

# Montana DEQ Wetland Program

## *2011-2018 Wetland Program Plan*

*"The DEQ Wetland Program provides state leadership to conserve and protect wetlands for their water quality, water quantity, habitat, and other environmental benefits."*



**MONTANA DEQ's WETLAND PROGRAM**  
*Working to conserve and protect Montana's wetland and riparian areas.*



### **Prepared By**

Montana DEQ Water Protection Bureau—Wetland Program

### **Wetland Program Plan History**

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Revised and resubmitted to US EPA Region VIII on December 28, 2015; Approved by US EPA Region VIII and submitted to US EPA Headquarters on January 4, 2016.

### **Photos**

Photos and other graphics were provided by Wetland Program staff and partners.

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# *Table of Contents*

<b>2011 - 2015 Wetland Program Highlights.....</b>	<b>4</b>
<b>Introduction.....</b>	<b>5</b>
<b>Public Communications and Education Actions.....</b>	<b>6</b>
<b>Monitoring and Assessment Actions.....</b>	<b>7</b>
<b>Wetland Water Quality and Regulatory Actions.....</b>	<b>9</b>
<b>Voluntary Restoration and Protection Actions.....</b>	<b>10</b>
<b>Planning and Policy Actions.....</b>	<b>11</b>
<b>Vulnerable and Impacted Wetland Actions.....</b>	<b>12</b>
<b>Sustainable Financing and Effectiveness Actions.....</b>	<b>13</b>
<b>Action Timetables.....</b>	<b>14</b>

# ***2011—2015 Wetland Program Highlights***

## **Sustainable Financing and Effectiveness Actions**

- ◆ To support wetland program staff time, actions, and internal and external projects the Wetland Program staff has applied for and received **\$1.5 million** in competitive Wetland Program Development Grants since 2011.
- ◆ Since 2008, the Wetland Council has grown as an effective network with a distribution list of over 900 individuals and Council meetings that consistently attract about 60 participants. The Council network is seen as forum for learning and is working to increase the overall awareness of the importance of healthy wetland and riparian areas and our collective responsibility to protect these resources.

## **Public Education and Professional Training**

- ◆ Instituted a yearly series of wetland and stream professional development courses at Montana State University. As of 2015 five courses have been taught and 164 individuals trained in regulatory requirements, restoration planning and implementation, and monitoring and assessment.
- ◆ Since 2013, collaborated with Montana Natural Heritage Program to sponsor 18 Wetland Plant Identification courses attended by 350 people.

## **Monitoring and Assessment**

- ◆ In 2015, integrated wetland monitoring and assessment into the Watershed Risk Assessment Strategy pilot project being undertaken in conjunction with other Montana Water Quality Act programs at DEQ.

## **Voluntary Restoration and Protection**

- ◆ Developed pilot project for identifying wetland restoration opportunities to address water quality impairments and integrating wetland considerations into Watershed Restoration Plans, resulting in a 2014 restoration project of 16 acres of wetlands and half-mile of stream corridor at Story Mill Community Park in Bozeman.
- ◆ In 2012 DEQ's Wetland Program, through a Wetland Program Development Grant, helped develop the Montana Aquatic Resources Services as a 501(c)3 non-profit entity to represent a third option for compensatory Wetland and Stream mitigation.
- ◆ As Co-Chair of the Montana Wetlands Legacy partnership lead the prioritization of wetland areas based on their ecological importance to guide where the Wetland Program and partners will focus its restoration and conservation efforts, 2015.

## **Planning and Policy**

- ◆ In 2012, conducted pilot project in Big Hole watershed to create a protocol for rapid development of approximate flood hazard maps, coupled with the updated model floodplain management regulations to provide a template for local governments.

## **Vulnerable and Impacted Wetlands**

- ◆ Developed a habitat suitability model to identify locations where beaver could be relocated to restore headwater wetlands and increase stream resiliency in the face of climate uncertainty, a 2009 Wildlife Conservation Society/Doris Duke Foundation funded project.

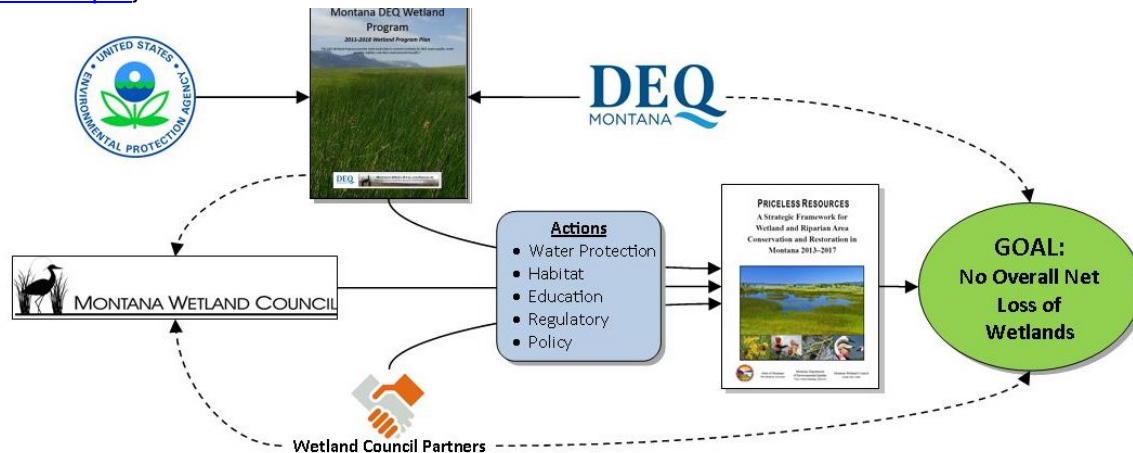
# Introduction

The Wetland Program is part of the Montana Department of Environmental Quality's Water Protection Bureau in the Planning, Prevention, and Assistance Division.

- ◆ The Montana Department of Environmental Quality (DEQ) is the lead state agency responsible for developing an effective, comprehensive wetland program for Montana, as well as developing the capacity of state and local governments to protect wetland resources.
- ◆ The DEQ Wetland Program provides state leadership to conserve, protect, and restore wetlands for their water quality, water quantity, habitat, and other environmental benefits.

DEQ's Wetland Program accomplishes these responsibilities through program actions, leading the Montana Wetland Council, and collaborating with our partners to develop and implement the approved State Wetland Plan (SWP), "Priceless Resources: A Strategic Framework for Wetland and Riparian Conservation and Restoration in Montana 2013-2017". The SWP was developed with input from over three hundred Montana scientists, resource managers, landowners, educators, private business owners, and citizens. Both Governors Schweitzer and Bullock and their cabinets of natural resource agency directors approved and endorsed the SWP. The current five-year plan includes seven strategic directions and individual objectives to achieve the goal of **"No overall net loss of the State's remaining wetland resource base (as of 1989) and an overall increase in the quality and quantity of wetlands in Montana"**. A copy of the SWP can be found at: <http://deq.mt.gov/wqinfo/Wetlands/PDFs/StateicFramework2013-2017.pdf>

DEQ Wetland Program's actions are guided by Department priorities and a U.S. Environmental Protection Agency (EPA) approved Wetland Program Plan (WPP) that aligns EPA's Core Elements Framework for effective wetland programs with the objectives identified in our SWP. Our WPP references the strategic directions and objectives in the SWP and identifies, in part, the unique actions that DEQ's Wetland Program takes responsibility for to collectively achieve the State's no overall net loss goal. The Wetland Program's plan has recently been updated and approved for 2017 and 2018 priority actions. The most recent update of the WPP, 2015, was undertaken to sync the timing of future updates to the SWP. The figure below illustrates how DEQ's Wetland Program works towards achieving the State no overall net loss goal through the actions in our Wetland Program Plan. A copy of the EPA approved WPP can be found at: <http://www.epa.gov/sites/production/files/2015-10/documents/mt-wpp-amendments.pdf>



*How the DEQ Wetland Program and its partners work towards the achieving 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".*

# Public Communication and Education Actions

*Goal: Foster the awareness and understanding of valuable ecological, economic, and public safety functions that wetlands and riparian areas perform, and encourage and support effective public and private protective actions.*

1. Plan, hold, and lead three state-wide Montana Wetland Council meetings per year.
2. Produce and distribute a quarterly electronic wetland newsletter of pertinent wetland agenda items for the Montana Wetland Council.
3. Update and maintain the Wetland Program's website, "Montana Wetland Information Clearinghouse". <http://Wetlands.mt.gov>
4. Create and provide two training workshops per year for federal, tribal, state, and local government agency staff and other resource professionals.
5. Provide technical assistance to ensure that wetland and riparian information and data including maps, reference conditions, restoration, protection and management techniques and options, monitoring and assessment data, and other resources are readily available to federal, tribal, state and local resource professionals.
6. Encourage attendance and provide scholarships for resource professionals to attend state, regional, and national wetland and riparian area workshops, conferences, and trainings.
7. Develop a science-based information campaign to deliver the message that Montana wetlands and riparian areas are important and valuable for their water quality, water quantity, habitat, and flood control benefits, but are a threatened and diminishing resource in need of protection and restoration.
8. Develop and provide floodplain design courses for engineers and ecologists that support riparian and floodplain ecological concepts and management strategies.
9. Mentor and support graduate students to develop and initiate long-term ecological monitoring of voluntary wetland restoration sites, with a focus on wetland hydrology, soils, and vegetation.



*Wetland Program staff conducting a 2011 training on the use of Wetland Ecological Integrity Assessments.*

## Monitoring and Assessment Actions

*Goal: Continue to encourage the collection, integration, and use of monitoring and assessment data to inform local planning, protection, restoration, and landscape-level decision-making.*



*Wetland Program field staff assessing wetlands in an ephemeral channel as part of the Musselshell Watershed Risk Assessment Pilot Project, 2015.*

1. Identify DEQ program decisions and long-term environmental outcomes that will benefit from a wetlands monitoring and assessment program. Define DEQ's needs and goals for meeting Clean Water Act (CWA) and Montana Water Quality Act (MWQA) objectives for wetlands. Specifically, identify programs that will ultimately use monitoring data for decision making and how wetland data can be used for comprehensive water quality planning.
2. Define DEQ wetland monitoring and assessment objectives and strategies.
3. Evaluate how to integrate wetland monitoring and assessment into existing DEQ water quality monitoring and assessment methods.
4. Evaluate how the methods, core indicators, and application of the National Wetland Condition Assessment can be integrated into existing DEQ water quality monitoring and assessment methods or programs.
5. Evaluate developed core set of indicators used to represent wetland integrity or a suite of functions from the Montana Natural Heritage Program Montana Ecological Integrity Assessment method, and the Montana Department of Transportation Montana Wetland Assessment Method. Ensure the indicators are relevant for DEQ's monitoring and assessment objectives and are scientifically defensible.
6. Review scientific validity of field monitoring and laboratory activities and methods. Select field assessment indicators and lab methods.
7. Accept or modify the existing MTNHP monitoring design to meet DEQ monitoring and assessment objectives, or develop a new monitoring design to meet DEQ objectives as needed.
8. Review MTNHP reference condition and reference sites data to determine if this is appropriate for DEQ monitoring and assessment objectives. Enhance and/or refine as needed. Incorporate into the reference sites adopted by DEQ.

*Continued...*

## Monitoring and Assessment Actions

*Continued...*

9. Design data management system that supports the Wetland Program's monitoring objectives and follows DEQ's data quality assurance procedures and is compatible or integrated with DEQ water quality data.
10. Analyze monitoring data to inform DEQ decision making and address monitoring objectives. Such as make use of wetland monitoring and assessment on private and public lands for local watershed planning purposes. Report wetland information in the Water Quality Integrated Report.
11. Develop a long-term ecological monitoring program at the Story Mill wetland restoration site to understand the effects of restoration activities on water quality and other aquatic resources.
12. Participate in Montana Department of Agriculture's wetland monitoring program to determine pesticide effects on vulnerable wetlands and develop protection and management strategies.
13. Participate in the development of the watershed risk assessment strategy at DEQ that integrates DEQ water programs, including wetlands, to provide comprehensive aquatic resource restoration and protection.



*Wetland Program field staff assessing a wet meadow habitat as part of the Restorable Aquatics Database project, 2015.*



# Wetland Water Quality and Regulatory Actions

*Goal: Plan, develop, and implement State and Department policies and regulations to protect the functions and values wetlands and riparian areas provide.*

1. Consider “wetlands” in the definition of “state waters” to ensure that they are legally included in the scope of the state’s water quality standards (WQS) and other Clean Water Act (CWA) and Montana Water Quality Act (MWQA) programs and activities.
2. Enhance DEQ’s existing 401 Certification Program based on WQS and through the use of conditions, provisions, or prohibitions.
3. Gather and evaluate information and guidance on wetland water quality standards.
4. Evaluate the feasibility to clarify that the definition of “wetlands” used in Montana’s mixing zone rules to apply to all state delegated CWA and MWQA programs and activities including WQS.
5. Provide technical expertise in the form of conducting wetland delineations to support enforcement of Montana water quality act violations and further integrate the protection of wetlands into Montana Water Quality Act programs at DEQ.
6. Review WQS beneficial uses, narrative criteria, and nondegradation policy to determine if they are meeting DEQ Wetland Program’s objectives.
7. Evaluate the feasibility to establish wetland-specific designated uses and use the protection provided for existing uses within Montana nondegradation policy to protect and maintain wetland functions.
8. Evaluate the feasibility to establish narrative criteria to regulate physical and hydrologic modifications that impact wetland functions, aquatic life, and wildlife.
9. Evaluate the feasibility to better define DEQ nondegradation policies for wetlands, requiring full protection of existing uses (functions).
10. Tie 401 Certification and other permit mitigation ratios and credits to watershed restoration planning.
11. Provide guidance to the public on how to identify jurisdictional waters and wetlands, regulatory program requirements, regulated activities, and wetland protection.
12. Develop guidelines to use WQS as basis for making and tracking regulatory decisions.
13. Develop guidelines to use WQS as basis for evaluating restoration/protection and mitigation/compensation projects.
14. Incorporate WQS into the Wetland Monitoring and Assessment Program.
15. Develop an ecosystem service assessment module for use in wetland mitigation to accomplish the ‘no-net-loss of ecosystem function and value’ dictum from Executive Memorandum M-16-01. (<https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-01.pdf>)



*Differing land-use management strategies affect the physical integrity of a wetland and the functions provided to downstream waters.*

# Voluntary Restoration and Protection Actions

*Goal: Montana's land and resource managers have ample human and financial resources to cooperatively restore, conserve, protect, and increase its wetlands, riparian areas, and associated uplands.*

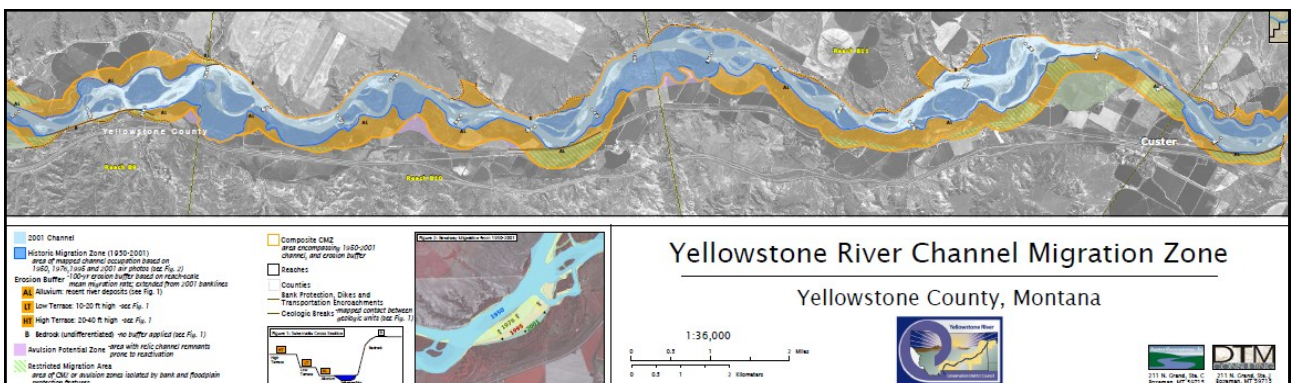
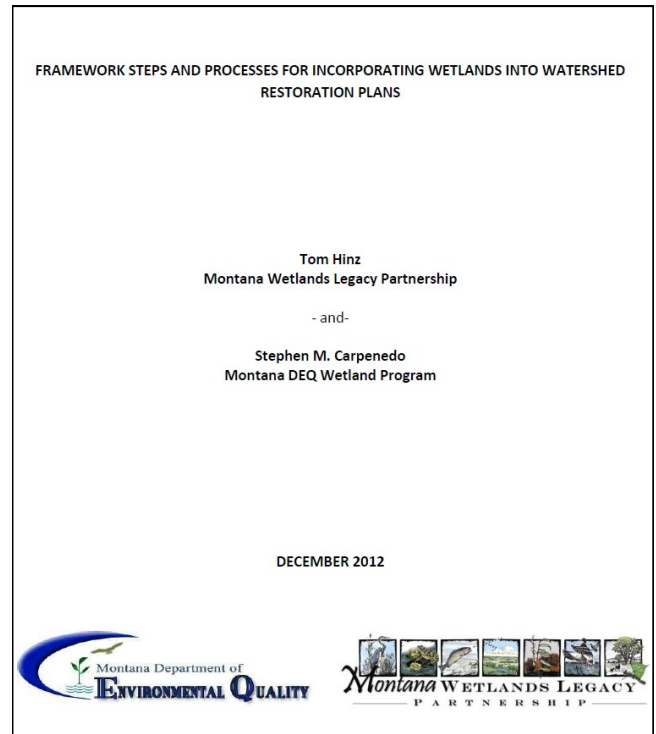
1. Create a wetland, stream, and other aquatic natural resource mitigation crediting program to increase the amount of restoration and deter avoidable aquatic impacts.
2. Integrate wetland restoration into nonpoint source watershed restoration plans for two pilot watersheds and evaluate and refine procedures to adopt within the DEQ nonpoint source program.
3. Develop a voluntary restoration component within the current state wetland program at DEQ that researches, develops, promotes, and demonstrates the principles and values of ecological wetland restoration.
4. Promote and demonstrate low cost and ecologically based voluntary protection methods to further protect and conserve Montana's wetland and riparian areas.
5. Develop, promote, and demonstrate techniques and technical assistance resources for living with beaver and effectively using beaver as tool for restoring wetland and riparian areas.
6. Develop a network of natural high quality reference wetlands for all wetland types based on their region and landscape position. Develop restoration trajectories based on monitoring data from past and current successful wetland restoration projects.
7. Identify rare, vulnerable, or important wetlands and prioritize for restoration and/or protection.
8. Verify restoration techniques using ecological and/or functional monitoring and assessment tools. Provide clear, peer-reviewed guidance on appropriate restoration and management techniques, field indicators, performance standards, and success measures. Train restoration partners on guidance techniques.
9. Develop an active wetland and riparian restoration program on the more than 5 million acres of state-owned and state-managed lands and prioritize for water quality limited stream reaches and watersheds needing restoration.
10. Develop and provide wetland restoration, management, and protection guidance to the DEQ open cut mining program, major facility siting act projects, storm water runoff program, and other Clean Water Act and Montana Water Quality Act programs.
11. Build collaborative partnerships to protect and restore wetlands that meet the varied goals and objectives of Montana Wetland Council partners.
12. Identify BMPs for agriculture, development, forestry, and other activities to protect and passively restore wetlands.



# Planning and Policy Actions

*Goal: Local, state, tribal, and federal governments are knowledgeable, well equipped, and supported to conserve and protect wetland and riparian resources, function, and values as they plan, develop, and implement programs and policies.*

1. Integrate wetland and riparian area conservation, management, and restoration into local, state, and federal watershed planning and assessment programs and processes.
2. Support the Association of State Floodplain Managers assessment recommendations (7/2011) to map Montana’s floodplains and riverine hazards (inundation, ice jam, lateral erosion), institute no adverse impact floodplain management, and identify and promote high standards to protect natural and beneficial floodplain functions.
3. Develop a channel erosion hazard and historic stream channel mapping and pursue funding to generate this data and for channel migration zone (CMZ) studies for local government land-use decision-making and wetland and riparian protection approaches.
4. Research, develop, and distribute technical assistance resources to assist local government decision-making to conserve and protect wetland and riparian resources and vegetative buffers.

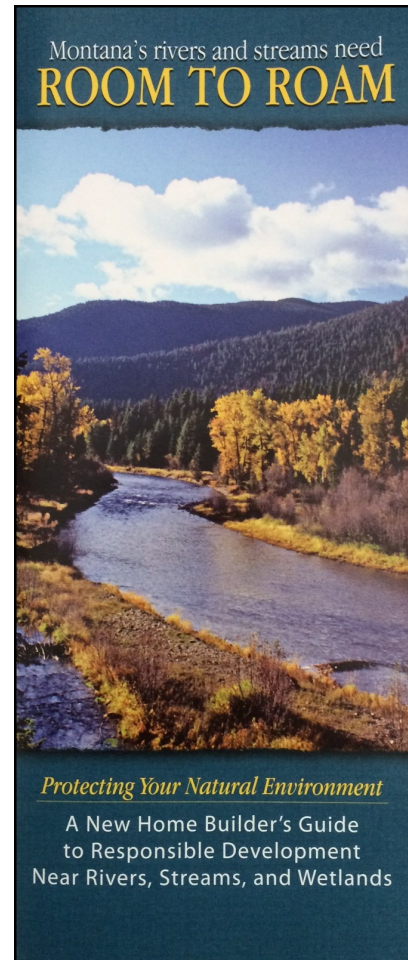


Channel Migration Zone mapping for the Yellowstone River, 2012.

# Vulnerable and Impacted Wetlands Actions

*Goal: Threats that affect wetland and riparian resources, such as energy development, climate change, and other land-uses, are understood. The broader scope of Montana's water resources, including vulnerable wetlands and other aquatic resources, are conserved and protected across all of Montana.*

1. Work with the Governor's Task Force on Riparian Protection and others to develop resources and provide targeted outreach about the importance of vegetative buffers, wetlands, riparian areas, floodplains, and headwater streams for water quality, water quantity and flood control benefits. Advance public policy to protect these vulnerable resources.
2. Engage state and local governments in protecting vulnerable aquatic resources, including floodplains and groundwater dependent ecosystems. Provide training and on-site technical assistance.
3. Coordinate and organize interested Wetland Council participants and others to develop Montana solutions to fill the federal gaps in protection for wetlands and other vulnerable aquatic resources.




# Sustainable Financing and Effectiveness Actions


*Goal: The Wetland Program, as chair of the Montana Wetland Council will continue to build and strengthen its communication, leadership, networking, and funding mechanisms to ensure its vitality, effectiveness, and longevity.*

1. Identify and pursue additional opportunities for DEQ Wetland Program funding and institutionalize the Wetland Program as a component of DEQ water resource responsibilities involving the Clean Water Act and Montana Water Quality Act.
2. Identify programs with impacts to wetlands and riparian areas or programs with opportunities to support wetland and riparian area protection and restoration, such as storm water, 401 Certification, TMDL's, nonpoint source, diversion dams, enforcement, water rights, gravel pit and mine restoration, impacts to buffers, and engage to identify resource protection and restoration solutions.
3. Lead the Wetland Council to assess the 2013-2017 Strategic Framework and update for 2018-2022.
4. Assess DEQ's Wetland Program Plan and update for 2018-2022 to coincide with the Strategic Framework.
5. Provide competitive small project assistance contracts to advance the goals and objectives of the Strategic Framework and leverage partners to assist DEQ in meeting water quality goals.

## PRICELESS RESOURCES

### A Strategic Framework for Wetland and Riparian Area Conservation and Restoration in Montana 2013–2017






State of Montana  
Steve Bullock, Governor

Montana Department  
of Environmental Quality  
Tracy Stone-Manning, Director

Montana Wetland Council  
Lynda Saul, Chair

OFFICE OF THE GOVERNOR  
STATE OF MONTANA

STEVE BULLOCK  
GOVERNOR



JOHN WALSH  
LT. GOVERNOR

May 2013

Fellow Montanans:

We all love to see the joy in young faces at the wonder of catching their first fish or discovering a hidden frog lurking in a shallow pond. Clean water, natural areas and abundant wildlife make Montana an incredible place to raise a family and enjoy the outdoors.

Clean water is also a very necessary part of our economy. Most of us know that wetlands and riparian areas provide clean water and critical habitat for the abundant fish and wildlife we enjoy, many people, however, are surprised to learn that these natural areas serve other important functions. For instance, they act as nature's sponges, soaking up high spring flows and snowmelt, and filtering out pollution that would otherwise reach our rivers and drinking water. By holding water on the land longer, these areas slow runoff, minimize erosion, reduce flood levels and recharge groundwater supplies.


Unfortunately, since the late 1800s, our state has lost more than one-third of its original wetlands to fill or draining. Countless miles of rivers and their streamside areas have been straightened, modified and deforested. If left unchecked, continued wetland and riparian loss will result in ecological and economic ramifications. On behalf of the citizens of Montana, we have a responsibility to protect and restore these natural assets to help ensure a clean and healthful environment for future generations.

The Montana Wetland Council, with input from more than 300 Montanans, has developed this statewide plan titled "Priceless Resources: A Strategic Framework for Wetland and Riparian Area Conservation and Restoration 2013 – 2017." It presents a focused approach to protecting and caring for our state's wonderful wetland resources. The result is a blueprint that builds upon the accomplishments of private landowners, conservation organizations, local, state, tribal and federal agencies, and others committed to protecting and restoring Montana's natural areas.


Major strategic directions of the 2013–2017 state plan include restoration, protection and management; mapping, monitoring and assessment; using land use planning and policy tools; focusing on vulnerable and impacted wetlands; and providing public communications and education.

As people who love all the opportunities afforded by Montana's great outdoors, we appreciate the private landowners who have completed voluntarily restoration and practice good stewardship on their lands. That these areas also provide clean water, reduce flood risk, and filter polluted runoff are services we should all value and preserve. This work will take concerted effort by all of us; we encourage you to join us in supporting this collaborative Strategic Framework to conserve, protect and restore Montana's wetlands, riparian areas and watersheds for now and for future generations.


Sincerely,



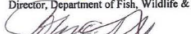
STEVE BULLOCK  
Governor



JEFF HAGENER  
Director, Department of Fish, Wildlife & Parks



TRACY STONE-MANNING  
Director, Department of Environmental Quality



JOHN TUBBS  
Director, Department of Natural Resources and Conservation

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## **Action Timetables**

Wetland Program Development (WPD) Grants are competitive grants through the U.S. Environmental Protection Agency. Montana Department of Environmental Quality's Wetland Program biannually applies for WPD Grants to fund staff time, activities, and projects to advance the Wetland Program's and State's wetland and riparian goals and objectives. The Wetland Program plans activities on a calendar year basis to align with the State's Strategic Framework.

**C** = Completed Action**A** = Active Action**P** = Priority Action

### **Public Communication and Education Actions**

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Plan, hold, summarize, and lead the three state-wide Montana Wetland Council meetings per year.	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>P</b>	<b>P</b>
2. Produce quarterly electronic wetland newsletters for the Montana Wetland Council listserv.	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>P</b>	<b>P</b>
3. Maintain the Montana Wetland Information Clearinghouse website and Wetland Council listserv.	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>P</b>	<b>P</b>
4. Develop and provide two training workshops per year to resource professionals.	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>P</b>	<b>P</b>
5. Provide technical assistance on wetland and riparian areas to federal, tribal, state and local resource professionals	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>P</b>	<b>P</b>
6. Encourage attendance and provide scholarships for resource professionals to attend wetland related workshops, conferences and training.		<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>		
7. Develop a science-based information campaign about the importance of Montana wetlands and riparian areas.						<b>P</b>	<b>P</b>	<b>P</b>
8. Develop and provide floodplain design courses for engineers and ecologist that support riparian and floodplain ecological concepts and management strategies.					<b>A</b>	<b>A</b>		
9. Mentor and support graduate students to develop and initiate long-term ecological monitoring of voluntary wetland restoration sites, with a focus on wetland hydrology, soils, and vegetation.					<b>A</b>	<b>A</b>	<b>P</b>	<b>P</b>
10. Revise the Montana Wetland Clearinghouse to incorporate new regulatory and project information in a user friendly interface.							<b>P</b>	

### Monitoring and Assessment Actions

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Identify program recommendations and long term outcomes for a wetland M/A program.	<i>C</i>	<i>C</i>		<i>C</i>	<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>
2. Define DEQ wetlands monitoring and assessment objectives and strategies.				<i>C</i>	<i>A</i>	<i>A</i>		
3. Evaluate how to integrate wetland monitoring and assessment into existing DEQ water quality monitoring and assessment methods.		<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>	<i>A</i>	<i>P</i>	
4. Evaluate how the application of the National Wetland Condition Assessment can be integrated into existing DEQ water quality monitoring and assessment methods.					<i>A</i>	<i>A</i>	<i>P</i>	
5. Developed core indicators that are relevant to DEQ's monitoring and assessment objectives.				<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
6. Review scientific validity of field monitoring and laboratory activities and methods.					<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>
7. Modify current MTNHP monitoring design to meet DEQ monitoring and assessment objectives.				<i>C</i>	<i>C</i>			
8. Review MTNHP reference condition and reference standards sites and data.						<i>P</i>	<i>P</i>	
9. Design data management system that supports DEQ monitoring objectives.						<i>A</i>	<i>P</i>	
10. Analyze monitoring data to inform DEQ decision making and address DEQ monitoring objectives.						<i>A</i>	<i>P</i>	<i>P</i>
11. Develop a long-term ecological monitoring program at the Story Mill wetland restoration site.				<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
12. Conducting wetland assessments to determine pesticide effects on vulnerable wetlands and develop protection strategies.				<i>C</i>	<i>C</i>			
13. Collaboratively develop a watershed risk assessment strategy at DEQ that integrates all DEQ water programs.					<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>

## Wetland Water Quality Standards and Regulatory Actions

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Consider “wetlands” in the definition of “state waters”.						<i>P</i>	<i>P</i>	
2. Enhance DEQ’s existing 401 certification program.	<i>C</i>			<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
3. Gather and evaluate information and guidance on wetland water quality standards.	<i>C</i>	<i>C</i>						
4. Evaluate the feasibility to clarify that the definition of “wetlands” used in Montana’s mixing zone rules applies to all state delegated CWA and MWQA programs.		<i>C</i>				<i>A</i>	<i>P</i>	
5. Provide technical expertise in the form of conducting wetland delineations to support enforcement of Montana water quality act programs and enforcement violations.	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
6. Review WQS beneficial uses, narrative criteria, and nondegradation to determine if they are meeting Wetland Programs’ objectives.	<i>C</i>	<i>C</i>					<i>P</i>	
7. Evaluate the feasibility to establish wetland-specific designated uses and the use the within Montana nondegradation policy.	<i>C</i>	<i>C</i>						
8. Evaluate the feasibility to establish narrative criteria to regulate physical and hydrologic modifications to wetlands.		<i>C</i>					<i>P</i>	<i>P</i>
9. Evaluate the feasibility to better define DEQ nondegradation policies for wetlands.		<i>C</i>					<i>P</i>	<i>P</i>
10. Tie 401 certification and other permit mitigation ratios and credits to watershed plans.				<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
11. Provide guidance to the public on how to identify jurisdictional waters and wetlands, and regulated activities.	<i>C</i>			<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
12. Develop guidelines to use WQS as basis for making and tracking regulatory decisions.					<i>C</i>	<i>A</i>	<i>P</i>	
13. Develop guidelines to use WQS as basis for evaluating wetland restoration and projects.							<i>P</i>	<i>P</i>
14. Incorporate WQS into Wetland Programs monitoring and assessment program.					<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>
15. Develop an ecosystem service assessment module for use in wetland mitigation.							<i>P</i>	<i>P</i>



### Voluntary Restoration and Protection

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Create an aquatic natural resource mitigation crediting program.	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>			
2. Integrate wetland restoration into nonpoint source watershed restoration plans.	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
3. Develop a voluntary restoration component within the Wetland Program at MDEQ.			<i>C</i>	<i>C</i>	<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>
4. Promote and demonstrate low cost and ecologically based voluntary protection methods for Montana's wetland and riparian areas.					<i>C</i>	<i>A</i>	<i>P</i>	
5. Develop resources for living with beaver and effectively and promote using beaver as tool for restoring wetland and riparian areas.	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
6. Develop a network reference wetlands and restoration trajectories for all wetland types.						<i>A</i>	<i>P</i>	<i>P</i>
7. Identify and prioritize for restoration/ protection rare, vulnerable, or important wetlands.					<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>
8. Verify restoration techniques using ecological and/or functional monitoring and assessment tools.					<i>A</i>	<i>A</i>	<i>P</i>	
9. Develop an active wetland and riparian restoration program on state-owned and state-managed lands.					<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>
10. Develop and provide wetland restoration, management and protection guidance to other CWA and WQA programs.					<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>
11. Build collaborative partnerships to protect and restore wetlands.							<i>P</i>	<i>P</i>
12. Identify and disseminate BMPs to protect and passively restore wetlands.						<i>A</i>	<i>P</i>	<i>P</i>

### Planning and Policy Actions

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Integrate wetland and riparian area conservation, management, and restoration into watershed planning programs and processes.	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
2. Support the DNRC floodplain program to map Montana's floodplains and riverine hazards, and promote protection of natural and beneficial floodplain functions.			<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>		
3. Develop channel erosion hazard and historic stream channel mapping.			<i>C</i>	<i>C</i>				
4. Research, develop, and distribute technical assistance resources to assist local government decision-making to conserve and protect wetland and riparian resources.		<i>C</i>		<i>C</i>	<i>A</i>	<i>A</i>	<i>P</i>	<i>P</i>

### Vulnerable and Impacted Wetlands Actions

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Work with the Governor's Task Force on Riparian Protection and others to provide targeted outreach and advance public policy.	<i>C</i>			<i>P</i>	<i>P</i>	<i>P</i>		
2. Engage state and local governments in protecting vulnerable aquatic resources.				<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
3. Coordinate and organize the Wetland Council and others to develop Montana solutions to fill the federal gaps in protection for vulnerable aquatic resources.				<i>C</i>	<i>C</i>	<i>P</i>	<i>P</i>	

### Sustainable Financing and Effectiveness Actions

WPD Grant Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018
1. Identify and pursue additional opportunities for DEQ Wetland Program funding and institutionalize the Wetland Program as a component of DEQ water resource responsibilities.		<i>C</i>	<i>C</i>	<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
2. Identify programs with impacts to wetlands and riparian areas and engage to identify resource protection and restoration solutions.				<i>C</i>	<i>C</i>	<i>A</i>	<i>P</i>	<i>P</i>
3. Lead the Wetland Council to assess the 2013-2017 Strategic Framework and update for 2018-2022. Assess DEQ's Wetland Program Plan and update for 2018-2022 to coincide with the Strategic Framework.							<i>P</i>	
4. Assess DEQ's Wetland Program Plan and update for 2018-2022 to coincide with the Strategic Framework.							<i>P</i>	
5. Provide competitive small contracts to advance the goals and objectives of the Strategic Framework.					<i>C</i>	<i>C</i>	<i>P</i>	<i>P</i>



**MT DEQ WETLAND PROGRAM**

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