NM’s NPS Management Program Update

What I’m going to present:

1. Intro presentation for key stakeholders
2. A summary of New Mexico’s NPS Plan
3. Example activities and milestones
4. Outreach and Public Involvement Ideas

Abraham Franklin
Program Manager, Watershed Protection Section
New Mexico Environment Department
2019 NONPOINT SOURCE MANAGEMENT PROGRAM REVISION
“The Governor of each State, for that State or in combination with adjacent States, shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval a management program which such State proposes to implement in the first four fiscal years beginning after the date of submission of such management program for controlling pollution added from nonpoint sources to the navigable waters within the State and improving the quality of such waters.”
Timeline

- Establish Nonpoint Source (NPS) Advisory Committee: Fall 2017
- NPS Advisory Committee Workshops
  - Ghost Ranch: 10/18/2017
  - Elephant Butte Lake State Park: 11/15/2017
- Drafting: January - April, 2018
- EPA Technical Review: April - June, 2018
- Office of General Counsel review: July - August, 2018
- Public Comment Period: October - December, 2018
- WQCC Submittal, Review & Approval: Jan - Mar, 2019
Proposed Timeline (continued)

- EPA Submittal: April, 2019
- EPA Approval: June, 2019
Background Documents


Chapters

1. Executive Summary
2. Introduction
3. Goal, objectives, activities, milestones
4. Balanced approach
5. Priorities
6. Programs that protect and improve water quality
7. Efficiency and effectiveness
8. References

Objectives

1. **Complete WBPs to Enable Effective Implementation**
2. **Improve Water Quality**
3. **Protect Water Quality**
4. **Share Information on Surface Water Quality**
5. **Protect Ground Water Quality**
6. **Cooperate with other Agencies on Water Quality Protection and Improvement**
New activities to “Complete WBPs to Enable Effective Implementation” (paraphrased)

- Help the Forest Service or other agencies develop post-fire plans that qualify as WBP alternatives.

- Complete an inventory of watersheds covered by Wetlands Action Plans (WAPs) and develop an associated GIS coverage, to update the list of priority watersheds for implementation.

- Work with the SWQB Monitoring, Assessment, and Standards Section (MASS) and stakeholders to choose a pilot watershed and complete an in-house WBP (as an alternative to a TMDL) for that watershed.
Example milestones towards WBP completion (paraphrased)

- At least one WBP per year will be updated or completed, and accepted by the EPA as meeting the nine elements of WBPs.

- A post-fire response plan or project work plan that qualifies as a WBP alternative will be submitted to EPA within two years of any major wildfire occurring in the watershed of one or more streams with a coldwater or cool water aquatic life designated use and a fire severity that falls outside the natural range of variability for the affected forest types.
Ute Park Fire
Damage Assessment and Burned Area
Emergency Rehabilitation Plan

PREPARED FOR
NEW MEXICO DEPARTMENT OF HOMELAND SECURITY
AND EMERGENCY MANAGEMENT

PREPARED BY
SWCA ENVIRONMENTAL CONSULTANTS

AUGUST 2018
<table>
<thead>
<tr>
<th>Basin</th>
<th>Drainage Area (sq. mi.)</th>
<th>Pre-Fire</th>
<th>Post-Fire</th>
<th>ΔQ</th>
<th>% change</th>
<th>Pre-Fire</th>
<th>Post-Fire</th>
<th>ΔQ</th>
<th>% change</th>
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<tbody>
<tr>
<td>Ute Gulch</td>
<td>10.1</td>
<td>205</td>
<td>1,531</td>
<td>1326</td>
<td>747</td>
<td>1,908</td>
<td>4,977</td>
<td>3,069</td>
<td>261</td>
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<tr>
<td>Deer Lake Alluvial</td>
<td>3.0</td>
<td>179</td>
<td>1,150</td>
<td>971</td>
<td>642</td>
<td>1,356</td>
<td>3,236</td>
<td>1,880</td>
<td>239</td>
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<tr>
<td>Hummingbird</td>
<td>3.1</td>
<td>27</td>
<td>898</td>
<td>871</td>
<td>3,326</td>
<td>655</td>
<td>2,859</td>
<td>2,204</td>
<td>436</td>
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<tr>
<td>UT to Ute Park</td>
<td>1.2</td>
<td>11</td>
<td>167</td>
<td>156</td>
<td>1,518</td>
<td>161</td>
<td>1,014</td>
<td>853</td>
<td>630</td>
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<tr>
<td>Project</td>
<td>Location</td>
<td>Description</td>
<td>Timeline</td>
<td>Cost</td>
<td>Funding Code</td>
<td>Priority (H, M, L)</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Headcut, low-water stream road crossings, and gully stabilization</td>
<td>Multiple locations to be determined during the PLA</td>
<td>Install on-site boulders and logs as grade control at steep high burn gullies and road crossings. ~ 10,000 If of Small supply tributaries @ ~$200 If of Restoration Sediment Reduction ~ $100/Ton (20,000 TONS)</td>
<td>Immediate</td>
<td>$25,000–$2,000,000</td>
<td>A, B, F, G, I, J, V</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sediment Basins (including new construction and utilization of existing ponds pending landowner approval)</td>
<td>Multiple locations to be determined during the PLA</td>
<td>Approximately 6 Sediment Basins: -Hummingbird subwatershed -Antelope Mesa (2) -Ute Gulch -Deer Lake Mesa Alluvial Fan -UT-to Ute Park subwatershed @<del>$250,000–2,000,000 each Sediment Reduction</del> $75/ton (110,000 TONS) Periodic maintenance and dredging may be required, especially following storm events.</td>
<td>Immediate within the drainage at Ute Park and Cimarron Canyon. Others following 2–5 years.</td>
<td>$1,500,000–$8,000,000</td>
<td>A, B, F, G, I, J, V</td>
<td>H</td>
<td></td>
<td></td>
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Example milestone under “Protect Water Quality”

- Within two years of any major wildfire occurring in the watershed of one or more streams with a coldwater or cool water aquatic life designated use, with severity outside the natural range of variability for the affected forest types, NMED will fund post-fire actions that reduce sedimentation and protect aquatic habitat, with support of Section 319 watershed project funds.
Figure 3.27. View looking west towards historic alluvial fan delta and the new delta forming.
Figure 3.28. Example preliminary design of sediment basin and alluvial fan (Source: Wildland Hydrology 2011).
Example activity under “Protect Water Quality”

- Work with NMED’s Office of General Counsel to document procedures to enforce regulations pertaining to ground and surface water protection at Section 20.6.2 of the New Mexico Administrative Code (NMAC), to prevent or abate disposal of refuse in watercourses.
“Share Information on Surface Water Quality”

- **Example Activity:** Promote and develop volunteer monitoring and data sharing to support more frequent and detailed water quality assessment and awareness of local water quality.

- **Example Milestone:** SWQB will organize a data sharing network to solicit external data, meeting data quality standards, that will be assessed in the *State of New Mexico CWA §303(d)/§305(b) Integrated Report and List* for 2022-2024. The data collected by non-NMED partners will be submitted in 2021.
## Silver City Watershed Keepers Example Data

<table>
<thead>
<tr>
<th>Date</th>
<th>Water Temp (°C)</th>
<th>Specific Conductance (µS/cm)</th>
<th>Dissolved Oxygen (DO) (mg/L)</th>
<th>DO (% Sat.)</th>
<th>pH</th>
<th>Turbidity Tube Depth (cm)</th>
<th>Turbidity (NTU)</th>
<th>Turbidity (visual)</th>
<th>Salinity (ppt)</th>
<th>Total Dissolved Solids (TDS)</th>
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<td>12/16/2016</td>
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<td>3.67</td>
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<td>7.16</td>
<td>x</td>
<td>0.69</td>
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<tr>
<td>9/30/2016</td>
<td>15.0</td>
<td>308.600</td>
<td>7.81</td>
<td>77.9</td>
<td>7.75</td>
<td>x</td>
<td>x</td>
<td>Turbid</td>
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<td>6/10/2016</td>
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<td>0.912</td>
<td>3.30</td>
<td>35.4</td>
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<td>4/16/2016</td>
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<td>6.06</td>
<td>61.2</td>
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<td>x</td>
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<td>3/18/2016</td>
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<td>1.032</td>
<td>x</td>
<td>49.4</td>
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<td>x</td>
<td>x</td>
<td>clear</td>
<td>0.50</td>
<td>0.671</td>
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Wetlands Action Plans (WAPs) as WBP Alternatives

Activities:

- **Planning**: Complete an inventory of watersheds covered by WAPs and develop an associated GIS coverage, to update the list of priority watersheds for implementation.

- **Water Quality Improvement**: Solicit applications at least every other year for watershed implementation projects outlined in WBPs and WBP alternatives, to be funded with Section 319 watershed project funds.

- **Water Quality Protection**: Direct a portion of Section 319 watershed project funds to implementation of WAPs, to protect and restore wetlands and to protect downstream water quality.
Slope wetlands threatened by headcuts (Jemez Watershed)
Project goals (Comanche Creek watershed)

- Reduce erosion to *improve* downstream water quality.
- Protect wetland functions to *protect* downstream water quality
- Protect the *wetland*!
How much public and interagency involvement is the right amount?

The legal minimum: 30 day public comment period, and notice buried in the legals.

The practical maximum: large contract for facilitation and planning, cloth napkin meals, and press promotion.

Goldilocks zone: Hire a facilitator (small contract), organize and involve a task force, engage task force in day-long workshops, feed them, 60 day comment period, and actively but informally encourage review.
Thank you!

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