

Assessing the Criteria for Water Quality Standards for Wetlands in New Mexico



Surface Water Quality Bureau ~ Watershed Protection Program ~ Wetlands

www.nmenv.state.nm.us/swqb/wetlands

New Mexico's Starting Point

- Before the ASWM Pilot Project, the SWQB Wetlands Program, Standards Section and SWQB 401 staff knew that the State's Water Quality Standards were not addressing suitable wetlands applications, but we were not sure of a successful process to make them directly applicable to wetlands.
- We also felt that we could not move forward with Water Quality Standards changes to make them more applicable to wetlands because we had no New Mexico data to back up wetlands standards, narrative or otherwise, or new designated uses.

New Mexico's Starting Point

- First we had to make the case that wetlands Water Quality Standards are critical – establish a need.
 - Draining
 - Isolated wetlands
 - Small wetlands are not mitigated

Went through the standards and identified

- Where Standards applied to wetlands
- Where are the gaps in protection
- What are the issues to resolve

WQ Standards Review

- NM Wetlands and Standards program staff spent just over a year researching the status of WQ Standards for Wetlands in New Mexico and compared various other State's standards
- NM Wetlands and Standards program staff attended ASWM Standards Webinar series and discussed the topics in relationship to NM position afterwards
- Identified protections in place
- Identified gaps in protection
- Identified issues to resolve

Current WQ Standards for Wetlands

Definitions

- **“Surface water(s) of the state”** means all surface waters situated wholly or partly within or bordering upon the state, including lakes, rivers, streams (including intermittent streams), **mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes**, reservoirs or natural ponds. Surface waters of the state also means all tributaries of such waters, **including adjacent wetlands**, any manmade bodies of water that were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state, and any “waters of the United States” as defined under the Clean Water Act that are not included in the preceding description. Surface waters of the state does not include private waters that do not combine with other surface or subsurface water or any water under tribal regulatory jurisdiction pursuant to Section 518 of the Clean Water Act. Waste treatment systems, including treatment ponds or lagoons designed and actively used to meet requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR Part 423.11(m) that also meet the criteria of this definition), are not surface waters of the state, unless they were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state.

Current WQ Standards for Wetlands Definitions

- **“Wetlands”** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Wetlands that are constructed outside of a surface water of the state for the purpose of providing wastewater treatment and that do not impound a surface water of the state are not included in this definition.
- **“Playa”** means a shallow closed basin lake typically found in the high plains and deserts.

Current WQ Standards for Wetlands Criteria

- General Criteria apply
 - Free from's (some may not be appropriate for wetlands)
- Designated Uses and criteria
 - Marginal warmwater aquatic life and primary contact
 - Livestock watering & wildlife habitat (NMWQCC default criteria)
 - Use-specific numeric criteria of unclassified intermittent or perennial waters apply
 - Some criteria may not be appropriate (E.coli, dissolved oxygen, temperature)

Current WQ Standards for Wetlands

Anti-degradation Policy

- ONRW wetlands are specifically covered in antidegradation implementation procedures for permitted discharges, and by nonpoint source guidance
- For non-ONRWs, the antidegradation implementation procedures identify 401 certification as the vehicle to restrict pollutant loading increases to de minimus amounts. Discharges from activities covered by general and nationwide permits are typically considered unquantifiable and thereby de minimus if BMPs are employed

Assessment and Monitoring Strategy

- Currently applying a Landscape Level Assessment and resource inventory
 - Wetlands mapping projects proceeding throughout the State
 - Adapting LLWW classification descriptors for the Arid West
 - Describing HGM wetland classes and subclasses throughout the State
 - Assigning ecological functions to wetland classes
- NM Rapid Assessment Method
 - Currently collecting data for mid-montane riverine subclass of wetlands
 - Developing methodology for lowland riverine subclass of wetlands
 - Plans for future subclass RAM development
- Developing a Vegetative Index of Biological Integrity

Developing Standards Criteria from Assessment Data

- Apply Assessment Protocol and evaluate applicability to existing narrative criteria (ie. Biological integrity, plant nutrients, bottom sediments)
 - Does the assessment protocol fit with the existing narrative criteria and/or designated use?
 - Is there a more appropriate criteria?
- Develop new narrative criteria for one wetland class to protect wetland functions
 - Designated use / narrative criteria based on functions
 - Physical: Streambank protection, flood water attenuation, Base flow/stream flow maintenance, groundwater recharge, water temperature maintenance
 - Biological: Conservation of biodiversity/production, aquatic habitat, wildlife habitat, migratory bird flyway system, plant life
 - Chemical: Nutrient cycling, sediment retention, pollution control/attenuation

Next Steps in Planning Process

- Develop specific antidegradation policy for wetlands – adopt as part of the Water Quality Management Plan/Continuing Planning Process
- Draft 10-year Wetlands Monitoring and Assessment Strategy
- Four discussion points from M &A Strategy that relate to Standards development:
 - Assessment Strategy – Tiered approach
 - Level 1 – mapping and applying the LLWW classification to relate wetland types to functions
 - Level 2 – collecting appropriate data to support wetland WQS and narrative standards development
 - Level 3 – validating level 2 data collection, and also establishing standards based on reference standards for wetland types.
 - Monitoring design how we can better coordinate and share resources
 - currently parallel programs
- General support and infrastructure – issue is timeline and budget constraints
- Data Management