}$

Shoshone-Bannock Tribes Elese D. Teton, Tribal Water Engineer eteton@shoshonebannocktribes.com 208-239-4580

Shoshone-Bannock Tribes will develop important components of a comprehensive wetlands protection program. These components would build the Tribes' capacity to protect and restore the Reservation's surface waters by continuing development of wetland protection capabilities through regulation, monitoring and assessment, restoration, outreach, and through coordination and partnership with other Tribal programs and interested parties.

National

Building capacity for the ASWM to strengthen and expand state and other wetland programs http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100859

Assoication of State Wetl; and Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The goal of this project will be to build capacity (i.e. knowledge, expertise, and resources) of states, tribes, local governments, and partner organizations to enable them to protect, manage, and conserve existing wetlands while improving the quality of restored wetlands through both regulatory and voluntary programs. The project will accomplish this through facilitating communication between states, tribes, local governments, federal agencies, wetland professionals, and other interested parties to help them tailor, adopt, and implement appropriate solutions to the problems faced by wetland programs across the country.

Protecting Vulnerable Wetlands and Aquatic Resources through Buffers http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEQ:100910

Environmental Law Institute Ms. Jessica Wilkinson wilkinson@eli.org 202-558-3100

Environmental Law Institute (ELI) will support the protection of wetlands and other aquatic resources through research on state and local laws, regulations, and ordinances developed to restrict development and other activities in the areas that buffer these resources then evaluate the range of available tools, and finally create and disseminate model buffer program examples. This project will benefit state, tribal, and local government agencies because it provides them with the latest resources, tools, and ideas on current buffer regulations and ordinances.

2007

National

Enhancing Wetlands Protection by Building Expertise and Improving Decisions Made by States, Tribes, Local Government and Land Trusts

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100872

Association of State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The key objective is to undertake five projects that will quantify problems and describe solutions for protecting vulnerable waters by collecting, analyzing, summarizing, and distributing information. The results of the tasks selected for funding will help States, Tribes, and local governments strengthen their wetlands programs by: 1) providing recommendations on how to improve the State Programatic Permit Program; 2) improve general knowledge among States, federal agencies and other partners on strategies to streamline permitting; 3) improve knowledge of Land Trusts and local governments with respect to their role in compensatory mitigation; 4)improve knowledge on wetlands and global climate change; and 5) support the development of Wetland Mapping Coalitions.

2008

Arizona

Ak-Chin Indian Community Wetland Protection Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100393

Ak-Chin Indian Community Kendra Tso, Director, Environmental Protection Department ktso@ak-chin.nsn.us 520-568-1159

The purpose of the project is to develop a wetland protection program through monitoring and assessment of Ak-Chin's wetland resources, and development of a Tribal Wetland Protection Ordinance and Anti-Degradation Policy, and a Wetland Restoration Plan.

California

Aquatic Science Center - Wetlands Tracker Enhancement

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100830

Aquatic Science Center Rainer Hoenicke rainer@sfei.org 510-746-7356

Aquatic Science Center will continue its work with the Regional Water Boards and the California State Water Board on wetlands protection. They will expand the existing Wetland Tracker Database with the eCRAM module for vernal pool systems, which will help the State support the implementation of its wetland program. "The amendment increased the amount of federal EPA funding by \$13,943 to a revised total of \$313,890. These funds support enhancement of the Wetlands Tracker database by adding a module for vernal pool and vernal pool systems.

Montana

Montana Department of Environmental Quality - 2008 Wetland Program Development Grant II http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101062

Montana Department of Environmental Protection, Wetland Program Lynda Saul lsaul@mt.gov 406-444-6652

The MDEQ Wetland Program Development II proposal's main objectives are to strengthen state wetland data and build capacity for wetland monitoring and assessment at the local, state, and tribal level. We propose to develop four interrelated components to achieve these objectives: 1) evaluate DEQ's 401 certification program, 2) support significant nexus jurisdictional determinations, 3) identify wetland and floodplain protection priorities, and 4) host a Region 8 wetland program capacity building workshop. Final products will include: 1) a final report evaluating Montana's 401 certification program including recommendations for program improvement for increased wetland and vulnerable waters protection, 2) maps and other information along with metadata and training to help determine jurisdiction in CWA issues, 3) a comprehensive floodplain mapping plan for vulnerable floodplain wetlands and development of a Floodplain Mapping Advocacy Team and 4) a successful, well attended Region 8 Wetland Program Capacity Building Workshop that includes a strong focus on wetland monitoring and assessment.

North Carolina

Development of guidelines and field staff training for stream and wetland restoration in response to violations of the Clean Water Act and associated State rules and regulations

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100806

NC Division of Water Quality, Wetland Program Development Unit John Dorney

john.dorney@ncmail.net 919-715-3471

This project will allow development of guidelines and field staff training for stream and wetland restoration in response to violations of the Clean Water Act and associated State rules and regulations. Funding will allow for related mitigation projects and training modules to educate compliance personnel. This will result in consistent and technically sound restoration of impacted aquatic systems within the State, improved wetland protection efforts and increased quality of streams and wetlands in North Carolina." GRANT CLOSED

The Spatial Relationship between Aquatic Resource Impacts and Compensatory Mitigation in **North Carolina**

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100808

NC Dept of Environment & Natural Resources Tammy Hill tammy.l.hill@ncmail.net 919-855-4558

"This project will create a spatial database within a geographic information system (GIS) to track wetland, stream, and riparian buffer impacts and compensatory mitigation within varying levels of development (urban vs. rural) on a cataloging unit (8-digit HUC) basis for the State of North Carolina. The database will fill an informational gap in tracking progress toward No Net Loss goals in the state. (MKJ) GRANT CLOSED 09/19/2012

National

$\frac{\textbf{Protecting Wetlands by Enhancing State and Local Regulatory Programs}}{\text{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100850}}$

Assoication of State Wetland managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

This project provides information and technical assistance to state and tribal wetland managers on States' and Tribes' role in 1) assumption of the Clean Water Act Section 404 permit program and 2) Clean Water Act Section 401 review of Section 404 permits that will improve their capacity to manage state and tribal wetland and aquatic resource regulatory programs.

Wetlands Assessment Technical Assistance Center: EPA Region 4

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100852

Research Triangle Institute Kimberly Sherrill ksherrill@rti.org

This grant is to develop and implement the Southeastern Wetland Assessment Technical Assistance Center (SEWATAC) to provide the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee with technical assistance and workgroup support for collecting, managing and analyzing wetland monitoring and assessment data. The workgroup's focus will be on rapid wetland assessment methods, statistically-based data analysis, and methods for collecting wetland assessment data for parameters such as vegetation, soils, hydrology, aquatic insects, amphibians, algae, and water chemistry. Technical assistance will be provided through a Webinar-based apporach, field training visits to participating states, and telephone and Web-based statistical assistance.

2009

Delaware

Delaware Wetland Assessment Methods and Water Quality Certification

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100800

Delaware Dept. of Natural Resources and Evironmental Control Mark Biddle mark.biddle@state.de.us 302-739-9939

This project will address the various programs through which wetlands are protected in Delaware, including; state and federal permitting processes and local land use review and decision making, to ensure that proposed improvements will protect vulnerable wetlands. It will also provide training to in-house regulatory reviewers, county land administrators, consultants and developers to understand wetland conditions in Section 401 Wetland permit reviews. In addition, an evaluation by ELI to provide recommendations on DE's wetland program will be conducted.

Florida

<u>Climate Change Vulnerability Assessment and Adaptation Opportunities for Salt Marsh Types in Southwest Florida</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101637

Southwest Florida Regional Planning Council Elizabeth Donley idonley@swfrpc.org 239-338-2556

the Charlotte Harbor National Estuary Program will inventory and map the physical extent of the five types of salt marsh present within the CHNEP Study Area. Researchers will then identify significant potential effects on these salt marsh ecosystems from anticipated climate change. An assessment of significant potential effects will be developed as well as identificant of opportunities for avoidance, minimization, mitigation and adaptation that could be implemented.

An interactive GIS mapping product depicting the project outputs will be uploaded to the CHNEP website for use by researchers, local governments and the public.

<u>Development of a Comprehensive Conservation Management Plan for Clearwater Harbor/St.</u> Joseph Sound, Pinellas County, FL

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101635

Pinellas County, Florida Melissa Harrison mharrison@pinellascounty.org 727-453-3420

Pinellas County identifies Clearwater Harbor and St Joseph Sound (CLW/SJS) as a vital natural resource requiring assessment, management, protect, and restoration to sustain the quality of this nearshore Gulf habitat. This area of Pinellas County cosnists of open and intracoastal waters and wetlands bounded on the east by the coastal mainland shoreline and the west by a barrier isalnd chain. Mangroves fringe much of the shorelines, which include Honeymoon Island and Caladesi Island State Parks. Expansive seagrass beds cover nearly 60-km2 of the 11-km 2 area, providing essential habitat for marine fauna. Pinellas County, the Southwest Florida Water Management Distraict (SWFWMD), the cities of Tarmpon Springs, Clearwater, Dunedin, and Largo; and various other stakeholder groups will develop a Comprehensive Conservation Management Plan (CCMP), following the National Estuary Program format to establish priorities for protection, enhancement, and restoration. This collaborative project will create a bridge between the Tampa Bay Estuary Program CCMP, the boundary of which stops just south of the CLW/SJS watershed. The CCMP will include data collection ad analysis, information gathered from multiple groups including local municipalities, state and local agencies, Audubon, and others. The final CCMP will be a document that provides guiding principals for management of the CLW/SJS area and its contributing watershed to decision makers, scientists, engineers and the citizens of Pinellas County. The County's Water Atlas will be used as a communication tool throughout the project to provide stakeholders with reports and other items of interest. rke

<u>Performance Partnership Grants: Seminole Tribe of Florida Tribal Wetland Program Development Project</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101615

Seminole Tribe of Florida Craig Tepper

954-965-4380

the Tribe will develop a wetland management program for the Big Cypress, Brighton and Immokalee Reservations, develop Tribal capacity and assistal Tribal stakeholders to develop regulation regarding Tribal wetlans. Activities will expand the Wetland Management Plan to include the Immokalee Seminole Indian Reservation, identify, integrate, and expand Tribal efforts in the area of wetland management by identifying at-risk wetlands, integrate water quality and wetland efforts by conducting a study of aquatic species and conducting a study of water

quality in the mitigation areas, mapping wetlands and developing a wetland geo-database and educating Tribal stakeholdrs, among others.

Montana

Chippewa Cree Tribe - 2009 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101053

Chippewa Cree Tribe Keith Gopher keith@cct.rockyboy.org 406-395-4147

The objectives will include: inventory of outstanding wetlands for inclusion in wetlands standards, public education, developing partnerships for on the ground Best Management to protect wetlands, drafting numeric standards for wetlands water quality standards, developing reference networks for measuring total wetland plant community health, conducting a peer review of Tribal assessment method, and continuing to aquire baseline data of wetland sites on the reservation.

Enhancing MT DEQ 401 Certification and CWA Integration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101055

Montana Department of Environmental Quality, Wetland Program Mr. Dean Rude dearude@mt.gov 406-444-4256

This two year project seeks to enhance wetland protection in Montana by strengthening the State's Clean Water Act (CWA) Section 401 Water Quality Certification program for 404 permits. A second objective is to increase coordination and integration of CWA programs at Montana Department of Environmental Quality (MDEQ) to improve the protection of wetland and streams in Montana. The main tasks to be accomplished and final products include: 1) develop formal written guidance for Clean Water Act Section 401 Water Quality Certification conditions for 404 permits, 2) develop more comprehensive conditions to the Corps of Engineers for 5-year re-issuance of Nationwide Permits and for the Yellowstone Special Area Management Plan, 3) evaluate federal and state databases and develop recommendations on databases that could be used or expanded to track 401 certification for 404 permits, and 4) research CWA Section 401 and 404 wetland related complaints and enforcement actions to determine trends and impediments to timely and appropriate enforcement for 401 and 404 violations, and provide recommendations for program improvement and identify outreach opportunities to increase wetland compliance.

2010

California

<u>California Wetland Protection Program Development for 401 certification, wetland and riparian</u> area policy, and wetland monitoring plan - Aquatic Science Center.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101930

Aquatic Science Center Lawrence Leung lawrence@sfei.org 510-746-7356

This assistance agreement provides federal funding in the amount of \$350,000 to The Aquatic Science Center (ASC), to build on past wetland protection program work. Together with partners, ASC will: - provide scientific review of the watershed approach to 401 certification, - recommend wetland and riparian beneficial uses and water quality objectives, - develop a riparian buffer definition and mapping methodology, - expand capacity for tracking 401 certifications and related activities, - develop comprehensive statewide monitoring plan based on the USEPA wetland Core Elements, and - develop statewide guidance for implementing wetland and riparian rules in a watershed.

Minnesota

Development of a Tribal Wetlands Program for the Red Lake Band of Chippewa Indians http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102171

Red Lake Band of Chippewa Indians Shane Bowe sbowe@redlakenation.org

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The project will consist of two parts in line with the two core elements upon which they are concentrating (see Project Description, section a, for descriptions directly related to core elements). First, in order to develop a wetland monitoring program, we will assess existing wetland data. Data will include GIS data (photos, National Wetland Inventory, LIDAR), biological data (fish, invertebrates, vegetation, etc.) and physical/chemical data (pH, Nutrients, Dissolved Oxygen, etc.). This data will be used to inform us about both the state of the wetlands on the Reservation and the state of our current data availability. The results will help guide the development of our wetland monitoring strategy which will be incorporated into our Integrated Resource Management Plan. This document ensures coordination between all resource managers (natural resource and otherwise) throughout Tribal programs. As a component of the Monitoring Strategy, they will coordinate with Tribal, State, Federal, and Local units of government to develop an appropriate, non-overlapping, complementary monitoring design. A primary monitoring tool will be volunteer monitoring coordinated through the Red Lake Tribal College in partnership with the Red Lake DNR. The second major component of this project will be the development of a Tribal Wetland Protection Ordinance. Current protections exist only at the federal level on the Red Lake Reservation, and the federal presence is minimal. This has resulted in poor enforcement and probable oversights of wetland degradation. We will develop a Tribal Wetland Protection Ordinance that is at least as protective as the CWA carrying the authority of the Tribal Council and enforceable by local conservation officers. This effort will bring wetland

protection under local control and result in greater protection to wetlands. The ordinance will also clearly define "wetlands of the reservation" and clearly state who holds authority over them. The process of developing this ordinance will include meetings with the ordinance committee and the planning department, public meetings with members, cooperative meetings with local counties and SWCDs who have dealt with wetland ordinance issues in the past, and direct meetings with the Tribal Council. The finalized ordinance will be presented to the Tribal Council to be passed by resolution.

Montana

CSKT Wetlands Program Development, Watershed-based Monitoring and Assessment of Reservation Wetlands, Continued Development of Jurisdictional Determination Tools, and Developing Water Quality Standards Specific to Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101850

Confederated Salish & Kootenai Tribes Clint Folden, CSKT Wetland Prog. Coordinator clintf@cskt.org 406-883-2888

Five year, FY11 and FY12, WPDG funding will assist the Confederated Salish and Kootenai Tribes (CSKT) to continue to build core elements of the Tribes' Wetland Conservation Program. Comprehensive program development during this grant period will include: watershed-based Wetland Monitoring and Assessment in the Mission Creek, Little Bitterroot River; continued development of GIS linked project tracking and evaluation database as well as; completion of enhanced NWI and riparian mapping with complete "Nexus" connections to assist with jurisdictional determination; and continued promotion of sound wetland conservation activities through effective wetland, riparian education and outreach activities. Program and CSKT Wetland Conservation Plan (1999) goals are consistent with National Strategic Plan and Region 8 priorities, and all are outside the scope of existing regulatory requirements. With the assistance of CSKT's, EPA Certified Staff of Air Quality, Shoreline Protection, Brownsfield, Pesticide, and UST/LUST Program, pollution and harmful human impacts to wetlands and water quality are being addressed at all levels. Products will include watershed-based wetland condition reports, GIS-linked project tracking tools to share with other stakeholders, assessment of NWI and hydrologic connectivity; and continued work on publication of 'Aquatic Weeds and their Native Look-a-Likes' field guides, Aquatic Invasive Species Threats and other education materials for use in outreach activities. Also, beginning in FY-2011, the wetlands program will complete the first draft of the Confederated Salish and Kootenai Tribe's first Aquatic Invasive Species Strategic Prevention Plan for the Lower Flathead River Watershed. The Wetlands Conservation Coordinator is also deeply involved in the "Crown of the Continent Working Groups and Partnerships" which is providing, preparing and helping in projected management decisions and needs for possible Global Climate Change impacts in the coming years.

North Carolina

Assessing Impacts Due to Small Impoundments in North Carolina to Support 401 Certification Policies

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101800

North Carolina DENR John Dorney john.dorney@ncdenr.gov

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Abstract: The objective of this proposed project is to collect chemical, physical, and biological water quality assessment data to support 401 Certification permitting decisions and addition of appropriate permitting conditions when issuing 401 Certifications in regards to small, artificial impoundments in NC. Currently, NC does not require mitigation for impounded stream reaches due to flooding and includes minimal conditions in 401 Certifications that are issued for small, private impoundments. This contradicts NC Division of Water Quality (NCDWQ) mitigation and restoration policies, since DWQ provides stream mitigation credits for dam removal projects. There are also concerns that these impoundments can lead to water quality degradation to the point that they can no longer be considered a change of use but a loss of use (e.g. aquatic life use support). Results from a large-scale, probabilistic study of small impoundments by the Tennessee Department of Environment and Conservation (TN DEC 2006) indicated that the impoundments had adverse affects on the physical, chemical, and biological components downstream. Thee are concerns that similar impacts occur in NC as well. During regulatory review of 401 applications, DWQ has insufficient data on small impoundments within NC to use as justification for inclusion of additional permit conditions based on concerns over these types of environmental risks. This study is intended to address these criticisms and also determine if existing data (such as the Tennessee study) are applicable to small, private impoundments located in the Blue Ridge and Piedmont ecoregions of NC.

Pennsylvania

Pennsylvania Comprehensive Aquatic Resource Protection and Management Program http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101880

Pennsylvania Department of Environmental Protection Kenneth Murin kmurin@state.pa.us 717-772-5975

The Pennsylvania Department of Environmental Protection (PA DEP) will be developing a Comprehensive Aquatic Program Development Plan. Specific objectives include finalization of the draft Pennsylvania Wetland Monitoring and Assessment Strategy; development of a headwater stream strategy; finalization of the Aquatic Resource Protocol; providing education and outreach to the regulated community.

Virginia

Regulatory Fidelity to Guidance in Virginia's Tidal Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101710

VA Institute of Marine Science Carlton H. Hershner caqrl@vims.edu 804-684-7614

This project addresses the development and refinement of the tidal wetlands program in Virginia. The project will involve the assessment of permitting decisions to determine the fidelity of local wetlands boards to the technical guidance they are provided in the evaluation of the regulatory program implementation.

National

Improving Wetland Restoration Permitting Success

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102142

Association of State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

This project will document current challenges, identify successful practices and identify how wetland restoration project managers and state wetland permitting agencies can work together successfully. Practitioners from the regulatory permitting and restoration communities will assist in developing: 1) a comparative study of wetland restoration permitting in Wisconsin and Oregon, 2) a report on restoration permitting challenges nationally and, 3) a handbook of best practices for wetland restoration. The products will be publicized broadly and available online.

Model Approaches to the Watershed Approach: A Handbook for States, Tribes and Local Governments

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102145

Environmental Law Institute Jessica Wilkinson wilkinson@eli.org 202-558-3100

This project will advance the application of the watershed approach to compensatory mitigation decision-making and to the voluntary restoration and protection of aquatic resources. The recipient will convene national leaders engaged in the watershed approach to analyze current watershed approach methodologies and use this information to develop and deliver a handbook for states, tribes, and local governments outlining detailed, step-by-step frameworks for carrying out the watershed approach.

State Definitions and Requirements for Ephemeral, Intermittent and Perennial Streams

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102141

Association of State Wetland Managers Jeanne Christie jeanne.christie@aswm.org 207-892-3399

The purpose of this project is to identify and compare the various ways states address jurisdiction, identification and protection of ephemeral, intermittent and perennial streams. The project will document how states identify streams for regulatory purposes, comparing the estimated extent of waters covered from state to state. In addition it will also describe methods for mitigating stream alteration and degradation under the state permitting programs and through conditioning of Section 404 program permits (using 401 certification) to identify best practices states can use to address gaps in federal Clean Water Act jurisdiction. Case studies will be developled and published summarizing the varied tools used by states nationally.

2011

North Carolina

<u>Develop North Carolina's Wetland Program Plan and Assess the Impact of Wetland Rules on the Extent of Waters of the State</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102415

NC Department of Environmental & Natural Resources Amanda Mueller amanda.mueller@ncdenr.gov 919-715-6823

NC Division of Water will establish a stakeholders group and develop a Wetland Program Plan for the State of NC. The Wetland Program Plan will be developed by experts from the public, private and university sectors in order to produce a comprehensive plan that my be utilized by all members of the state's scientific, education, regulated, and regulatory communities.

South Carolina

<u>Department of SC Stream Function Assessment Methodology (SFAM) and a SC Wetland Program Plan.</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102418

South Carolina Department of Health & Env. Control Heather Preston prestohs@dhec.sc.gov 803-898-3105

Project objectives are: 1) To refine wetland ecosystem protection; restoration and management; 2) A focused and sustainable wetland program; and 3) Internal review of current SC wetland

related statutes, regulations and program activities in the context of the Core Elements Framework.

By Fiscal Year

2006

Alaska

<u>Breeding Bird Diversity and Abundance Across Western Kenai Peninsula Lowlands Wetlands,</u> Alaska

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100265

Ninilchik Traditional Council Darrel Williams darrel@ninilchiktribe-nsn.gov 907-567-3815

This project will build on previous projects to characterize and map wetlands on the western Kenai Peninsula. The project will document the relationship between avian habitat and wetland types based on classification of plant cover on Kenai Peninsula wetlands. In a subsequent project the bird/vegetation information will be used to assess wildlife functions of Kenai Peninsula wetlands.

Wetlands Program Development Grant (Matanuska-Sustina Borough)

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100263

Matanuska-Sustina Borough Frankie Barber

907-745-9851

Project will help fund a position within the Borough to produce a guidance document to be used to help the Borough conserve ecologically significant wetlands, seek input and support for program development and produce public outreach materialson wetlands conservation.

Arizona

Hualapai Tribe Wetland Demonstration Pilot Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100435

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(see WDP pilot grants list)

California

Parsons Slough Tidal Wetland Restoration - California State Coastal Conservancy

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100369

California State Coastal Conservancy Trish Chapman

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The purpose of this project is to determine the best way to restore the integrity of this tidal wetland in the Elkhorn Slough Watershed on California's Central Coast.

San Francisco Bay and Suisun Marsh Protection Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100370

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Project will update the San Francisco Bay Plan and the Suisun Marsh Protection Plan findings, policies and map designation.

Santa Ana River Basin Phase I Wetland Protection

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100372

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This assistance agreement provides full federal EPA funding in the amount of \$50,000 for the promulgation of Basin Plan wetland amendments creating updated regulatory framework for more effective wetland protection

Colorado

<u>Colorado Division of Wildlife, Wetland Wildlife Conservation Program - 2006 Wetland Program</u> Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100950

Colorado Division of Wildlife, Wetland Wildlife Conservation Program Brian Sullivan, Wetlands Program Coordinator, for Bill Goosman brian.sullivan@state.co.us 303-291-7158

Four individual projects, or subgrants, were funded with this 2006 WPDG award to the Colorado Division of Wildlife's Wetland Wildlife Conservation Program. Individiual projects are: (1) Field Testing, Validation, and Mitigation Performance Standards of the Subalpine-Montane Riparian Shrublands Ecological Integrity Scorecard in the Blue River Watershed (Colorado Natural Heritage Program); (2) Survey of Critical Wetlands in Boulder County, Colorado (Colorado Natural Heritage Program and Boulder County); (3) Survey of Critical Wetlands in Rio Blanco County, Colorado (Colorado Natural Heritage Program); and (4) Floristic Quality and Wildlife Habitat Assessment of Playas in Eastern Colorado (Rocky Mountain Bird Observatory). Information on Colorado Division of Wildlife's Wetland Wildlife Conservation Program can be found at http://wildlife.state.co.us/LandWater/WetlandsProgram/.

Field Testing, Validation, and Mitigation Performance Standards of the Subalpine-Montane Riparian Shrublands Ecological Integrity Scorecard in the Blue River Watershed
http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100960

Colorado Natural Heritage Program, Colorado State University Joanna Lemley Joanna.Lemly@colostate.edu 970-491-2127

Georgia

<u>Conservation, Protection, Restoration and Utilization of Wetland Forests in the Georgia Coastal</u> Plain

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102630

Southern Law Environmental William W. Sapp bsapp@selcga.org 404-521-9900

Project will seek to determine whether Georgia's cypress forests are a threat of cypress forest stands bein harvested for the production of mulch, which is being marketed as a high-quality garden and landscaping

product. The project will assess the various threats faced by cypress-dominant wetlands in coastal Georgia and determine current trends.

Regional Wetlands Program Development Grants

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100272

Ga Dept of Natural Resources Jill Anderson jill_andrews@dnr.state.ga.us 912-264-7218

The Grantee will produce National Wetland Inventory maps for the GA coastal counties a mapped inventory of hardened shorelines, and a demo, technical transfer of soft engineering, alternatives to harden shorelines and wetland monitoring in the Satilla Basin.

Hawaii

Hawaii Wetland Assessment and Monitoring - University of Hawaii

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100371

University of Hawaii gregory brulan bruland@hawaii.edu 808-956-8218

This project will monitor and assess the water quality and habitat functions of restored, created, and natural wetlands in Hawaii

Idaho

Nez Perce Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100421

Nez Perce Tribe Gwen Carter gwenc@nezperce.org 208-843-7368

GAP: Improve existing water and wastewater services for the Nez Perce Tribe and prepare for future development. Improve existing solid waste management services for Nez Perce tribal members, enterprises and administrative offices and protect the natural environment of the Nez perce reservation. Implement a remote ensing project to determine aquatic habitat in support of TMDL work. Coordinate a conference on environmental issues throughout Idaho for tribal, private, state and federal land managers. 106: Protect the quality of rivers, lakes, and streams on a watershed basis. Provide and apply a sound, scientific foundation to EPA's goal of clean and safe water by conducting field surveys and developing a better understanding and characterization of the environmental issues. 319: Improve water quality by implementing best management practices on select water bodies. Wetlands: Assess wetland resources in the neighboring Cottonwood, Lawyer Creek watersheds.

Maryland

Maryland Wetland Monitoring Strategy

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100422

Maryland Department of the Environment Denise Clearwater

dclearwater@mde.state.md.us 410-974-2266

The purpose of this joint proposal is to develop a comprehensive strategy to monitor and assess the condition of wetlands in Maryland and to initiate its implementation.

Michigan

Improved Protection and Management of Stream Corridors

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100402

Michigan Department of Environmental Quality Joseph Haas haasj@michigan.gov 517-241-3139

Update regulatory guidance and provide training for field permit staff to improve permid and compliance decision-making and to increase the effectiveness of stream mitigation.

Minnesota

Comprehensive Wetland and Monitoring Plan Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100449

Fond du Lac Reservation Richard Gitar richardgitar@fdlrez.com 218-878-8022

Wetlands Program - The Tribe will evaluate wetland assessment and monitoring methods for Level 1, 2 and 3 applications and test them for use. The methodologies will be used to develop an on-goint comprehensive wetland assessment and monitoring plan.

Nutrient Criteria Development for Forested Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100448

Grand Portage Indian Reservation Andy Schmidt aschmidt@boreal.org 218-475-2415

Wetlands Program - The Tribe is adding the Wetlands Program to its Performance Partnership Grant. The Tribe will monitor and assess wetlands by: seasonal sampling of water and sediment for 2 years to establish nutrient cycling trends; assess existing conditions of algae and vegetation. Assess data to develop seasonal wetland nutrient ranges for assessing impairment and restoration over time. Create nutrient criteria for forested wetlands and go through process to add to tribal water quality standards. Outreach on the topic.

Missouri

Lost Creek Restoration Project (Wetlands Program)

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100275

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The purpose of this grant is to restore the riparian area, stabilize the streambanks, and create aquatic and terrestrial wildlife habitat along Lost Creek and for the Eastern Shawnee Tribe of

Montana

Chippewa Cree - Upper Big Sandy Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100516

Chippewa Cree Tribe Jim Morsette loranda@cct.rockyboy.org 406-395-4225

Implementation of Wetland Protection in Ravalli County

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101120

Bitterroot Water Forum Susan Key, Executive Director mrwaterforum@bitterroot.net 406-375-2272

Ravalli County is the second fastest growing county in Montana. This project proposes to accomplish three tasks: (1) develop a decision tree integrating wetlands information and tools with local subdivision review procedures for use by county staff; (2) coordinate wetland training workshop for county; and (3) provide coordination to the Setback Working Group to incorporate streamside setbacks into county processes (i.e., subdivision regulations, floodplain regulations, and growth plan implementation). Training workshops topics include: State and Federal wetland regulations; wetland identification; wetland plant identification; State wetland assessment methods; and plant community classification. Project results will serve as models and should be transferable to other local governments in Montana.

<u>Montana Department of Environmental Quality, Wetland Program - 2006 Wetland Program</u> Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101100

Montana Department of Environmental Quality, Wetland Program Lynda Saul lsaul@mt.gov 406-444-6652

Six individual projects, or subgrants, were funded with this 2006 WPDG award to the Montana Department of Environmental Quality's Wetland Program. Individual projects are: 1) Critical Lands Project; 2) Planning for Wetlands: Educational Workshops and Local Government Assistance on Methods to Protect Wetlands and Riparian Areas in Land Use Decisions; 3) Watershed Stewardship Education in Montana; 4) Implementation of Wetland Protection in Ravalli County; 5) Mapping and Analysis of Geographically Isolated Wetlands; and 6) Development of a GIS Level I Assessment Tool.

Nevada

Pyramid Lake Paiute Tribe Wetland Protection Program Development and Wetland Assessment http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100367

Pyramid Lake Paiute Tribe Fannie Ely fely@plpt.nsn.us 775-574-0101

The purpose of this project is to further develop the Tribe's wetland protection program through wetland monitoring, assessment, and tracking within exterior boundaries of the Pyramid Lake Indian Reservation.

Wetlands Protection Development - Nevada Wetland Information System

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100366

Nevada Department of Conservation and Natural Resources Eduard Skudlarek skud,arek@heritage.nv.gov 775-684-2907

This assistance agreement provides full EPA funding in the amount of \$151,000. The purpose of this project is for the State of Nevada to complete the NV Wetland Information System

New Jersey

Wetlands Invasive Species Monitoring

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100268

Montclair State University Kirk Barrett kirk.barrett@montclair.edu 973-655-7117

The applicant will determine the extent and distribution of invasive plants in three large wetland complexes in New Jersey: one relatively undisturbed natural wetland (reference) and two disturbed wetland areas. They will establish a long-term monitoring program at these sites. The project results will be available as an online database with an interactive map interface. Findings will be coordinated with the Invasive Species Council and the New Jersey Department of Environmental Protection to establish a groundwork for an invasive species management program in New Jersey.

New York

NYC Dept of Parks and Recreation Wetlands Monitoring Protocol

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100269

City of New York Parks and Recreation Natural Resources Group Marit Larson marit.larson@parks.nyc.gov 212-360-1415

The New York City Department of Parks and Recreation will improve its wetland monitoring protocol, adapt revised/improved monitoring protocols for freshwater wetland sites throughout New York City, interact with volunteer community groups, and introduce an assessment of recreational use in restored wetland sites. These efforts will improve wetland monitoring methods with application to prioritize wetland protection, conservation and restoration efforts.

Prioritization of Wetland Acquisition and Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100267

Tompkins County Soil & Water Conservation District Nick Schipanski nschipanski@hotmail.com 607-277-2161

The Tompkins County Soil and Water Conservation District will assess wetland regulatory gaps among state, municipal, and local wetland regulations; assess the extent of unregulated wetlands; and prioritize wetland acquisition and restoration efforts in Tompkins County, NY. The applicant will evaluate wetland regulation and need, and determine wetland protection priorities in an effort to increase wetland protection.

St. Regis 06-10 PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100472

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This continued program aims to partially fund St Regis Mohawk Tribe's FY'06 Performance Partnership Grant consisting of Clean Air Act (CAA) 105, Clean Water Act (CWA 106), Clean Water Act (CWA

North Dakota

North Dakota Department of Health - 2006 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100980

North Dakota Department of Health, Division of Water Quality Mike Ell mell@nd.gov 701-328-5214

Three individual projects, or subgrants, are funded with this 2007 WPDG award to the North Dakota Department of Health's Division of Water Quality. Individual projects are: (1) Estimating Wetland Quality for the Missouri Coteau, North Dakota: Phase II (North Dakota State University); (2) Remote Wetland Landscape Profiles for Agricultural Wetland Assessment and Monitoring (University of North Dakota); and (3) Building Capacity: the Region 8 Bioassessment Workgroup.

Ohio

Tinkers Creek, Ohio, Wetland Assessment and Prioritization Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100291

Cuyahoga County Board of Health Harry Stark hstark@ccbh.net 216-201-2001

To develop a comprehensive wetland inventory for the Tinkers Creek Watershed that addresses the need of obtaining the current "snapshot" of wetland acreage, classification, functionality and and economic value within the Tinkers Creek basin. Assists local government and community residents in recognizing the need for prioritizing conservation practices that offer sustainable growth for the community while promoting environmental integrity by developing a wetland assessment and monitoring program.

Oklahoma

Partnerships for Wetlands Protection, Restoration and Planning in an Urban Setting

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100276

State of Oklahoma Office of the Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8995

This project will demonstrate low impact development techniques to maximize wetland area and decrease flood impacts to communities; demonstrate environmentally friendly stabilization techniques; and include wetlands in watershed planning to protect future impacts to wetlands, while creating partnerships that are essential for sustained wetland protection efforts, ultimately resulting in a healthier biological community associated with the wetland and stream to attain no net loss of wetland acreage and functions.

South Carolina

Identification of Compensatory Mitigation sites within Priority Watersheds

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100289

SC DHEC David Wilson wilsonde@dhec.sc.gov 803-898-3712

SCDHEC and SCDOT proposes to identify, assess, and restore wetlands within the Coastal Plains and develop a guidebook to identify ephemeral, intermittent and perennial streams.

Utah

Utah - 2006 Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100309

Utah DNR, Division of Wildlife Resources Nancy Keate nancykeate@utah.gov 801-538-4745

Two individual projects, or subgrants, are funded with this 2006 WPDG award to the Utah DNR, Division of Wildlife Resources. Individual projects are: (1) Technical Assistance and Outreach for Refining the Reference Network and Rapid Assessment Methods for Utah's Wetlands (Division of Wildlife Resources) and (2) Groundwater Modeling to Assess Effects on Wetlands, Salt Lake Valley, Utah (Utah DNR, Utah Geological Survey).

Virginia

<u>Continuing Development of a Non-Tidal Wetland Inventory and Functional Assessment and</u> Monitoring Strategy for Virginia

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100423

Virginia Department of Environmental Quality Dave Davis

804-698-4105

The goal of the project is continue to develop a complete wetland monitoring and quality assessment in Virginia's Coastal Plain and Piedmont physiographic provinces. The proposal builds on exisiting work for Virginia's long-term wetland assessment strategy. Tasks include: Completion of Level II assessment of non-tidal piedmont wetlands, Continuation of Level III in Coastal Plain and selected sites in Piedmont Public Outreach and Technology transfer

Washington

Skagit River System's Wetland Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100395

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Analysis of the ecosystem function of remnant tidal scrub-shrub communities in the Skagit Delta with application to local and regional habitat restoration planning and Chinook recovery.

2007

Alaska

<u>Headwater Stream Wetland Settings and Shallow Groundwater Influence: Relationships to</u> Juvenile Salmon Habitat on the Kenai Peninsula, Alaska

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100378

Alaska Department of Fish & Game Cowee Walker coowe_walker@fishgame.state.ak.us 907-226-4651

This project will document the hydrologic relationship between wetlands and adjacent low order streams on the southern Kenai Peninsula, Alaska. It will monitor wetland and stream hydrology over the course of a year, including winter months. It will document plant communities in each of the wetland classes. It will document macro invertebrate and fish communities in streams associated with each wetland class. The project will develop a model for relating the Kenai Peninsula Borough Geographic Information Systemwith the derived information. The information will also provide the basis for wetland assessment of Kenai Peninsula wetland that will be completed as a subsequent project.

Arizona

Hualapai Tribe - Wetland Program Implementation Pilot Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100451

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(See Hualapai Pilot Grant description)

Florida

A Watershed Analysis of Permitted Coastal Wetland Impacts and Mitigation Methods within the Charlotte Harbor National Estuary Program Study Area

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101780

Southwest Florida Regional Planning Council Elizabeth Donley donley@swfrpc.org

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This project describes and evaluates the regional success of the use f coastal wetland mitigation strategies implemented in the CHNEP Study Area. It establishes the acreage f private mitigation, how well these lands are managed and the overall success rated of these actions, how well regional mitigation goals are being met and ay changes in quantity of coastal wetlands subject to permitted mitigation since the SWANNC decision. Mitigation performed both within and outside the watershed are examined. To accomplish this, areas and types of permitted coastal wetland impacts are tabulated and mapped; assisgned mitigation actions ae tabulated and mapped by coastal wetland type and mitigation category (creation, restoration, preservation, etc.; and a sample of mitigation sites are visited and evaluated for implementation success. The evaluation criteria incorporate regional mitigation goals and criteria established by regulatory and other resource management areas. (rke)

Idaho

Nez Perce PPG for FY2008 GAP, CWA 106, CWA 104(b)(3), and CWA 319 Base Funding

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100445

Nez Perce Tribe of Idaho Gwendolyn Carter gwenc@nezperce.org 208-843-7368

This project provides funding for: GAP: Develop financial, managerial and technical capacity for water and waste water systems. CWA 106: Review and acceptance of the Lower Clearwater River Imp[lementation Plan. Develop a Groundwater Protection Plan. Prioritize watersheds for restoration. Continue ongoing water quality monitoring. Designate beneficial uses for the development of tribal water quality standards. Complete TAS application for water qual;ity standards. CWA 319 Base Funding: Implement best management practices in impaired waters. Assist with water quality monitoring & assessment. Educate best land management techniques to local landowners. CWA 104 (b)(3) wetlands: Complete wetland assessment and management plan.

Illinois

Development of an Index of Biological Integrity (IBI) to Monitor and Assess Illinois Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100408

University of Illinois at Urbana Champaign/Illinois Natural History Survey Michael Ward mpward@uiuc.edu 217-244-4089

The work to be accomplished will be to develop an Index of Biological Integrity (IBI) for Illinois wetlands by the Illinois Natural History Survey. Data from the Illinois Natural History Survey's Critical Trends Assessment Program on over 200 wetlands, gathered since 1997, will be used to develop the IBI. This includes data on birds, terrestrial arthropods and vascular plants. It will be used to create a standardized statewide Bioassessment Protocol capable of scoring and ranking wetlands based on their relative impairment along a human disturbance gradient.

Kansas

Assessment of Floodplain Wetlands of the Lower Missouri using the EMAP Study Approach Phase II: Verification of Rapid Assessment Tools

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101160

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The wetland monitoring and assessment study will apply and test assessment tools, provide an unbiased estimate of the current condition of floodplain wetlands in the lower Missouri River study area. Gather and assess water quality, floristic, macroinvertebrate, and landscape data from 40 wetlands selected by an EMAP probability-based approach.

Assessment of Floodplain Wetlands of the Lower Missouri using the EMAP Study Approach Phase II: Verification of Rapid Assessment Tools

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100305

University of Kansas Don Huggins dhuggins@ku.edu 785-864-1548 The wetland monitoring and assessment study will apply and test assessment tools, provide an unbiased estimate of the current condition of floodplain wetlands in the lower Missouri River study area. Gather and assess water quality, floristic, macroinvertebrate, and landscape data from 40 wetlands selected by an EMAP probability-based approach.

Mississippi

<u>Linking Cultural, Biological and Economic Values into Wetland Programs: Mississipi Band of Choctaw Indians' Pearl River Wetlands Demostration</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100290

Ms State University Dr. Gary Ervin, Associate Professor gervin@biology.msstste.edu 662-325-1203

The purpose of this project is to protection and restoration of riparian wetlands of the Upper Pearl River located on land controlled by Mississippi Band of Choctaw Indians. Canebrakes restoration as riparian buffers will be undertaken as a comprehensive appoach to bridging cultural, ecological, and economic values of the Tribe. Integration of EPA priorities with the traditions of the tribe, will provide a template for the restoration and protection of riparian wetlands and canebrakes around the Southeast. GRANT CLOSED

New Jersey

NJ Meadowlands Commission Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100270

New Jersey Meadowlands Commission Christine Hobble christine.hobble@njmeadowlands.gov 201-460-4660

The applicant will develop a method to monitor wetland vegetation type and condition using remote sensing images, detailed sediment analyses, and elevation measures using LIDAR (radar sensor of elevation). They will develop a model to link aerial image values from vegetation texture/height to onthe-ground ranges of salinity, water table level, and sediment characteristics. The purpose is to develop and refine a cost effective method to monitor wetlands.

New Mexico

FY 2007 Wetlands Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101400

New Mexico Environment Department Maryann McGraw maryann.mcgraw@state.nm.us

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Five individual projects were funded under this grant. A. Hyperspectral Imagery B. Wetlands Monitoring Strategy C. Comprehensive Wetlands in Santa Fe County D. Integrated Stream Restoration E. Integrating Biological Assessment with RAM

Santa Clara Creek Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100294

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The priority objectives are: (1) to protect the Santa Clara Creek wetlands and streams from further erosion, sediment loads and decreased water quality and (2) re-establish native plant co

Valles Caldera

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100298

New Mexico Environment Department Maryann McGraw maryann.mcgraw@state.nm.us 505-827-0527

This project will restore site specific bog and slope wetlands and floodplain wet meadow habitat on the 89,000 acre Valles Caldera National Preserve (the Preserve). This project will use in

New York

Invasive Plant Management Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100326

Research Foundation of SUNY/Plattsburgh Michael E. Simpson simpsome@plattsburgh.edu 518-564-2155

The Research Foundation of the State University of New York (SUNY) at Plattsburgh will collect baseline data on wetland plant communities, develop a wetland monitoring program and develop an invasive plant management program for the AuSable River watershed in New York. Invasive species reduce the health and quality of natural wetlands, reducing their fitness and ability to perform important natural functions.

St. Regis 06-10 PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100446

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This Performance Partnership Grant (PPG) is to provide for the operation of continuing environmental programs while giving the St. Regis Mohawk Tribe (SRMT) greater flexibility to address its

State Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100407

NYSDEC - NYS Dept. of Environmental Conservation Roy Jacobson rajacobs@gw.dec.state.ny.us 518-402-8853

The New York State Department of Environmental Conservation (NYSDEC) will revise and redesign the agency's freshwater wetland regulatory maps to make them more useful to landowners, local governments and others. Project efforts include updating regulated wetland boundaries, including surface water information and location of National Wetlands Inventory mapping in a watershed framework. This project will increase NYDEC'S wetland regulatory capabilities improve wetland protection efforts and will facilitate wetland monitoring and assessment.

Ohio

Integrating Wetland Development into a Total Maximum Daily Load, (TMDL) Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100335

Ohio Environmental Protection Agency Jennifer Martin jennifer.martin@epa.state.oh.us 614-644-2867

This is a pilot project where ambient wetland condition assessment and evaluation will be included in a TMDL project from its inception. This will allow a completely integrated assessment of of both streams and wetlands.

Oklahoma

An HGM Approach for Assessing Wetland Functions in Central Oklahoma: Hydrogeomorphic Classification and Functional Attributes

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101350

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

The HGM approach for wetland classification has been incorporated into a number of state wetland monitoring programs because it supports functional assessment of wetlands. In Oklahoma, wetland classification has largely followed the Cowardin system, which has limited use in functional assessment. We propose to classify a select group of wetlands in the Cross Timbers and Central Great Plains Ecoregions of Oklahoma using the HGM approach, evaluate the need for regional wetland subclasses within these ecoregions, and collect baseline abiotic and biotic data that can be used to support development of functional assessment models for these ecoregions. The study will not only support existing wetland projects in Oklahoma (e.g. development of a probabilistic monitoring design, approaches for use attainability evaluations), but will serve as a critical first step toward implementing functional assessment protocols as part of the State's wetland monitoring program.

Initiating a Vegetated Wetland throughout the Littoral Zone of Atoka Lake

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101351

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

See subgrant information for project specific information.

Oklahoma's FY 07 104 (b)(3) Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100299

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

See subgrant information for project specific information.

Texas

Texas AgriLife Research of the TX A&M Univ. System

exas

The Blackland Research and Extension Center proposes the establishment of a voluntary, interdisciplinary Central Texas Stream Team (CTST) that will provide technical advice to accomodate, remediate, and/or stabilize area streams; this to be achieved through consultation and recommendation to landowners, local officals, city engineers and contractors wthin the Central Texas region. The primary objective of this project is to establish an interdisciplinary team of professional volunteers from local, state and federal agencies that will develop and promote strategies and solutions for the complex problems facint Central Texas streams. CTST will encourage environmental stewardship through planning and policy development with the ultimate goal of promoting more ecologically-oriented development and stream management. http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100296

Central Texas Stream Team and Restoration Project

Dr. Dennis Hoffman hoffman@brc.tamus.edu 254-774-6040

$\underline{\textbf{Current Status and Function of Playa Wetlands and Evaluation of Buffer Effectiveness}}_{http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100301}$

Texas Tech University **David Haukos** david.haukos@ttu.edu 806-742-1983

The 25,000 playas in the Southern Great Plains are being greatly altered and lost through sedimentation and other impacts. This project will assess the extent to which eroded soils have caused complete wetland loss as well as impairment of wetland function in the remaining playas, and effects of conservation buffers on sediment and hydrology.

Washington

Colville Tribe Regional Wetlands Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100379

Colville Confederated Tribes Todd Thorn, Forest Practices Administrator todd.thorn@colvilletribes.com 509-634-2417

The Colville Tribe will revise the Tribal legal code for protecting wetlands, create a wetland monitoring program, establish a tribal wetlands working group to coordinate wetland monitoring,

2008

Idaho

Performance Partnership Grant for FY 2009 GAP, CWA 106, CWA 104(b)(3), and CWA 319 Base Funding.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100458

Nez PerceTribe of Idaho Gwendolyn Carter gwenc@nezperce.org 208-843-7368

General Assistance Program: Develop financial, managerial and technical capacity for water and waste water systems. Tribal Leader Summit organization and implementation. 106: Wa

Michigan

Advancing wetland monitoring and assessment in Michigan through interagency coordination, data management and data analysis

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100692

Michigan Department of Environmental Quality Peg Bostwick bostwickp@michigan.gov

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Address data analysis, data management and infrastructure planning elements and encourage collaboration by agencies and organizations involved in wetland monitoring in Michigan. Expand and strengthen statewide wetland monitoring and assessment. Use GIS information to make better decisions in program. Get GIS data tools to local governments.

Michigan Refinement of Landscape Level Wetland Assessment Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100336

Michigan Department of Environmental Management Peg Bostwick bostwicp@michigan.gov 517-335-3470

The objectives of this project are to refine landscape level wetland assessment methods that have been used on a trial basis in Michigan, to evaluate the success of these methods, and to provi

State Wetland Program Development Grants

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100334

Michigan Department of Environmental Quality Peg Bostwick bostwicp@michigan.gov 517-335-3470

The objectives of this project are to increase the expertise of Michigan □s Section 404 Program staff, improving their ability to respond more comprehensively to scientific and legal issues,

<u>Strengthening Michigan's Section 404 Permit Program: Regulations, Mitigation and Delineation http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100691</u>

Michigan Department of Environmental Quality Peg Bostwick

bostwickp@michigan.gov

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Update and improve assumed 404 program in response to EPA program review, Federal mitigation rule and new regional supplements to the wetlands delineation manual. This includes specific program updates and proposed administrative rules, improved procedures for compensatory mitigation, development of a State Programatic General Permit for State-Corps interface in traditionally navigable waters, update Michigan wetland delineation manual.

Minnesota

Minnesota PCA

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100782

Minnesota Pollution Control Agency

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"Performance Partnership Grant to the Minnesota Pollution Control Agency (MPCA) as continued support of the partnership between MPCA and USEPA, and to allow the State the flexibility to direct resources as appropriate, to achieve maximum environmental benefit."

New Jersey

The Effectiveness of Upland Buffer Zones in Mitigating the Impact of Suburbanization on the Integrity of Wetland Communities

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101480

New Jersey Pinelands Commission John Bunnell john.bunnell@njpines.state.nj.us 609-894-7300

The Pinelands Commission will quantify the effect of variable-width upland buffers, located between forested wetlands and residential development, on the ecological integrity of Pinelands wetlands. The biological indicators to be measured include forested-wetland plants and pond-breeding frogs and toads. The results will enhance the Commission's wetlands-buffer program by improving the decision-making process used by Commission regulatory staff when determining the width of upland buffers. The proposed study will address several major objectives: 1. Determine the effect of variable-width upland buffers, located between forested wetlands and residential development, on wetland-plant species composition. 2. Determine how far into a wetland any developed-land-proximity/plantspeciescomposition effect extends. 3. Identify ecological-integrity thresholds by determining the degree to which plant assemblages in reference (minimally disturbed) wetlands and wetlands with adjacent residential development differ. 4. Determine the effect of variable-width upland buffers, located between off-stream breeding ponds and residential development, on the composition of frog and toad assemblages. 5. Identify ecological-integrity thresholds by determining the degree to which frog and toad assemblages in reference ponds and ponds with adjacent residential development differ. Quantitative models relating various metrics, including total, native, and nonnative species richness and overall composition of plant and anuran assemblages, to the width and development intensity of adjacent upland buffers will be prepared by the end of the project. These models can be used to predict the ecological integrity of a wetland based on adjacent land use or to determine the buffer width needed to maintain reference conditions.

New Mexico

FY 08 Wetland Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101410

New Mexico Environment Department Martyann McGraw maryann.mcgraw@state.nm.us

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Four separate wetlands projects were funded under this grant. A. La Cienega Le San Vicente B. Rapid Assessment Upper Rio Grande, Phase II C. Cebolla Canyon D. Curry County Playa Restoration This grant award will include funding for four projects: Project 1 (San Vicente) - to survey, restore, and protect more than 30 acres of degraded riverine wertlands; Project 2 (Rapid assessment) - to further development of rapid assessment of wetlands and to continue development of a macroinvertebrate wetland condition index for riverine wetlands; Project 3 (Cebolla Canyon) - to demonstrate innovative methods for restoring agricultural lands to natural wetland habitat; and Project 4 (Curry County) - to complete demonstration playa restoration and conservation measures by working with landowners to protect more than 150 acres and restore 60 acres of playa wetlands.

New York

St. Regis 06-10 PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100460

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This Performance Partnership Grant (PPG) is to provide for the operation of continuing environmental programs while giving the St. Regis Mohawk Tribe (SRMT) greater flexibility to address its

North Carolina

Development of a Wetland Mitigation Document for Specfic Wetlands Types

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101810

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The proposed projects the establishment of a comprehensive wetland mitigation guidance documentfor North Carolina. The document will include current federal and state reegulations, scientific descriptions of ecological communities expected to be present wiothin specific wetland types, and information on mitigation techiques that have shown the greatest accesst

Ohio

Comprehensive Wetland Assessment and Prioritization Plan for the Tinkers Creek Watershed http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100690

Cuyahoga County Board of Health Harry Stark hstark@ccbh.net

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Use wetlands as best management practices for improving water quality in the Tinkers Creek Watershed. This will be analyzed through water quality modeling for pollution reduction and stormwater runoff.

Oklahoma

<u>Hydrogeomorphic Classification and Initial Functional Assessment of Wetlands in the Ouachita</u> Ecoregion of Oklahoma

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101360

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

The primary goal of this project is to continue HGM characterization of wetlands in support of a functional approach to wetland assessment in Oklahoma and also to provide a classification scheme that will enhance the resolution of other assessment methods. Both of these will significantly further development of Oklahoma's wetland monitoring program. In conducting this study, we will use the regional guidebook for assessment of wetlands in the Ouachita Mountains that has been developed by the State of Arkansas (Klimas et al. 2006) as a template in assigning wetland classes and subclasses. This process will include baseline monitoring of the systems to characterize key functional attributes. This work will also represent a third ecoregion in Oklahoma in which we have initiated HGM classification and identification of functional attributes. With these combined data we will begin making broader evaluations of wetland assessment in the state including the need for specific wetland assessment areas (distinct from ecoregions), similarity of subclasses between ecoregions and major functional attributes within ecoregions.

Kaw Nation Beaver Creek Wetland Project

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100410

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These funds will provide continued support for the Kaw Nation's development of their wetland program.. The fiscal year objectives are to enhance, restore and effectively sustain the wetland w

Oklahoma's FY08 104 (b)(3) Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100339

Oklhaoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

Please see subgrants for project specific information.

Oxbow System Assessment and Protocol Development – Phase 1

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101361

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

Oxbow systems are unique natural lakes/wetlands that provide several key ecosystem services such as floodwater retention, loading nutrients and sediment, nursery grounds for fish, and feeding grounds and habitat for local and migratory waterbirds, amphibians and macroinvertebrates. These systems have not been assessed in Oklahoma. Oklahoma Water Resources Board (OWRB), Oklahoma Conservation Commission (OCC) and Oklahoma State University (OSU) have partnered to design a three-phase project that addresses Oklahoma's high priority to develop and implement a comprehensive wetland monitoring

program that furthers our understanding of the ecological health of waters in Oklahoma. This workplan is written for funding of Phase I.

Tennessee

Athens Dynamic Watershed Modeling to Provide for Wetland Protection and Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101641

City of Athens Shawn Lindsey slindsey@cityofathenstn.com 423-744-2769

To provide tools to educate, protect, monitor, evaluate, and create wetlands in the Oostanaula Sub Watershed which is part of the Hiwassee Watershed. (MKJ)

Washington

Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100459

Tulalip Tribe of the Tulalip Reservation Julia Gold jgold@tulaliptribes-nsn.gov 360-651-4491

The Tulalip Tribes will continue to play a major role in the monitoring, management and planning of water resources in and around the Puget Sound. For the Clean Water Act 106 program the goal is to meet all EPA106 Clean Water Act guidance requirements and begin the rocess of updating the Tribes' water quality standards. The Tribe will use the 319 funding for stream and riparian enhancement on the Coho creek and implementation of Tulalip Bay Watershed base plan and low impact development of the demonstration #2 wetland construction projects. The Nonpoint Source 319 funds will support current efforts to further assess and reduce Nonpoint source pollution impacts to the waters of the reservation. Wetlands Grants will be used for planning, protection, mitigatio, and restoration measures as well as long vterm monitoring and assessment work.

Regional Wetland Program Development Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100324

Department of Ecology Andy McMillan anmc461@ecy.wa.gov 360-791-2254

The Washington State Department of Ecology (Ecology) proposes to develop guidance materials and provide training and technical assistance to local jurisdictions. In addition, Ecology will review and comment on draft wetland regulations for local jurisdictions.

Yakama PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100457

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Wetland Component: inventory, assess, map wetlands within the "closed" portion of the Yakama Reservation (724,000 acres) then prioritize "at risk" wetlands for protective actions Water Qu

2009

Alabama

Eco-Morphological Stream Design and Assessment Tools for the Alabama Piedmont

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101680

Auburn University - AL Cooperative Extension System Dr. Eve F. Brantley brantef@auburn.edu 334-833-3927

Development of a set of eco-morphological stream design and assessment tools for the Piedmont Region of Alabama to support effective stream mitigation. The tools will include: 1) hydraulic geometry relationships for predicting stable stream morphology related to channel-forming discharge and drainage area; 2) streambank erodibility relationships for predicting bank erosion related to near-bank shear stress and the Bank Erosion Hazard Index and 3) stream/floodplain eco-morphological relationships for predicting stream and riparian ecological functions related to morphological conditions. (MKJ)

Arkansas

Stream Restoration Demonstration at Niokaska Creek

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101646

City of Fayetteville Arkansas Sarah Wrede swrede@ci.fayetteville.ar.us 479-575-8208

The City of Fayetteville in partnership with the Watershed Conservation Center proposes to implement an urban stream restoration using a natural channel design approach that includes the development of wetlands in Fayetteville, Arkansas. The 1,600 feet urban stream restoration will use innovative approaches to manage and treat the stormwater and address severe streabank erosion, while restoring aquatic and terrestrial habitat and maintaining a sustainable, natural hydrology.

Idaho

Nez Perce PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100776

Nez perceTribe of Idaho Gwendolyn Carter gwenc@nezperce.org 208-843-7368

"GAP: Develop financial, managerial and technical capacity for water and waste water systems. Alternative energy and conservation development. 106: Watershed assessment analysis for surface, groundwater, wetlands and toxins/pesticides/oil and grease. Continue ongoing water quality monitoring. Develop water resource monitoring strategy. 319: Implement best management practices in impaired waters. Assist with water quality monitoring and assessment and Total Maximum Daily Load implementation plans. Educate best management plans to local landowners and watershed groups. Wetlands: Track changes in the quality and condition of wetlands in Lapwai Cr. and develop a wetland program prioritization plan."

Wetlands Development Grants Program - Assessment of Restoration Outcomes

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100795

Idaho Department of Fish and Game Chris Murphy chris.murphy@idfg.gov 208-287-2728

"This project will develop a framework for a wetland restoration monitoring program in Idaho. The spatial distribution and extent of wetland types at restored, enhanced, and created wetlands on private and state lands across Idaho will be retrospectively evaluated. Rapid and biologic assessment methods will be used to evaluate their potential functions and values, condition and integrity, and vegetation by analyzing a combination of spatial and field-derived data. Restored wetlands will be compared with reference wetlands that occur in similar hydrogeomorphic environments."

Michigan

Map and Assess Vernal Pools in Michigan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEQ:101642

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The Michigan Department of Environmental Quality (MDEQ) will develop an effective approach for identifying, mapping, classifying, and assessing vernal pools to aid in the conservation of these wetlands and associated biodiversity in Michigan. This project will investigate and develop an effective approach for obtaining accurate information on the status, distribution, and ecology of vernal pools. This information will facilitate efforts to protect and restore these wetlands, which will increase the quality and quantity of wetlands and maintain healthy ecosystems.

Monitoring the Status & Trends of Ecosystem Health

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101643

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The Michigan Department of Natural Resources & Environment (MI DNRE) will implement the U.S. Environmental Protection Agency's National Assessment protocols (when finalized and where applicable), in addition to the Great Lakes Coastal Wetlands Monitoring Plan developed by the Great Lakes Coastal Wetland Consortium (GLCWC) to evaluate the status and trends of Great Lakes coastal wetlands.

Strengthening Michigan's Section 404 Permit Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100813

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The Michigan Department of Environmental Quality (MDEQ) will provide regulatory efficiency for the citizens of the state and is seeking ways to more efficiently share regulatory responsibilities with the United States Army Corps of Engineers (USACE) in traditionally navigable waters and adjacent wetlands that cannot be administered under a state 404 program. MDEQ will update their 404 Regulatory Program, improve compensatory mitigation procedures, streamline permitting in traditionally navigable waters, and update their wetland delineation manual.

Wetland Monitoring and Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100812

Michigan Department of Environmental Quality Peg Bostwick

bostwicp@michigan.gov 517-335-3470

The Michigan Department of Environmental Quality (MDEQ) will advance wetland monitoring and assessment in Michigan by addressing current gaps in their wetland monitoring and assessment strategy. MDEQ will address data analysis, data management, and infrastructure planning elements and encourage collaboration by agencies and organizations involved in wetland monitoring within the state.

Minnesota

Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101617

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The purposes of amending this project is to plan, develop and establish the capability for implementing environmental protection programs administered by the Environmental Protection Agency. Specific activities in this action include: Habitat assessment through breeding bird survey; Historic trends in nutrient concentrations in two Grand Portage Lakes; Implement the Grand Portage Reservation Nonpoint Source Management Program and Grand Portage Reservation Watershed-Based Plan to Restore Grand Portage Bay.

Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100781

Red Lake Band of Chippewa Kenneth McBride ccskier@paulbunyan.net 219-679-3959

This Performance Partnership grant will aid the Band in the development and establishment of basic environmental management capability. The funds will be used to continue efforts to build the basic infrastructure of an environmental program to protect the Band's water, land and air resources. Specifically, the Band will maintain a surface water monitoring and assessment program, develop and implement Environmental Protection Agency water quality standards, develop and maintain a wetland monitoring and assessment program and provide public outreach and education to members regarding pollution prevention, reduction and conservation of resources.

Mississippi

Distribution and cycling of mercury species in wetlands in Northwest Mississippi

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101681

University of Mississippi Dr. James Cizdziel cizdziel@olemiss.edu 662-915-1814

To determine the distribution and cycling of mercury species in NW Mississippi. The overall goal is to produce quantitative data with known quality that can be used by the state to manage and protect its aquatic resource. (MKJ)

New Mexico

Galisteo Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100818

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The primary objectives of this project are (1) pre-restoration monitoring, (2) restoration (3) post restoration monitoring. this project will facilitate an expanded effort to create, restore, and protect wetlands in the Galisteo Watershed. New Mexico Environment Department (NMED) was awarded an additional \$10,000 for completion of tasks that are part of the pilot project: develop a Wetlands Action Plan to incorporate into the Galisteo Watershed Restoration Action Strategy; print additional copies of the wetlands brochure and construct sign for the Wilderness Preserve. This project was awarded in 2004 and in FY 2009 and additional \$10,000 was awarded for a pilot project. For the Wetlands Action Plan, public participation and project signage.

New Mexico FY2009 Wetlands Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101648

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This grant will fund the mapping and classification of wetlands in the Canadian River drainage, including playas and isolated wetlands in northeastern New Mexico; to acquire imagery and to assemble a geodatabase, to conduct a literature search and agency GIS staff interviews; pre and post mapping field reviews, to develop a LLWW draft classification for the project area, and to create a landscape level assessment.

New York

St. Regis 06-10 PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100790

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This Performance Partnership Grant (PPG) is to provide for the operation of continuing environmental programs while giving the St. Regis Mohawk Tribe (SRMT) greater flexibility to address its highest environmental priorities, improve environmental performance, achieve administrative savings and strengthen the partnership between the St Regis Mohawk Tribe and EPA. This agreement funds St Regis Mohawk Tribe programs to protect and improve air quality, water quality, nonpoint source, and drinking water; and support pollution prevention, wetlands, and general assistance environmental program capacity building activities.

North Carolina

Eric Kulz

eric.kulz@ncmail.net 919-791-4200

This project will develop restoration guidance and staff training to address un-permitted impacts to streams and wetlands, to allow for more consistent site restoration and monitoring at these sites, resulting in more quality restoration across the state. This guidance document will provide field staff with details on restoration techniques monitoring activities and success criteria to be implemented to restore streams

<u>National Wetland Condition Assessment Study of the Alabama, South Carolina and North Carolina</u> Piedmont and Coastal Plain Regions

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101639

North Carolina Department of Environment and Natural Resources DWQ Rick Savage

rick.savage@ncmail.net

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This grant proposes to conduct an intensification study of Piedmont and Coastal plain wetlands in North Carolina (NC), South Carolina (SC), and Alabama (AL), with NC taking the lead. The National Wetland Condition Assessment (NWCA) level III protocol will be used, and a level II assessment using rapid methods developed for the NWCA (USA RAM), the Ohio Rapid Assessment Method, the NC Wetlands Assessment Method and other available methods. Sites will be chosen using the NWCA probablistic sampling design for each state. Training in the wetland assessment protocol will be conducted for NCWA field staff of all three states. Water quality, soils, and vegetation will be surveyed at each site as defined by the NWCA protocols, and macroinvertebrates and apmphibians will be sampled for development of a regional index of biological integrity. Results of this work will contribute to the interpretation of NWCA data and provide an initial assessment of USA RAM. It will also help the participating states develop and test their own wetland assessment methodologies and provide a better understanding of Piedmont and Coastal Plain wetlands in NC, SC, and AL.

Ohio

Ohio National Wetland Condition Assessment Intensification Study Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101644

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The Ohio National Wetland Condition Assessment (NWCA) Intensification Study is to develop a detailed dataset of wetland conditions using the NWCA methodology. This will provide statistically valid information to generate an overall report card illustrating the status of wetland resources in the state of Ohio. Additionally, Ohio's Level 1, Level 2 and Level 3 assessment techniques will be used on all wetlands in this study, including the Ohio sites used for the NWCA, to allow for a comparison between the NWCA and Ohio protocols.

Wetland Improvement Projects

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100814

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"This grants consists of two projects: (1) Condition and Ecosystem Services of Created Wetlands for Detaining and Treating Storm Water Runoff: an Intensive Biological, Hydrological and Chemical Monitoring Approach; and (2) Developing Hydrological Condition Indicators for Primary Headwater Streams in Northeast Ohio. These projects will address critical issues and vulnerable resource types in the urban ecosystems of Northeast Ohio."

Oklahoma

Development of Floristic Quality Index Approaches for Wetland Plant Communities in Oklahoma

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101371

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

The primary goal of this project will be to develop a wetland vegetation assessment tool that can be used in conjunction with other data to assess and monitor wetlands across the ecoregions of Oklahoma. To date, this information is lacking in the state and Region 6 and this project would help to build program capacity by filling data gaps that are needed to assess wetlands. The first Oklahoma's FY 09 104(b)(3) Wetlands Workplan 10 objective of this project will be to develop Coefficient of Conservatism scores for the wetland and aquatic plants of Oklahoma. The second major objective will be to field calibrate the

FQA approach to the ecoregions across the state. Additionally, the CC scores will be a valuable tool that can be utilized for the National Wetland Condition Assessment. Fulfillment of the proposed project objectives will further the capacity of Oklahoma's Wetlands Program to assess and monitor wetland resources.

Identification and characterization of reference conditions in Oklahoma wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101380

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

An important step in the development of effective bioassessment programs is the identification of "reference" sites that represent relatively unaltered or minimally disturbed conditions. Unfortunately, reference conditions have not been fully characterized for wetlands in many regions of the country. Furthermore, reference conditions may vary geographically or spatially so that a single defined reference condition is not appropriate for use throughout an entire region or state. This may be particularly true for Oklahoma due to the strong east to west precipitation gradient that exists throughout the state. The purpose of this study, therefore, is to provide an assessment and comparison of reference wetland conditions in Oklahoma. To accomplish this goal we will first identify and screen reference wetlands from four ecoregions or groups of ecoregions that represent this precipitation gradient (e.g. Quachita Mountains and Arkansas Valley, Cross Timbers, Central Great Plains, High Plains and Southwestern Tablelands) using a combination of approaches (e.g. compilation of previous collected wetland data and percentile scoring, the best professional judgment of state biologists, landscape assessments, and site reconnaissance visits). From candidate reference sites, we will select 15 sites from the dominant wetland class in each of the four ecoregions or groups of ecoregions and sample them using the National Wetlands Condition Assessment (NWCA) field protocols. The resulting data will provide a thorough characterization of reference conditions in Oklahoma wetlands that can be used in the development of effective statewide bioassessment, biocriteria and use attainability programs. Furthermore, by using the NWCA sampling methodology our results will provide comparable data on statewide reference conditions that could not be obtained from probability based surveys alone.

Oklahoma's FY09 104 (b)(3) Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101362

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

Please see subgrants for project specific information.

Oxbow System Assessment and Protocol Development – Phase II

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150 GRT SEO:101370

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

The primary goal of Phase II of this project is to assess conditions of oxbow systems using Use Support Assessment Protocols (USAP), hydrogeomorphic (HGM) functional models, and indices of biotic integrity (IBI's) and to determine the protocols appropriate for assessing these unique systems. The objectives of Phase II are to conduct Level III assessments on representative oxbow systems, evaluating the appropriateness of USAP, HGM, and IBI protocols on these systems, and create a collaborative

process to assess all wetland types through work groups and other technical expertise. The goals of Phase II are directly in line with the EPA's Strategic Plan, Goal 4 Healthy Communities, Objective 4.3 Restore and Protect Ecosystems, Sub-objective 4.3.1 Increase Wetlands by working with partners to focus on assessment of Oklahoma's oxbow systems. The assessment of oxbow lakes assists in ensuring that these natural wetland resources can be protected, sustained, and where possible, restored.

Virginia

VA Comprehensive Wetland Development Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101300

Virginia Institute of Marine Sciences Jane A. Lopez jlopez@vims.edu 804-684-7029

This project will assist the Virginia Institute of Marine Sciences (VIMS) work towards developing comprehensive wetland development plansand linking wetland and water quality monitoring programs for the Commonwealth of Virginia. This work will be completed through research, monitoring, documentation, training and transfer of results through outreach.

Washington

Auburn Wetland Mitigation Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100799

City of Auburn, Department of Planning, Building & Community Development Chris Andersen, Senior Planner candersen@auburnwa.gov 253-876-1962

The City of Auburn will conduct a comprehensive assessment of its active wetland mitigation sites. Approximately 50 sites will be evaluated. A document will be produced and a planning document developed to assist local land-use planners in reviewing and approving appropriate mitigation performance standards. Field methods will be developed with input from EPA, U.S. Army Corps and Washington Department of Ecology to ensure use of best available science and consistency across mitigation site evaluation efforts. Mitigation site assessment results from this work will be shared with other local jurisdictions.

<u>Kalispel Tribe Performance Partnership Grant - Aggregate of 319, 106, IGAP & WPDG programs.</u> http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:100789

"Maintain and expand field water quality monitoring; collect and analyze water samples; develop and implement Total Maximum Daily Loads (TMDL) implementation plans; outreach education on watershed and ecosystem management in coordination with the University of Washington Extension Program. Riparian/shoreline restoration implementation. Continue the implementation of water quality/ watershed management planning and assessing water resource issues. Wetland restoration planning and development. Provide input to other tribal departments planning efforts. Continue to communicate with state and federal environmental agencies. This award approves the workplan and budget submitted with the application, dated June 2, 2009, WITH THE EXCEPTION OF THE INDIRECT COSTS, which are being excluded from the approved budget. The indirect cost rate agreement on file with EPA expired 09/30/2008. The recipient may request a budget revision to include the indirect costs after an indirect cost rate agreement is signed and submitted to the Grants Specialist."

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Kalispel Tribe

West Virginia

WV Wetlands Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101290

WV Div. of Natural Resources Walter S. Kordek

304-637-0245

The project will provide information and build state expertise and capacity to implement a prototypical state wetland program begining in 2011. Program goals are to protect existing wetlands, add to the number of wetlands by construction and restoration, increase the health, integrity and functionality of wetlands, and make all wetland related decisions with the best science available.

2010

Alaska

<u>Developing A Keep Wet Program: Improving Management and Protection of Wetlands on the Kenai Peninsula</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101621

Homer Soil & Water Conservation District

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The Homer Soil and Water Conservation District will manage, coordinate, document, provide information transfer for, and otherwise contribute to a highly collaborative 2-year project to assess the functions of wetlands on non-federal lands on the Kenai Peninsula. Hydrologic, biological, and social/community functions of wetlands will be assessed by "expert teams" using available information, including existing, digitized, 1:25,000-scale wetland maps. Six products (deliverables) will be produced to support accomplishment of two key goals.

Golovin Bay Watershed Wetlands Monitoring Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101620

Native Village of White Mountain Eric E. Morris

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This project is a partnership among three Alaska Native Tribes to develop a wetland program plan for the Golovin Bay Watershed. The plan will identify a strategy for monitoring and assessing wetlands in the watershed. The effort will develop the database by which wetlands data will be tracked to better protect subsistence resources and waters upon which they depend in light of future resources\ extraction and transportation development, the Native Village of White Mountain (NVWM) believes it is in its best interest to be involved in protecting water, establishing baseline environmental conditions, and planning for wetlands protection. These efforts and ecosystems all have strong connection to EPA's Startegic Plan.

Arkansas

Developing a Wetland Management Plan for the White Oak Bayou Watershed

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101647

City of Maumelle, Pulaski County, Arkansas Mr. Jim Narey, Director of Planning and Zoning jimn@maumelle.org 501-851-2500

This project is in the third phase of developing a Wetland Management Plan for the White Oak Bayou watershed in Pulaski County, Arkansas. Additional hydrogeomorphic (HGM) functional assessments will be conducted of wetlands within the watershed for refinement of existing GIS and associated wetland maps for planning and management purposes. This work will build on existing collaborative efforts by local agencies, governments, businesses, citizens, educators, and others for development of educational resources for locally driven and science based approach to management of the wetlands at watershed scale.

Geomorphic Setting Delineation and Analysis for Wetlands in the Coastal Plain Region of Arkansas: The Deweyville Terraces of the Saline and Ouachita River Valleys

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102180

Arkansas Natural Resources Commission Ken Brazil ken.brazil@arkansas.gov 501-682-5410

The project will create a field-verified accurate detailed and comprehensive analysis of the geomorphic landscape of the Deweyville Terace system of the Saline and Ouachita River valleys of the Arkansas wEst Gulf Coastal Plain.

<u>Identification of Biological Methods for Evaluating Wetland Water-Quality Conditions in Arkansas (ASU)</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102061

Arkansas State University Jennifer L. Bouldin jbouldin@astate.edu 870-972-2570

Development of a wetland biological index that can be used to evaluate water quality conditions for shallow perennial wetlands in the Mississippi Alluvial Plain Ecoregion.

Florida

Level 1 Landscape Scale Analysis of Wetland Condtion

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102700

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This project will build on the US EPA National Wetland Condition Assessment (NWCA) 2011 by performing GIS based site evaluation and Level 1 Landscape Assessment Landscape Development Intensity (LDI) index evaluation of all 67 wetland assessment points located within the State of Florida. (MKJ) Grant Closed

Level 1 Landscape Scale Analysis of Wetland Condtion

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101750

University of Florida Mark T. Brown mtb@ufl.edu

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This project will build on the US EPA National Wetland Condition Assessment (NWCA) 2011 by performing GIS based site evaluation and Level 1 Landscape Assessment Landscape Development Intensity (LDI) index evaluation of all 67 wetland assessment points located within the State of Florida. (MKJ) Grant Closed

Georgia

<u>Planning Tool for Assessing Cumulative Environmental and Economic Benefits of Wetland</u> Restoration and Mitigation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101751

Georgia Department of Natural Resources Linda MacGregor linda.macgregor@dnr.state.ga.us 404-656-4713

Continue to build the capacity for monitoring and protecting wetlands in Georiga. Four main objectives: 1) continue the development of wetland assessment protocols and to apply the assessment protocols in the Blue Ridge, Ridge & Valley and Southeastern Plains; 2) build capacity for GA's CWA Section 401 Water Quality Certifications; 3) initiate the work in development of wetland-specific water quality standards; and 4) develop a guidebook and provide training for local governments to use in protecting wetlands. (MKJ)

Idaho

<u>Developing a Wetland Monitoring Program for Idaho: establishing a Baseline with an Idaho</u> Wetland Condition Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150::::NO::P150_GRT_SEQ:101623

Department of Environmental Quality Jason Pappani

208-373-0294

This project would supplement the National wetland Condition Assessment (NWCS) monitoring effort in Idaho. Several sites would be added to the NWCS effort to provide a more statewide assessment of wetland conditions. The Monitoring and Assessment core element of the national plan would be addressed.

<u>Nez Perce PPG: Monitoring Wetlands on the Nez Perce Reservation and Prioritizing their</u> Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101608

Nez Perce tribe of Idaho

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This project will build on previous rapid assessment and first year monitoring, expanding to a broader selection of wetlands, and including monitoring for changes and detection of trends. results will be used to set restoration goals. These efforts have connection to national priority for Wetland Program Planning based on two of the four Core Elements: Monitoring and Assessment; and restoration and Protection. ARU staff will assist NPT in transitioning to other funding sources for this important work.

Mississippi

Refinement and Development of Mississippi's Wetlands Development Programs

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101682

MS DEQ Florance Watson florance_watson@deq.state.ms.us 601-961-5614

Grant will support revising Mississippi's regulations for Section 401 Water Quality Certifications. MSDEQ will study the areas of regulations that should be updated and identify areas of improvement to provide better support for compliance issues. Development towards a comprehensive wetland program that includes the following; Development of a comprehensive monitoring and assessment program; Improves the effectiveness of compensatory mitigation; and Refines the protection of Mississippi's vulnerable wetlands and aquatic resources. (MKJ)

Nevada

Fallon Paiute Shoshone Tribe - Wetland Protection Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101654

Fallon Paiute Shoshone Tribe Richard Black or Sonia Corleto sonia@enviro-fpst.org 775-423-0590

The Fallon Paiute Shoshone Tribe will monitor and assess water quality in the wetlands, oversee the US Fish and Wildlife Service wetlands restoration project, develop partnerships with other agencies to protect wetland resources, and conduct outreach and education to the community about the importance of wetlands. This assistance agreement provides full federal funding in the amount of \$114,533.

New Jersey

Developing a Wetland Condition Monitoring Network for New Jersey

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101520

New Jersey Dept. of Environmental Protection Kathleen Strakosch Walz kwalz@dep.state.nj.us 609-984-1339

The New Jersey Dept. of Environmental Protection will establish a statewide wetland monitoring network. This will provide baseline wetland condition information to enable management decisions for resource protection and wetland restoration. The New Jersey Dept. of Environmental Protection will: 1) Establish a statewide network of wetland Condition Assessment monitoring sites at Level 2 and 3 intensification, applying new methods and protocols developed by NatureServe in conjunction with EPA NWCA protocols, 2) Map and classify the springs of New Jersey as well as establish long-term monitoring of an array of characteristic springs statewide, 3) Augment the existing Floristic Quality Assessment Index with Coefficients values for both bryophytes and rare flora in New Jersey, and use the

full species FQAI to evaluate and track vegetation at wetland mitigation sites, and 4) Outreach to federal, state, local, and private and citizen conservation groups, in particular watershed groups, to provide information on the locations of vulnerable wetlands and springs in need of greater protection, restoration and adaptive management. All of these activities are development, program building activities and are outside the scope of existing regulatory requirements.

Development and Implementation of an Integrated Tidal Wetlands Monitoring and Assessment Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101511

Ocean County College Martha Maxwell-Doyle mmdoyle@ocean.edu 732-255-0472

The Ocean County Community College will establish a wetland monitoring and assessment network in New Jersey tidal wetlands. The recipient will establish reference monitoring sites covering different tidal wetland types and will test, refine and apply on-the-ground methods for assessing wetland condition. Results will establish baseline wetland condition and will enable management decisions for resource protection, restoration and climate change planning.

New Mexico

Rapid Assessment Method(RAM) of Riverine Wetlands in the Gila Watershed, SW New Mexico

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101991

New Mexico Environment Departme nt Maryann McGraw maryann.mcgraw@state.nm.us 505-827-0581

This grant will fund the collection/completion of data collection for two wetland subclasses and completion of a Gila Watershed Rapid Assessment Method (RAM) User's Manual; development of an assessment too l for wetlands that can be used for restoration, regulation and planning; to train end-users to aply the RAM; to coordinate regional and statewide partnerships to enhance wetland protection and to develop/enhance a wetland database to track New Mexico wetlands information

New York

Integrating watershed based wetland protection

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101632

Tioga County Soil & Water Cons. Dist James Curatolo jac3@htva.net 607-546-2528

Investigate the occurrence, distribution and characteristics of wetlands in the Susquehanna Basin, NY. Develop wetland mitigation tools in accordance with recent federal Wetland Mitigation Rules and provide training in these mitigation tools in order to restore and protect wetlands in the region. Develop protection strategies for wetlands at risk of loss and integrate these strategies into NY State planning efforts.

LI Tidal Wetlands Trends Analysis

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101629

NEIWPCC - New England Interstate WPCC Susan Sullivan

ssullivan@neiwpcc.org 978-323-7929

This project will analyze aerial photo imagery of tidal wetland systems throughout Long Island, NY. The applicant will analyze changes and trends and evaluate potential causes of wetland loss in specific pilot tidal marshes areas. The project will report on changes in tidal wetlands between 1997 and 2005/2008 and report on potential stressors to these wetlands. Data will enable comprehensive watershed protection and restoration plans. The recipient will work with partners to build a more effective comprehensive monitoring and assessment program to protect and restore Long Island tidal wetland ecosystems.

Refining Wetland Mapping with Remote Analysis/Technology

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101633

New York State Department of Environmental Conservation Timothy J. Post tjpost@gw.dec.state.ny.us 518-402-8903

This award provides funding to New York State to use new technology in aerial photo analysis and wetland mapping. The mapping will more accurately reflect current wetland distribution and characteristics in the Mid-Northern Hudson and Southern Lake Champlain watersheds and will incorporate watershed information.

Oklahoma

Oklahoma's FY 2010 Wetlands Program, CWA 104 (b)(3)

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102200

Oklahoma's Office of the Secretary of Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

Please see subgrants for project specific information.

Oklahoma's FY 2010 Wetlands Program, CWA 104 (b)(3)

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102201

Oklahoma"s Office of the Secretary of Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

This award will covers first of two projects. This is the description for: Development of a Wetland Program Plan for the State of Oklahoma. Oklahoma's Comprehensive Wetlands Conservation Plan (OCWCP) was completed through interagency cooperation in July 1996. Oklahoma will revisit the OCWCP to determine progress that has been made and tasks that need to be completed for the development of the wetland program. Development of Oklahoma's wetlands program can be refocused through the development of a Wetland Program Plan (WPP). The Oklahoma Conservation Commission and the Oklahoma Wetland Technical Work Group participants, which includes other state partners, will develop a comprehensive wetlands program to relate state priorities to the Core Elements of a Wetlands Program for a 3-6 year period. The areas include 1) monitoring and assessement; 2) regulatory activities; 3) voluntary restoration and protection; and 4) water quality standards for wetlands. This project will coordinate the effort to develop the Core Elements in three ways: 1) Review the status of the OCWCP objectives and wetland program acitivities in Oklahoma; 2) Develop a Wetland Program Plan; 3) Develop Oklahoma wetland program website.

Oklahoma's FY 2010 Wetlands Program, CWA 104 (b)(3)

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102203

Oklahoma's Office of the Secretary of Environment Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

This award will covers second of two projects. This is description for: Classification of wetland habitats in Oklahoma's Eastern Ecoregion. The project will extend ongoing efforts to inventory characterize classify Oklahoma wetlands using the HGM approach. Using existing databases to locate wetlands in the Central Irregular Plains, Arkansas Valley, and South Central Plains ecoregions of Oklahoma. These wetlands will be assigned to HGM classes. Selection of a subset of wetlands from each class identified to provide as much spatial coverage across each of the ecoregions. Landowners will be contacted to visit site and verify the original class designation and collect data. A qualitative assessment of wetland functions and to characterize the dominant stressors that may be influencing the system based on the California Rapid Assessment Method for Wetlands (CRAM). The dominant wetland class and subclass in each ecoregion will be determined and select reference wetlands within that class and subclass. These sites will represent a range of conditions from impaired to unimpaired.

Peoria Tribe of Indians of OK, Wetland Development Grant 2010

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102060

Peoria Tribe of Indians of Oklahoma Jim Dixon jdixon@peoriatribe.com 918-540-2535

Development of Wetland Program Plan/Build Tribal Wetlands Program. The Peoria Tribe of Indians of Oklahoma proposes to develop and begin a wetlands program plan in order to achieve a net increase in wetlands acres. The Peoria Tribe will begin this process of development of a wetlands program plan by incorporating one of the four core elements identified by EPA as fundamental elements of a wetlands protection plan. The Peoria Tribe does not currently have a wetlands program. The main tasks the Peoria Environmental Department plans to complete are the following; establish a wetlands expert by attending as many trainings as possible in order to enhance tribal capacity along with gain a better understanding of the wetlands specifically to restoration and protection, develop a Wetlands Program Plan to identify and prioritize voluntary restoration and protection of wetlands within Peoria Tribe jurisdiction, include a Tribal Resolution to protect the wetlands on Tribal lands, and attend meetings with state agencies such as 'Wetlands Technical Work Group' along with establish other contacts that may aid in the development of the Peoria Tribe Wetlands Program. The Wetlands Program Plan will include one of the four core elements. The Peoria Tribe will focus on Voluntary Restoration and Protection in the Peoria WPP. The Peoria Tribe owns approximately 2,000 acres in land with multiple wetland sites that have been destroyed from local agriculture use for both farming and ranching.

Oregon

Coquille Indian Tribe Wetland Program development and Wetland Management Plan

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101609

Collquille Indian Tribe Edward Metcalf

541-756-0904

This project will build Tribal capacity to address environmental issues by participating in training, conducting environmental reviews and inventories, and conducting a water quality needs assessment. This

project will also address water quality issues affecting the Tribe including monitoring water quality, analyzing the data and submitting it into the STOrage and RETrieval (STORET) data warehouse, developing an assessment report, developing Tribal water quality standards, and expanding their non-point source management program.

<u>Develop Coordinated Wetland Program Plan and Build State Capacity for Wetland Monitoring</u> and Protection

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101624

Oregon Department of State Lands janet Morlan janet.morlan@state.or.us 503-986-5239

The State of Oregon has a mature regulatory program. The Oregon Department of State Lands will address the need to develop a monitoring and assessment strategy, and improve the stat'e ability to protect important natural wetlands and restore wetlands to an overall high level of function and condition. There are three related projects recommended for funding: (1) develop a coordinated wetland program plan addressing monitoring and assessment incollaboration with state and tribal partners; (2) national wetland Condition Assessment support, and (3) update the Oregon Native wetland Plan Communities Classification. These efforts have all strong connection to the national priority Wetland ProgramPlanning, addressing Core elements 1 (Monitoring and Assessment) and 3 (Voluntary Restoration and Protection).

Wetland Prairie Restoration

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101626

Lane Council of Governments
Jeff Krueger, Senior Landscape Architect
jkrueger@lcog.org
541-682-4122

This project will analyze, refine,and disseminate cutting-eddge information designed to improve the restoration and mangement of wetland prairies. It addresses all three critical steps for achieving successful wetlands prairie restoration; proper sites restoration; proper site prreparation; initial establishment of native species, and long-term focused management activities. The proposed work builds upon 10 years of previous work, and addresses key knowledge gaps. With greater than 95% of wet prairie lost in the Pacific Northwest, dessimination of the results of this project could significantly improve results in restoration and management of wet prairie wetlands.

Washington

<u>Assessment of Wetland and Meadow Condition and Protection and Restoration Needs on Yakima</u> Reservation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101614

Confederated tribes and Bands of the Yakima Nation Rodney M. Guske

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This project addresses at-risk wetland and wet meadow habitats located within the Yakima reservation. Wetlands and meadows within the Yakima Reservation support ecologicallty and culturally valuable species, such as the federally-threatened Middle Columbia Steelhead, Greater Sandhill Crane, and numerous traditional food plants as well as sensitive and state and federally listed plant species. Over 800 wetalnds and meadows are embedded within the 742,000 acres of reservation land forests. Wetland functions are seriously impaired in many. This project addresses EPA's core Elements: 1- Monitoring and

Assessment and 3-Voluntary Restoration and Protection by monitoring approximately 100 wetlands and meadows (half of the 200 in original 2-year project), including vegetation, hydrology, and benthic macroinvertebrate communities at a sub-set of wetland sites. These data will be used to develop a condition assessment report, which will be used to establish priorities for wetland protection and restoration.

<u>Developing Guidelines for Feasibiulity Assessments and Conceptual Designs for Wetlands for the Restoration in the Calispel-Cusick Valley</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101612

Kalispel Indian Community of the Kalispel Reservation Kenneth Merrill

509-447-7276

This project will result in conceptual designs for restoring wet meadow/Tule marsh ecosystem wetlands once common in the Calispel-Cusick Valley flood plain. These designs would be incorporated into regionally-based guidelines for completing restoration site feasibility assessments and restoration plans. The Voluntary retsorationCore element is addressed with this project. development pressure on tribal resourced under self-governence is mentioned as a need.Results will be intergated into the Pend Orielle County Shoreline Mangement Plan.

Historical Wetland Mapping

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101627

Washington Department of Fish and Wildlife Timothy Quinn timothy.quinn@dfw.wa.gov 360-902-2414

This project will identify the historic location, extent and potential types of wetlands that existed in 29 townships of Clark and Cowlitz Counties in southwestern Washington using the general land Office (GLO) cadastral land survey maps and notes from the 1850s through 1910. A geospatial dataset of historical landscape components, including the location and extent of mapped wetlands is useful for identifying and prioritizing wetland protection and restoration. The methodology used and the tools developed through this grant will have application to other locations throughout Region 10. The information can be utsed to analyze the type of wetlandss that have hadthe greatest historical loses and identify targetrestoration and/or mitigation objectives with more informaed information. this region of Washington State is identified as a highpriority area forrare wetland types, including wetland prairies that historically extended from the Willamette Valleyup through the Puget Trough. The 29 townships in Clark and Cowlitz Counties are also experiencing rapid development pressures. By knowing the historic extent, locations and types of wetlands that existed on these landscapes in the past, better priorities for protection and restoration can be achieved. This project fulfills objectives underCore Element 3 for State Wetland Program development.

<u>Updating and Identifying Wetland Conservation Priorities for Washington State: Phase I - Puget Sound Basin</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:101628

Washington Department of Natural Resources John Gamon john.gamon@dnr.wa.gov 360-902-1661

This project will improve wetlands protection by updating the Natural Heritage Program's inventory of wetland sites and ensuring Natural Heritage Sites are identified as Category 1 wetlands in the WDNR rating system. The long-term goal is to identify wetland conservation priorities for the entire State. Major

tasks include: updating methods to assess ecological condition, revisit and update information about known Natural Heritage Wetlands, identify currently undocumented Natural Heritage wetlands, and distribute information to planners, consultants, land managers and the public.

2011

Alabama

Inventory, classifiction and assessment of Alabama's geographically isolated wetlands.

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102410

Auburn University Sam Fowler, Director Water Resource Center fowlesr@aces.edu 334-844-5075

Identify and document the objectives of Alabama's long term wetlands monitoring program and identify the data needed to achieve these goals and objectives for all wetlands statewide.

Alaska

Monitoring and Assessment of Urban and Rural Community Wetlands on Kodiak Island

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102287

Kodiak Soil and Conservation District David Kaplan dave@kodiaksoilandwater.org 907-486-5574

This project would coordinate a preliminary collaboration on the development of a Kodiak wetlands program to promote and support sound management and protection of wetlands in urban and rural communities on Kodiak Island. As part of the wetland plan development, the Kodiak Soil and Water Conservation District (KSWCD) would begin the planning phases for including monitoring and assessment strategies in Kodiak Island.

Arkansas

Continuing the Development of a Wetland Management Plan for the White Oak Bayou

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102347

City of Maumelle Jim Narey jimn@maumelle.org 501-851-2500

The main objective of this proposal is to complete a revised draft Wetland Management Plan (WMP) for the White Oak Bayou Watershed. Associated components involved in completeing the revised plan will include additional HGM and opther environmental analyses work; refinement of and additions to, the existing geographic information system.

California

Bioassessments and Expansion of Wetland Inventory

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102610

Yurok Tribe

Dr. Kathleen Sloan, Environmental Program Director

ksloan@yuroktribe.nsn 707-482-1822

The Yurok Tribe will expand water quality and environmental monitoring of wetlands within Yurok Reservation to provide data to further the understanding of their wetlands ecosystems. Data will be used to develop an environmental baseline for Yurok Reservation that will allow the Tribe to assess and track trends over time and space in relation to degradation and climate change impacts. Project will include macroinvertebrate bioassessment studies for the Klamath River Estuary wetlands previously inventoried and assessed by the Tribe using the California Rapid Assessment Method (CRAM). Bioassessments are needed to further understanding of ambient wetland condition, wetland function, and water quality within these wetlands. The Tribe also will expand their existing wetlands inventory to include all wetlands on the Reservation, which will allow them to document wetland locations, assess ambient wetland condition and develop wetland protection needs for the entire Yurok Reservation. Via partnership with US Fish and Wildlife Service (FWS), the Tribe will complete the wetland assessment task earlier than originally scheduled (2014-2015) in its Wetland Program Plan (WPP) by conducting assessment during the mapping groundtruthing.

Colorado

CSU 2010 WPDG: South Platte

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102366

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Tools for Colorado Wetlands, Phase 2: Outreach and Training on Wetland Plant Identification and Condition Assessment

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102367

Colorado State University Carmen Morales carmen.morales@colostate.edu 970-491-6684

This award provides funding to build capacity to protect, manage, and restore wetlands, through assessment and development of a comprehensive program. Current efforts are focused toward developing a portfolio of scientifically validated tools to describe the abundance, health, and function of wetlands. These tools will then be incorporated into wetland monitoring protocols and assessment strategies, with the ultimate goal of assessing the ambient condition of approximately 10% of the state's wetlands per year. This project includes the development of 1) a pocket guide to common wetland plants of Eastern Colorado, 2) professional trainings on wetland plant identification, 3) a detailed field manual for wetland condition assessment, and 4) professional trainings on wetland assessment protocols.

Georgia

Georgia Wetlands Pogram Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102413

Georgia Department of Natural Resources Jennier Welte Jennifer.Welte@dnr.state.ga.us 404-675-1752

Build Capacity fo monitoring and protecting wetlands in Georgia. Task 1 continue the development of wetland assessment protocols and to apply the assessment tools in wetlands in the Southern Coastal Plain and Task 2 build additional in-house expertise to sustain and develop EPDs wetlands monitoring and

assessment efforts, as well as to enable CWA Section 401 water quality certification inspection and compliance efforts.

Idaho

Developing a Wetland Program Plan (WPP) for Idaho

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102289

Idaho Department of Fish and Game Chris Murphy chris.murphy@idfg.idaho.gov 208-334-2114

The project will create a collaborative, 3 - 6 year Wetland Program Plan (WPP) addressing assessment, monitoring, restoration, protection, mitigation, and management of IDFG's wetlands. Tasks in support of the WPP include compilation of existing wetlands information, assessment of current conditions, updating wetland maps, creation of an assessment and monitoring method "tool box," testing methods, and training. The WPP would implement the Idaho Wetland Conservation Strategy. This WPP will be a model for other agencies to use in developing their own plans. The outcome will be increased restoration and protection, and improvement of the health and function of over 35,000 acres of Idaho's wetlands.

Nez Perce PPG

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102288

Nez Perce Tribe Elisabeth Brackney elisabethb@nezperce.org 208-621-3886

This project will develop a 3- to 6-year WPP that describes Nez Perce Tribe program goals along with actions and activities designed to achieve the overall objectives. The WPP is intended to provide clear direction for the Tribe's wetlands program. The proposed tasks involving additional monitoring and assessment of wetlands were not funded. The project objective ties into Objective 4.3 of the EPA Strategic Plan to protect, sustain, and restore the health of critical natural habitats and ecosystems.

Michigan

Building and Enhancing Technical Tools and Coordination to Improve Wetland Protection http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102335

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The State of Michigan, Department of Environmental Quality (MDEQ), Water Resources Division (WRD) will further develop their exisiting Section 404 Program by building and enhancing technical tools and coordination in wetland assessment, wetland and stream restoration, natural shoreline protection, and Michigan's regulatory program. The project is comprised of four components that improve technical tools and coordination in the program: Landscape Level Assessment, Improved Wetland/Riparian, Lakes and Streams Protection, Improving WRD's Joint Permit Application, and Endangered Species Coordination.

Montana

Blackfeet Tribe Wetlands Program Development

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102377

Blackfeet Tribe DUNS Number: 085660624

Gerald Wagner, Director, Blackfeet Environmental Office

gwagner@3rivers.net 406-338-7421

The main objective of this proposal is to prepare a Wetland Program Plan (WPP) for the Blackfeet Tribe to guide wetland monitoring and assessment, regulation, restoration and protection, and wetland water quality standards. The main objectives of the WPP will be to: i) to produce a wetland monitoring and assessment plan for the Blackfeet Reservation in support of the other Core Elements within an EPA-approved WPP; ii) revise the existing regulatory framework to reflect the Clean Water Act 404 and 401 process; iii) continue the educational outreach program to develop a wetland restoration and protection ethic on the Blackfeet Reservation; and iv) research and establish a set of wetland water quality standards that reflect the minimum requirements for the Tribe. The final product will be an EPA-approved WPP to enable the Blackfeet Environmental Office (BEO) to continue protecting wetlands on the Blackfeet Reservation. The goal of the Blackfeet Tribe's Wetlands Program is to protect existing wetland resources and increase the quantity and quality of wetlands within the Blackfeet Indian Reservation. About 4% of the 1.5 million acre Reservation was mapped as wetlands by the National Wetlands Inventory in the early 1980's. The Blackfeet Nation values wetlands and wish to protect them for future generations.

CSKT Watershed Monitoring, Assessment of Reservation Wetlands, Development of NWI Database ("Nexus"), and Education and Outreach Performance Partnership Grant http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102372

Confederated Salish and Kootenai Tribes, Wetlands Conservation Program Clint J. Folden clintf@cskt.org
406-883-2888

CSKT Wetlands Program Development, Monitoring and Assessment of Reservation Wetlands, Continued Development of Jurisdictional Determination Tools, Voluntary Protection and Developing Water Quality Standards Specific to Wetlands, FY12. The goal of project is to halt the loss ("no net loss"), of the remaining wetlands and riparian areas and the decline in wetland and riparian quality (1.Monitoring and Assessment, 2. Regulatory Activities Including 401 Certification, if required). The long-term goal is to increase the acreage of wetlands and riparian areas and improve the quality of those resources (3.Voluntary Restoration and Protection, 4. Develop Water Quality Standards for Wetlands). The interim and long term goals are a synthesis of Tribal goals for wetlands and riparian lands articulated in prior plans, strategies, ordinances, consent decrees, environmental standards, and best management practices (BMP's). The CSKT WLCP will use this information to improve understanding of baseline wetland condition, to continue to develop benchmarks for wetlands restoration and protection, to inform development of wetland-specific water quality standards, to continue to build core elements of the Tribes' WLCP and to prioritize wetland restoration and protection activities. The CSKT WLCP plans to achieve this goal through implementing the following actions and activities over the next several years

<u>Chippewa Cree Tribe Sweetgrass Wetlands Monitoring, Assessment and Protection Project Performance Partnership Grant</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102373

Chippewa Cree Tribe Water Keith Gopher, Chippewa Cree Tribe cct_wetlands@yahoo.com. 406-395-4225

The primary objective of the Chippewa Cree Tribe Sweetgrass Wetlands Monitoring, Assessment and Protection Project is to facilitate protection, restoration, conservation and sound management of wetlands and wetlands supporting sweetgrass through the establishment legislation, provision of wetland-specific education and outreach, completion of restoration planning activities, and the development of a Wetlands

Antidegradation Policy. Main Tasks: The following tasks will be completed as a means to fulfill our stated objective: 1) continued monitoring and assessment activities; 2) development of wetlands restoration plans; 3)development of a UTDC including a Setback Ordinance for wetlands and riparian zones; 4) sustained participation in TIC meetings and decisions; and 5) development of a Wetlands Antidegradation Policy.

MDEQ Wetland Program Plan Development Including Monitoring and Assessment and Voluntary Restoration Program Building Actions

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102210

Montana Department of Environmental Quality. DUNS#: 112481648 Stephen M. Carpenedo, Wetlands Environmental Science Specialist SCarpenedo2@mt.gov

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This instrument is an assistance agreement because it provides funding to The Wetland Program, Montana Department of Environmental Quality (MDEQ) to: 1) Provide MDEQ and partners in Montana a clear path of the actions plan on taking to achieve Montana's goal of "no overall net loss of the state's remaining wetland resource base and an overall increase in the quality and quantity of wetlands in Montana." 2) Take a collaborative approach to integrate wetland monitoring and assessment and voluntary restoration and protection into other water quality programs at MDEQ and provide resource materials and a training using a demonstration project. 3) Identify program recommendations and long term outcomes that will benefit from a wetland M&A program at MDEQ. 4) Define MDEQ's wetland M&A objectives and strategies, 5) Evaluate how to integrate wetland M&A into existing MDEO water quality monitoring and assessment methods. 6) Evaluate how the methods, core indicators, and application of the National Wetland Condition Assessment can be integrated into existing MDEQ water quality monitoring and assessment methods. The project anticipate several benefits that will result from this proposal, including: an agreed upon direction and approach for MDEQ to incorporate wetlands into existing water quality monitoring programs; an increased understanding how wetland monitoring and assessment can inform decision making at MDEQ; an increased awareness of how wetlands function to improve and maintain water quality and quantity, an approach to target wetlands for restoration and protection based on their ability address water quality and quantity impairments; and an increase in acres of wetlands restored and protected.

NCT-Development of a Comprehensive Mapping and Assessment Program - Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102374

Northern Cheyenne Tribe / DUNS #: 001118574 Charlene Alden, Director cwalden2001@yahoo.com 406-477-6506

Montana's Northern Cheyenne Tribe (NCT) is currently developing a comprehensive wetlands mapping and assessment program, yet we are limited by a lack of digital wetlands data. In 2009 we received a FY2009 EPA Wetland Program Development Grant (WPDG), with the goal of developing a comprehensive wetlands mapping and assessment program to provide quality baseline wetlands data for the reservation. The FY2009 WPDG detailed four objectives to realize this goal: (1) Map and assess wetland conditions on the reservation to USFWS National Wetlands Inventory (NWI) Standards; (2) Map culturally-significant wetland plants; (3) Develop a GIS-based data storage and display system for assessment data and wetland maps; and (4) Develop outreach materials for dissemination of wetlands program data and findings. The NWI Standard maps wetlands using USGS quadrangles as the mapping unit; as of 2009 there were nineteen unmapped quads within NCT reservation boundaries. Implementation of the FY2009 WPDG focused on eight of the nineteen quads. Without data on wetland acreage and

condition in the remaining eleven quads, we are unable to confirm whether we are achieving a no net loss, or a change in quality and quantity of reservation wetlands. Therefore, the goal of the this FY2011 proposal is to continue our efforts to develop a comprehensive wetlands mapping and assessment program, through mapping and assessment of the eleven remaining quads located in the Rosebud Creek drainage. As in FY2009, we will partner with Montana Natural Heritage Program's Wetland and Riparian Mapping Center for implementation of the grant.

Univ of Mon 2011 WPDG- Characterization and Description of the Extent, Distribution, Characteristics and Functions of Headwater Wetlands in the Missouri Headwaters Basin http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102450

MTUNIV - University of Montana System, School of Education Margaret Roberts and Linda Vance margaret.roberts@umontana.edu 406-243-4737

This award provide funding to build capacity to protect, manage, and restore wetlands, through assessment and development of a comprehensive program. Current efforts are focused toward developing a portfolio of scientifically validated tools to describe the abundance, health, and function of wetlands. These tools will then be incorporated into wetland monitoring protocols and assessment strategies, with the ultimate goal of assessing the ambient condition of approximately 10% of the state's wetlands per year. This project supports Goal 4 (Healthy Communities and Ecosystems), Objective 4.3 (Restore and Protect Ecosystems), Sub-objective 4.3.1 (Increase Wetlands). The overall goal of the proposed project is to prevent wetland loss by developing tools, maps, information materials and workgroups that will promote voluntary protection and restoration of critical natural habitats that cannot easily be replaced if lost. Assessment of wetland condition and potential threats is an inherent part of the project plan. It also advances Strategic Direction #3 of the Montana Wetland Council's Strategic Framework for Wetland and Riparian Area Conservation and Protection: Mapping, Assessment, and Monitoring, and Strategic Direction #6: Vulnerable Wetlands.

New Mexico

FY 2011 Wetlands: Beaver Habitat and Comanche Watershed Projects

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102354

New Mexico Environment Department Maryann McGraw Maryann.McGraw@state.nm.us 505-827-0160

Assessing Beaver Habitat on Federal Lands in New Mexico: Under this project, the NMED will use landscape level tools for modeling and identifying potential beaver habitat on Federal lands in New Mexico. Wetland and riparian areas in the Jemez Mountains will be remotely mapped and classified using GIS techiques to provide a baseline for future monitoring nd restoration activities. Also, technical material and information will be created and disseminated and outreach avenues to various groups will be developed to increase involvement in wetlands. Innovative Design and Restoration of Slope Wetlands in the Comanche Watershed, New Mexico: NMED will survey, restore, and protect more than 60 acres of degraded slope wetlands in the Comanche Watershed in the Carson National Forest in the State. Contractors will survey five areas in Northern New Mexico slope wetland areas to collect relevant data to characterize slope wetlands hydrology, topography, soils, vegetation, and geomorphology. Stressors will be identified, restoration and design techniques will be designed and tested to help restore and improve remaining slope wetlands

FY 2011 Wetlands: From Plan to Action Phase 3

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102353

New Mexico Environment Department Maryann McGraw Maryann.McGraw@state,nm,us 505-827-0581

NMED will survey, restore, and protect more than 60 acres of degraded slope wetlands in the Comanche Watershed in the Carson National Forest in the State. Contractors will survey five areas in Northern New Mexico slope wetland areas to collect relevant data to characterize slope wetlands hydrology, topography, soils, vegetation, and geomorphology. Stressors will be identified, restoration and design techniques will be designed and tested to help restore and improve remaining slope wetlands

North Dakota

NDDH WPDG: Spatial Variation

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102386

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Oklahoma

Oklahoma's FY 12 Wetland Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102590

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@environmnet.ok.gov 405-530-8996

Project 1 includes the development of Wetland Water Quality Standards for Oklahoma.

Oklahoma's FY 12 Wetland Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102591

Oklahoma Secretary of the Environment Gayle Bartholomew gnbartholomew@ok.gov 405-530-8996

Project 2 will consist of the third phase of a project to develop an oxbow system assessment and protocol.

Oklahoma's FY 12 Wetland Program

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102356

Office of the Secretary of Environment, Oklahoma Gayle Bartholomew gnbartholomew@environment.ok.gov 405-530-8996

This grant will cover two wetlands projects. Project 1 includes the development of Wetland Water Quality Standards for Oklahoma. Project 2 will consist of the third phase of a project to develop an oxbow system assessment and protocol.

Oregon

Protecting Wetlands by Assisting Small Communities

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102294

University of Oregon Robert Parker rgp@uoregon.edu 541-346-3801

Collaboration with the Oregon Department of Environmental Quality (ODEQ) to work through the University in developing a cost effective approach (i.e. using planning graduate students) to provide necessary technical and planning assistance to underserved communities in OR, while providing planning program graduate students with hands-on opportunities to work with local jurisdictions on the integration of natural resource issues into land use policies and ordinances.

Tribal Wetland Working Group - Emerging Patterns and Networks

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102293

Confederated Tribes of the Umatilla indian Reservation Scott O'Daniel scottodaniel@ctuir.org 541-429-7452

Through this proposal, CTUIR aims to: 1) provide continuation of workshops and meetings for Region 10 tribes throughout the PNW, 2) scope, research and produce Tribal Wetlands Strategic plans for Region 10 Tribes, and 3) provide training opportunities for wetlands inventory and assessment to tribal staff in the Region., and 4) establish a governance structure, responsive to the needs of the Inter-Tribal Wetland Working Group. The project also will build on emerging themes (restoration/assessment) through workshops and training opportunities that consider the patterns of Tribal use of wetland and other aquatic resources throughout Region 10.

Watershed Based Stream Mitigation/Oregon

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102291

Clean Water Services
Bobby Cochran, Project Manager
cochran@willamettepartnership.org
503-681-4435

Working with key federal and state agency partners, this project aims to further development of a stream mitigation framework in Oregon. End result will be a tested, supported watershed based approach which treats all waters in the state consistently in determining compensatory mitigation. This project addresses regulatory and restoration and protection core elements.

South Carolina

<u>Defining Significant Nexus with Navigable Waters for Small, Relatively Isolated Wetlands in the Piedmont Ecoregion</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102417

Clemson University Dr. Robert Baldwin baldwi6@clemson.edu 864-656-4857

A protocol for determining to what degree small, relatively geographically isolated wetlands in the Piedmont ecoregion have a significant nexus based on hydrological and biological connectivity with

headwater and perennial streams, ponds and other traditional navigable waterways. This protocol will provide a science based method for guiding regulatory decisions as non-navigable wetlands may fall under the jurisdiction of the Clean Water Act if there is a significant nexus with traditional navigable waters.

Tennessee

Permit Compliance and Characterization of Wetland Mitigation Efforts in Tennessee

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102419

Tennessee Technological University Kenneth Morgan kmorgantntecg.edu 931-372-6240

Project will assess the effectiveness of wetland mitigation within the context of federal and state regulatory programs in Tennessee.

Utah

<u>UT Geo Survey FY11 WPDG-Developing Tools to Assess and Improve Condition of Great Salt</u> Lake and West Desert Wetlands

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102388

UTGS - Utah Department of Natural Resources Mike Lowe, Groundwater and Paleontology Program Manager mikelowe@utah.gov 801-537-3389

This award provide funding to build capacity to protect, manage, and restore wetlands, through assessment and development of a comprehensive program. Current efforts are focused toward developing a portfolio of scientifically validated tools to describe the abundance, health, and function of wetlands. These tools will then be incorporated into wetland monitoring protocols and assessment strategies, with the ultimate goal of assessing the ambient condition of approximately 10% of the state's wetlands per year. This proposal contains four projects that, based on Utah's WPP, will build collaborative partnerships and integrate knowledge, tools, and effort for more effective wetlands management. The first project builds on continuing work to adapt the most effective elements from two wetland condition assessment methods (USA-RAM and UWAAM) into a new rapid assessment method for spring-fed wetlands in Utah's West Desert (Snake Valley, UT). This project will expand the wetland sample frame in a poorly mapped area of Utah, and collect important wetland data from sites under greater stress from agricultural water use. The second project builds on high-resolution digital elevation data acquired from a previous WPDG, by developing procedures to analyze geomorphic features and hydrologic flow paths of wetlands in order to improve mapping efforts and to more accurately identify wetland classes across a range of GSL water levels. The third project represents a Pilot Project that will evaluate the impact of water level management on wetland condition around GSL by (1) determining how and why water management is conducted in GSL wetlands and (2) surveying emergent wetlands to assess wetland condition across a range of wetland water management practices. The final project involves organizing and hosting a Region 8 Wetland Program Capacity Building Workshop, in northern Utah, in spring 2013.

<u>Utah DEQ FY11 WPDG-Building Utah's Great Salt Lake (GSL) Wetlands Monitoring, Assessment, Water Quality Standards, and Regulatory Programs</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102389

Utah Department of Environmental Quality, Division of Water Quality (UDWQ) DUNS #:826001059 Jodi Gardberg, GSL Coordinator, UDWQ

jgardberg@utah.gov 801-536-4370

This award provide funding to build capacity to protect, manage, and restore wetlands, through assessment and development of a comprehensive program. Current efforts are focused toward developing a portfolio of scientifically validated tools to describe the abundance, health, and function of wetlands. These tools will then be incorporated into wetland monitoring protocols and assessment strategies, with the ultimate goal of assessing the ambient condition of approximately 10% of the state's wetlands per year. The objectives of this proposal include: 1) incorporation of long-term wetland monitoring strategy into Utah's Strategic Monitoring Plan, 2) a thorough evaluation of the effects of flooding on water quality indicators used in the MMI, 3) rules, guidance documentation, fee schedule and application procedures for a refined 401 certification program, 4) a compilation of GIS-layers and remote sensing images that quantify land-use surrounding GSL, 5) objective and repeatable reference site selection methods, and 6) maps, derived from remote sensing images, depicting inter-annual changes in emergent vegetation, with an emphasis on the spread of Phragmites australis and control efforts being conducted across the GSL. These objectives, coupled with the WPP work conducted by UGS, will enhance our understanding of wetland condition, provide key data necessary to refine standards, and help inform decision making and wetland protection efforts under the §401 certification and assessment (CWA §§303(d), 305(b)) programs.

Washington

Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102298

Confederated Tribes and Bands of Yakima Nation Ms. Elizabeth Sanchey esanchey@yakama.com 509-865-5121

The grant will focus on the development of a Tribal Wetland Program Plan to enhance the protection and restoration of wetlands, with a specific emphasis on establishing an independent wetland program to train staff in wetland monitoring and restoration. The Yakama Reservation is 1.4 million acres in size, warranting a concise plan to alleviate the present strategy of scattered management and restoration approaches. The Nation has a number of programs, including Yakama Wildlife Department, Natural Resources, Fisheries, Cultural Resources, and Tribal Forestry, among others. Funding will support implementation of the larger proposal's Objectives 1 and 2, including holding intra-departmental meetings to establish and prioritize the ecological and traditional use goals for each program. The Wetland Program Plan would begin with a broad range set of goals for different wetland classes and landuse settings.

Performance Partnership Grant

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102297

Colville Confederated Tribes
Gary Passmore, Director, Office of Environmental Trust
gary.passmore@colvilletribes.com
509-634-2425

The project objectives are to complete a Wetland Program Plan for the Colville Reservation meeting EPA's guidance and to develop and implement a wetland monitoring and assessment strategy, building upon work funded by EPA under a 2007 WPDG. The original project proposal included completing final outputs that would include a) completing a Wetland Program Plan, b) establishing a monitoring and assessment strategy, and developing a quality assurance project plan for the monitoring and assessment strategy, providing a final report and database with completed initial assessment of ambient conditions of

major wetlands on the Colville Indian Reservation. However, with the proposed reduced funding level, EPA is proposing to support completing the Wetland Program Plan only.

Regional Wetlands Program Development Grant - Assessing Buffer Establishment in Washington http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102299

Washington Department of Ecology Andy McMillan amc461@ecy.wa.gov 360-791-2254

Wetland buffers are a primary wetland protection tool used by state and local agencies in Washington State. This pproject would evaluate how wetland buffer establishment and maintenance are being implemented as required under state and/or localregulations. Sites will be selected from state and local jurisdictio records (Thurston County is identified as a partner).

<u>Tulalip Tribe Performance Partnership Grant - Tulalip Restoration Wetland Program Plan</u> <u>Development and Wetland Geodatabase Refinement</u>

http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102420

Tulalip tribe Julia Gold jgold@tulaliptribes-nsn.gov

The Tulalip Natural and Cultural Resources Department will develop a six-year Wetland Program Plan (WPP) to be implemented between 2012 and 2018. In addition, the Tulalips newly developed geodatabase (GDB) will be refined to aid in wetland planning, protection and site identification for voluntary restoration. This project builds on work done by the Tulalip Tribe and funded by EPA Wetland Program Development Grants in the past; including a 1996 Wetland Management Plan that provides a baseline inventory and assessment of Tribal wetlands and the 2005 Tulalip Wetlands Bioassessment Monitoring Report.

Wyoming

WY Game and Fish FY11 WPDG: Green River Basin Wetland Profile and Condition Assessment http://iaspub.epa.gov/pls/grts/f?p=101:150:::NO::P150_GRT_SEQ:102392

The Wyoming Game and Fish Department, DUNS Number: 809915788 Susan Patla, Nongame Biologist susan.patla@wgf.state.wy.us 307-733-2383

This award provide funding to build capacity to protect, manage, and restore wetlands, through assessment and development of a comprehensive program. Current efforts are focused toward developing a portfolio of scientifically validated tools to describe the abundance, health, and function of wetlands. These tools will then be incorporated into wetland monitoring protocols and assessment strategies, with the ultimate goal of assessing the ambient condition of approximately 10% of the state's wetlands per year. This project builds upon the Level 1 Assessment by proposing a Level 2 Assessment for the Green River Basin, a priority wetland complex that contains some of the most important wetland habitat in the state. Our intent is to use this first basin-wide assessment as a model for future assessments of all priority complexes in Wyoming. Through this project, Wyoming Game and Fish Department and its partners will:

(1) identify baseline reference condition wetlands in the Green River Basin to support future development of a state Wetland Program Plan (WPP); (2) conduct a statistically valid, field-based survey of wetland conditions in the basin; and (3) assess the habitat value and requirements of wetlands for target wildlife species. Deliverables produced through this project will inform decisions made by WGFD, the Wyoming Department of Environmental Quality (DEQ) and other partners including conservation organizations, such as The Nature Conservancy and Ducks Unlimited, for wetland restoration, enhancement and protection.