

ASWM State Wetland Program

Integration Case Study: New Mexico

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Integrating Wetlands into Nonpoint Source Plans and 319 Projects



State Wetland Program Information

This case study explores the integration efforts undertaken by the New Mexico Environment Department (NEMD). The New Mexico Environment Department Surface Water Quality Bureau (SWQB) Wetlands Program developed its first wetland program plan in 2003. The NEMD has an active wetland program under the leadership of Maryann McGraw. The Wetland Program has undertaken several innovative approaches to wetland management over the last decade and is committed to conserving and protecting wetlands that play a critical role in the arid state.

Type of Integration Effort

This effort has worked to elevate the role of wetlands in nonpoint source pollution planning activities and, specifically, Total Maximum Daily Loads (TMDLs). Wetland Action Plans have been developed to serve as an alternative option to the use of watershed-based plans in determining 319 funding activities. While hydrologic alterations are not a pollutant, they do threaten wetlands and water quality. Wetland Action Plans focus on protective measures, rather than specific water-quality measures.

Scale of Integration Effort

This integration effort addresses all waters statewide, except tribal waters not under state jurisdiction.

Project Leadership

All partners in this project were internal to state government and within the New Mexico Environment Department Water Protection Division. The Division contains both a Surface Water Section and a Watershed Protection Section. The Wetlands Protection Section contains three teams: 1) the Wetlands Team, 2) the Implementation and Restoration Team (which includes the 319 program), and 3) New Mexico Field Offices (which manages 319 implementation). The collaboration integrates the three teams under the Wetlands Protection Section and is led by Abe Franklin, the Watershed Protection Section Chief and the Wetlands Team, which is led by Maryann McGraw. All three teams provide oversight and management collaboratively. By the nature of this wetland work and 319 projects, the NMED integration team works extensively with nonprofits as well.

Integration Goals

The primary goal of this integration approach is to protect against a major threat to water quality. The state developed this effort to recognize that wetlands are waters that should be included in watershed plans, even though they are not in the 303(d) listed category of waters to work on. The state's efforts have looked instead at water corridors that are inclusive of not only rivers and streams, but wetlands and depressions. Water quality goals cannot be achieved without including adjacent wetlands, so the approach focuses on whole hydrologic systems. While riparian areas are critical in the arid West and linear riparian wetlands overlap with what is going on in streams, riparian areas are often undervalued. Staff endeavor to enable more innovative designs through the use of Wetland Action Plans, including how project planning is conducted and more integrated reporting.

This innovative approach: 1) makes possible the piggybacking of wetland program plans on regulatory documents required for restoration planning; 2) makes the use of non-wetland program funding to support wetland restoration possible (expanding the potential for water quality gains), and 3) expanded wetland mapping (which identifies opportunities to improve not only wetlands, but watersheds as a whole).

Integration Process Timeline

Wetland Action Plans (WAPs) are unique to New Mexico. They have been part of New Mexico's Wetland Program Development Grants since 2003. The development of Wetland Action Plans has been funded in each round over the last three EPA grant competitions. In 2014, new NPS guidance documents listed watershed-based plan alternative categories for use in determining 319 funding decisions. Conversation about opportunities this presented began in New Mexico as a result and the state was soon approved to submit WAPs as an alternative to a watershed-based plan. New Mexico started by listing for the first time a new milestone in its state 319 Program plan to develop a state Wetland Action Plan for one priority watershed. In 2018, the state began to pursue even greater integration. To date, the state has developed 12-15 Wetland Action Plans. While integration efforts have been modest to date, the potential to expand integration is gaining momentum.

Resource Investment

In the short-term, most of the investments in this integration effort have focused on investments of staff time required to develop Wetland Action Plans. The Section Chief has invested approximately 20 hours in this effort over the last 12 months. The Wetland Team leader also provided approximately 20 hours during this same time on working with the 319 staff towards the development of these plans. Other staff time is estimated to total an additional 20 hours of time among them. Staff time has been spent primarily on developing presentations, holding discussions, coordinating a portion of the state's workshops (total one day), and the attendance of approximately 20 non-DEP staff in that event. In the long-term, staff envision increased consideration of wetlands in NPS plans. The amount of consideration is still relatively small but could evolve into a greater role.

Impact on Watershed-level Planning, Implementation or Outcomes - How Success Has Been Measured

Integration Outputs:

- The development of Wetland Action Plans that can be used in wetland restoration planning and the determination of restoration priorities for 319 funds.
- A collaborative internal approach to addressing watershed issues that more actively includes the restoration of wetlands.
- A competitive project application process (including a problem definition section in each application which requires identification of the target stream system, water quality problem, information about the stream's TMDL, information about loading in excess of the TMDL and other information.
- The production of technical publications annually.

Integration Outcomes:

Programmatic

- Recognition by EPA of a broader view of the NPS Program.
- Resulted in a huge paradigm shift around wetlands – wetlands are now part of the conversation about watershed health and restoration.
- The use of Wetland Program Plans as an alternative to watershed-based plans to determine 319 projects and restoration priorities.
- Access to additional funding to support wetland restoration.
- Staff and partners better trained in rapid assessment methods
- Better coordination between NMED Watershed Protection Section teams working on restoration activities.
- EPA and other federal agencies are now more aware of the value of wetlands for watersheds and the potential improvements that could be achieved by making wetland restoration activities eligible for 319 funding, laying the groundwork for the future use of 319 funds to directly support wetland restoration work.

Environmental

- Greater quantities of wetland restoration as a result of more funding for these efforts.
- Improvements in headwaters (though issues have not been fully solved).
- Better mapping of wetlands.
- Better targeting of stressors and their impacts on wetlands.

Outreach

- Reinvigoration of watershed organizations in the state, as they were interested in doing work that had additional social and ecological benefits.
- Public increased their recognition that not every wetland is a riparian area.
- Watershed organizations increasingly recognized the range of functions provided by wetlands in their watersheds.

Cost Benefit Insights

No specific benefit-cost analysis has been conducted for this integration effort. However, staff identify that a small investment in staff time and meeting expenses has resulted in more comprehensive consideration of water resources, the potential to more effectively reduce impacts to water quality, and the ability to more adequately assess and address wetland stressors. The ability to access 319 funds for additional wetland restoration activities has positive ramifications for the NM Wetlands Program and other sections in the Water Protection Division.

Information about Policy-related Issues

No information provided.

Challenges & Lessons Learned

- Both state and federal agency staff were initially cautious about considering WAPs for these purposes. However, there was not pushback.
- Initially, staff had a hard time envisioning how a Wetland Action Plan could substitute for a watershed-based plan.
- In the 319 program, each state develops an NPS program, funded by no more than 60% of federal funds. The lack of state funding to cover this can lead to problems and competition for these limited funds.

Next Steps

Currently most applicants do not have the resources available to qualify. In the future, the NM Environment Department would like to require that the problem description be framed in terms of a Rapid Assessment Method (RAM) assessment to show a C or D rating of the water body.

NM Environment Department would like to move towards the use of a stressor checklist and the more effective use of these lists in planning and prioritizing projects. The process would include a subjective statement from the applicant with their opinion on the impact of the stressor and why. This information could be used to justify restoration or protection of a wetland.

Although there are no plans to develop them, staff are interested in exploring the concept of Total Maximum Levels of Stress (TMLS) for wetlands (like TMDLs) to help identify the level of stress affecting a specific wetland and inform efforts to mitigate impacts through restoration. TMLS would be used to help the state prioritize restoration sites.

Transferability

As Wetland Action Plans are unique to New Mexico, there are some limits to the current transferability of this integration approach. However, EPA's NPS guidelines list Watershed-based Plan alternatives categories. Other states could identify one of these alternatives to use in place of New Mexico's WAPs. Any state or tribe seeking to explore alternatives should engage in discussion with EPA early in the process to determine if their proposed alternative would qualify as an NPS Watershed-based Plan alternative under 319 requirements.

Contact Information

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Additional Resources

- [New Mexico Nonpoint Source Management Plan](#) (2014)