MEETING MINUTES

Water Quality Task Force

September 11, 2018
9:30-11:30
195 North 1950 West,
Red Rocks Conference Room

PRESENT:

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Jim Bowcutt</td>
<td>DEQ/DWQ</td>
</tr>
<tr>
<td>Nathan Daugs</td>
<td>Cache Water District</td>
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<tr>
<td>Ken Bradshaw</td>
<td>BLM</td>
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<tr>
<td>RJ Spencer</td>
<td>UDAF</td>
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<td>Kerry Swartz</td>
<td>BLM</td>
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<tr>
<td>Jay Olsen</td>
<td>UDAF</td>
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<tr>
<td>Jon Hilbert</td>
<td>JVWCD</td>
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<tr>
<td>Scott Paxman</td>
<td>WBWCD</td>
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<tr>
<td>Rhonda Miller</td>
<td>USU Extension</td>
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<tr>
<td>Nancy Mesner</td>
<td>USU Extension</td>
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<tr>
<td>Ryan Williams</td>
<td>WBWCD</td>
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<tr>
<td>Bill Zannotti</td>
<td>UDFFSL</td>
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<td>Melissa Noble</td>
<td>UDDW</td>
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<tr>
<td>Marian Rice</td>
<td>SLC</td>
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<tr>
<td>Andy Pappas</td>
<td>UDAF</td>
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<tr>
<td>Tyler Thompson</td>
<td>UDNR</td>
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<tr>
<td>Norm Evenstad</td>
<td>NRCS</td>
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<tr>
<td>Ben Radcliff</td>
<td>USBR</td>
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<tr>
<td>Craig Miller</td>
<td>UDNR</td>
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<tr>
<td>Kristy Davis</td>
<td>UACD</td>
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I. DISCUSSION

Melissa Nobel (Utah Division of Drinking Water) - Source Water Protection (see presentation)

- Source Water Determination reports are based on geology/hydrology of the ground water.

- DDW and the Division of Water Quality are currently discussing where possible NWQI watersheds focused on source water protection may be, and they are open for recommendations from the Task Force.

- Ryan Dearing is the Emergency Response person for the Division of Drinking Water.

- The NRCS can use EWP funding to help pay for practices to protect drinking water infrastructure in areas that have been impacted by forest fires.

- It would be beneficial to get emergency funding at DEQ to deal with fire remediation in critical areas. It just takes too long to get EWP and WRI on the ground.

Tyler Thompson (Utah Department of Natural Resources) WRI Annual report (See Presentation)

- Wri.utah.gov is the website for the WRI program, and it contains a database of all projects that have been funded using WRI grants.

- The DWR habitat Restoration crew can help implement large watershed scale projects around the state if there is a need out there.

- Invasive species removal project do include revegetation work in the work plan.

- Utah Water Watch would be happy to help monitor the effectiveness of the WRI projects that are implemented.

- Hugh Hurlow continues to do studies to determine the water quantity and quality impacts that have been achieved by pinion juniper thinning projects.

- There is currently an inconsistency right now when it comes to installing and approving Beaver Dam Analogue Structures. There needs to be a blanket policy for the installation of BDAs and fire restoration.

Andy Pappas (Utah Department of Agriculture and Food) Chalk Creek Restoration Project (See presentation)
II. ADDITIONAL ITEMS

- Once the latest phase of project implementation has been completed, there will have been over $1.3 in projects implemented throughout the watershed.

- UDAF and DEQ continue to work toward developing an agreement between the UCC and the Water Quality Board that will allow large scale AFO/CAFO operations to get interest free loans. It will be presented to the Water Quality Board and UCC at their next meetings, and hopefully available for cooperators by the spring of 2019.

- The Information and Education Subcommittee of the Task Force continues to work toward putting out two surveys to the general public. One will be on small farm operations, and the other will be on Human waste. The survey on small farms is almost completed, and will be sent out to the general public by the end of the year.

- Other possible topics: More project summaries, watershed flood prevention-NRCS, Bringing partners together.

- Next meeting will be held December 6th.
Drinking Water Source Protection Plan

What is it?
What's it for?
What can we do together?

Safe Drinking Water Act

"To ensure that drinking water is safe, SDWA sets up multiple barriers against pollution. These barriers include: source water protection, treatment, distribution system integrity, and public information." EPA 816-F-04-030 June 2004
Public Water System

Public Water System (PWS) means a system, either publicly or privately owned, providing water through constructed conveyances for human consumption and other domestic uses, which has at least 15 service connections or serves an average of at least 25 individuals daily at least 60 days out of the year and includes collection, treatment, storage, or distribution facilities under the control of the operator and used primarily in connection with the system but not under his control (see 19-4-102 of the Utah Code Annotated). All public water systems are further categorized into three different types, community (CWS), non-transient non-community (NTNCWS), and transient non-community (TNCWS). These categories are important with respect to required monitoring and water quality testing found in R309-205 and R309-210 (see also definition of “water system”).

Source Types

What are the types of sources we have in Utah?

DDW Facility Types by the Number

- Consecutive Connection
- Intake
- Spring
- Well

Legend
- Bailey County Population Size
- 10,000-49,999
- 50,000-249,999
- 250,000-499,999
- 500,000 or more

Division of Drinking Water
DWSP Plan
Delineation Report

Source Protection Zones based on hydrogeology
- Zone 1 - 100 ft radius
- Zone 2 - 250 day time of travel
- Zone 3 - 3 year time of travel
- Zone 4 - 15 year time of travel

DWSP Plan
Interactive Map

Utah Environmental Interactive Map

Division of Drinking Water
DWSP Plan

Inventory of Potential Contamination Sources (PCS)

Potential Sources of Water Contamination

- Air Pollution
- Smog
- Smells
- Acid Rain
- Chlorine Fills/Wells
- Municipal Treatment
- Copper & Lead Plugs

DWSP Plan

Management Program

- Existing PCS
- Future PCS

Legend

- Counties with DWSP Outliers
- NO
- YES

Division of Drinking Water
NRCS National Water Quality Initiative

Source Water Protection Pilot Program

* Area needs to have a DWSP plan in place.
* Develop conservation plans with interested landowners.
* Can include Groundwater sources.

Elevated Nitrate Levels

- Increased monitoring >5.0 MG/L
- Not for consumption =10.0 MG/L

Find Water System with elevated nitrate and agricultural land in source protection zones.

Other suggestions?
Questions?

Melissa Noble, MS | Environmental Scientist II | Source Protection
801.536.4224 (office) | 801.536.4311 (fax)
mnoble@utah.gov
FY 2018 WRI Riparian Projects

- 50+ projects completed in FY18
  - 16 of these Tamarisk–Russian Olive Removal
  - 13 of these Livestock Watering/Riparian Protection Projects
- $4.7 million spent ($3.1 million through WRI) - $700K in-kind
- 175+ river/stream miles enhanced
Lower San Rafael River & Riparian Corridor Habitat Improvement
Fisheries Improvement on the Lower Beaver River near Minersville Reservoir

Mill Creek Watershed and Riparian Restoration
Vernon Creek BDA Installation

Meadow Creek Riparian Restoration
Escalante River Watershed Riparian Invasive Species Restoration Project - Phase 10

FY 2019 WRI Riparian Projects

- 38 projects Funded for FY19
  - 12 of these Tamarisk–Russian Olive Removal
  - 2 of these Livestock Watering/Riparian Protection Projects
- $6.2 million in funding ($4.2 million through WRI) - $1 million in-kind
- 195+ river/stream miles planned for treatment
South Fork of Chalk Creek
Coordinated Resource Management Plan (CRMP)

Location

- South Fork Watershed (54000 acres)
- 18 Landowners
Fish Creek August 7\textsuperscript{th}, 2014

One inch rain fall event.

250 dump truck load of sediment entered stream.
## Load Reductions

<table>
<thead>
<tr>
<th>Water Treatment Method</th>
<th>Stormwater</th>
<th>Sediment</th>
<th>Nitrogen</th>
<th>Phosphorus</th>
<th>Output Reduction</th>
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<tr>
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<td>11</td>
<td>35</td>
<td>2</td>
<td>0</td>
<td>156</td>
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<td>Creek B</td>
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<td>6</td>
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<td>Creek D</td>
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<td>54</td>
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<td>Creek F</td>
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<td>891</td>
<td>47</td>
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Projects

- Cross fencing
- Riparian Fencing
- Grazing Management
- Water Developments
- Pinion Juniper lop and scatter
- Converting from Wild Flood to Sprinkler Irrigation

Monitoring

- Chalk Creek Sampling Analysis Plan
  - Temperature
  - pH
  - DO
  - Turbidity
  - TSS
  - Nutrients
  - Flow
- Other Monitoring
  - Photo monitoring
  - BLM MIM assessment
- Summit Conservation District
Partners

Summit Conservation District
Trout Unlimited
Utah Department of Agriculture and Food
NRCS
Utah Division of Water Quality
Utah Division of Wildlife
Fish and Wildlife Service
Weber Basin Conservancy District
Plus many other partner
- $580,000 spent on implementing the CRMP
- $268,000 NWQI NRCS 2017

Huff Creek CRMP
Location

- Huff Creek Watershed 20000 acres
- 10 Landowners

Formation of a Plan

- Landowner driven
- Monthly meeting
- Guest speakers
- Resource inventories
- One on one meeting with landowners
Monitoring

• Chalk Creek Sampling Analysis Plan
  • Temperature
  • pH
  • DO
  • Turbidity
  • TSS
  • Nutrients
  • Flow
• Other Monitoring
  • Photo monitoring
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