

Addendum to Utah's Wetland Program Plan: Major Tasks for Utah Geological Survey for 2016-2018

Prepared for EPA Region 8 Wetlands Program, by Diane Menuz and Richard Emerson

Diane Menuz, Wetland Section Coordinator
801.538.7436, dmenuz@utah.gov
Richard Emerson, Wetland Mapper/GIS Analyst
801.537.3345, richardemerson@utah.gov

Utah Geological Survey
Utah Department of Natural Resources
1594 W. North Temple
Salt Lake City, Utah 84114

Objective: Provide field-based data on the condition and potential function of wetlands, collected using a watershed approach.

Core Elements

Monitoring and Assessment: 1a Identify outcomes, 1c Develop monitoring design, 1d Select core indicators, 2a Ensure scientific validity, 2b Monitor wetlands, 2d Track monitoring data, 2e Analyze data, 3a Evaluate monitoring program, 3b Evaluate consequences of actions, 3c Improve management

Tasks

- 1) Validate current tools by testing with multiple observers and different times of year (2017)
- 2) Engage stakeholders to determine needs that are unmet by existing tools (2017-2018, ongoing)
- 3) Add additional metrics related to wetland function that can be collected using a rapid, Level II approach (2017-2018)
- 4) Add new species or guild-specific habitat metrics to better characterize habitat condition for priority wildlife species, likely focusing on either Columbia spotted frog or amphibians in general (2017-2018)
- 5) Modify metrics as needed based on new wetland types or situations encountered (ongoing)
- 6) As new components are added to tools, make sure there is a simple version composed of core indicators that can be used rapidly and by multiple partners (2018)
- 7) Establish survey cycle that aligns with probabilistic stream and lake surveys conducted by the Utah Division of Water Quality (2017)
- 8) Develop two-tier monitoring approach that allows for probabilistic surveys across the watershed combined with targeted surveying in project areas of interest (2017-2018, ongoing)
- 9) Summarize available watershed-level survey data through the development of analysis that addresses key concerns of stakeholders (2017-2018, ongoing)

Objective: Improve capacity to characterize wetlands through description of reference condition and improved wetland plant species information

Core Elements

Monitoring and Assessment: 1d Select core indicators, 2a Ensure scientific validity, 2b Monitor wetlands, 2c Establish reference condition, 2e Analyze data, 3b Evaluate consequences of actions, 3c Improve management, 3d Develop geographically-defined plans

Voluntary Restoration and Protection: 1c Provide clear guidance on success measures, 4b Monitor restoration sites

Water Quality Standards: 2a Gather relevant monitoring data, 2d Establish target criteria

Tasks

- 1) Develop Utah-specific coefficient of conservatism values (C-values) for wetland plants (2017)
- 2) Determine appropriate wetland classes within the Wasatch and Uinta Mountains Level IV Ecoregion to target for development of reference condition descriptions (2017-2018)
- 3) Subjectively select and survey targeted wetlands as needed to obtain sample of least and most disturbed sites (2018)
- 4) Develop plant-based multi-metric indices for target wetland types (2018)
- 5) Conduct pilot work to determine feasibility of using water quality data to develop additional multi-metric index for one target wetland type; provide recommendations for expansion of effort (2018)
- 6) Expand network of shallow wetland piezometers in least disturbed target wetlands to better characterize natural hydrology in currently unmonitored wetland types and serve as a point of reference for future change (2017-2018)

Objective: Develop data, tools, and methods that allow wetland data to be better incorporated into landscape scale planning

Core Elements

Monitoring and Assessment: 1c Develop monitoring design (universe of wetland resources), 3b Develop geographically-based wetland protection 3c Improve management

Regulatory: 3d Incorporate watershed approach into decision-making

Voluntary Restoration and Protection: 1b Consider watershed planning, wildlife habitat, etc. when selecting restoration/protection sites, 2a Establish partnership to leverage protection

Tasks

1. Estimate wetland area in field-surveyed areas without updated mapping by determining amount of under- and over mapping of wetlands in existing mapped data (2017-2018)
2. Update mapping in anticipation of upcoming monitoring activities by identifying areas with poorest mapping accuracy and remapping to National Wetland Inventory standards (2017-2018)
3. Update mapping in other areas based on priorities identified by state partners (ongoing)
4. Develop new methods of mapping when novel wetland types are encountered (ongoing)
5. Conduct pilot project to test riparian mapping method (2017-2018)
6. Conduct landscape analysis in watersheds that are targeted to field surveys to help rare wetland types and potential conservation opportunities (2017, 2018)

Objective: Improve outreach and information availability regarding wetlands

Core Elements

Monitoring and Assessment: 1a Identify outcomes, 3a Evaluate monitoring program, 3b Evaluate consequences of actions, 3c Improve management

Voluntary Restoration and Protection: 1a Establish consistent goals, 1b Consider watershed planning, wildlife habitat, etc. when selecting restoration/protection sites, 1c Provide clear guidance on success measures

Tasks

- 1) Conduct annual working group meetings to provide forum for discuss, identification of stakeholder needs, and plans to address those needs (ongoing)
- 2) Develop six year wetland program plan through collaboration with Utah Division of Water Quality and stakeholders (2017)
- 3) Conduct training on wetland field survey and/or mapping methods to increase use across the state (2018)
- 4) Develop outreach material summarizing key aspects of watershed survey results that are targeted to different stakeholder groups, such as the general public, restoration practitioners, and regulatory authorities (2018)
- 5) Maintain and update webpage as needed, including posting reports and information about wetland program projects (2018)
- 6) Attend at least one professional meeting every two years and three local non-wetland working group meetings per year to disseminate information about Utah's wetland program and stay up-to-date on relevant collaborative opportunities (2017, 2018)