

**Table 2.1.17 Proposed RMP and Alternatives – Soil and Water Resources**

PROPOSED RMP	Alternative A (Draft RMP/EIS Preferred Alternative)	Alternative B	Alternative C	Alternative D Current Management (No Action)	Alternative E
<b>SOIL AND WATER RESOURCES</b>					
<p><b>GOALS AND OBJECTIVES</b></p> <ul style="list-style-type: none"> <li>Eliminate or reduce discharge of pollutants into surface waters and achieve water quality that provides protection and propagation of fish, amphibians, wildlife, livestock, and recreation in and on the water. Implement BMPs, as applicable, adopted by UDEQ to limit surface discharges into water. Implement BMPs, as applicable, adopted by Utah Division of Environmental Quality (“DEQ”) to limit surface discharges into water.</li> <li>Restore and maintain the chemical, physical and biological integrity of the area’s waters as required by the State of Utah’s and EPA’s water quality standards.</li> <li>Restore and maintain soil quality and long-term productivity through the implementation of applicable BMPs, guidelines for rangeland health and other soil protection measures.</li> <li>Reduce salinity loading where possible to accomplish the goals outlined in the Colorado River Basin Salinity Control Act.</li> <li>Pipeline crossings of perennial, intermittent, and ephemeral stream channels should be constructed to withstand 100-year floods to prevent breakage and subsequent accidental contamination of runoff during high flow events. Design pipeline crossings through riparian areas and across stream channels to minimize impacts to these resources. Guidance may be updated over the life of the plan, but current technical guidance can be found in BLM Technical Note 423: Hydraulic Considerations of Pipelines Crossing Stream Channels (Fogg 2007), which as of April 2008, was available at <a href="http://ftp.blm.gov/pub/nstc/TechNotes/TechNote423.pdf">ftp://ftp.blm.gov/pub/nstc/TechNotes/TechNote423.pdf</a>. Specific recommendations regarding surface and subsurface crossings are found in Guidance for Pipeline Crossings (See Appendix B).</li> <li>VFO would operate under the unified policy to protect water quality and aquatic ecosystems on federal lands (Unified Federal Policy for a Watershed Approach to Federal Land and Resource Management). This policy guides protection of water quality and aquatic ecosystem health through the reduction of polluted runoff, the improvement of natural resources stewardship, and an increase in public involvement in watershed management on federal lands.</li> </ul>					
<p><b>MANAGEMENT COMMON TO THE PROPOSED RMP AND ALL ALTERNATIVES</b></p> <ul style="list-style-type: none"> <li>Collaborate with the USFS, state, counties, Native American tribes, and the Division of Water Rights when possible to protect and enhance priority watersheds.</li> <li>Cooperate with states and Native American tribes to review processes for issuing and renewing use authorizations and licenses when these uses/licenses may affect watershed condition and water quality. Revise these processes if necessary to ensure that they address watershed protection, improvement, and monitoring and water quality compliance needs.</li> <li>Continue partnership with State of Utah, Daggett County, UDWR, USFS, Wyoming Fish and Game, and Rock Springs BLM to develop a watershed activity plan for Red Creek in Daggett County.</li> <li>Restore and protect water quality and severe and critical erosion areas by restricting or mitigating surface disturbance.</li> <li>Comply with standards identified in “The Surface Operating Standards for Oil and Gas Exploration and Development” (Gold Book) unless otherwise specified in the plan.</li> <li>The BLM would adhere to criteria outlined in the Colorado River Salinity Control Act.</li> <li>The BLM implements multiple types of water uses on public lands that require water rights from the State of Utah, such as livestock watering, wildlife watering and habitat, wild horse watering, recreation facilities, and fire suppression. The BLM will continue to implement actions to maintain its current water rights for these purposes, such as filing proofs of beneficial use, filing diligence claims, changing existing water rights to fit new uses and projects, and filing protests as necessary to protect existing BLM water rights. The BLM will also file for new water rights in accordance with and when allowed under state water law procedures. Situations in which the BLM will file for new water rights include locations where existing water rights are insufficient or not in place to support the water use, or when existing water rights cannot be changed to support the water use on public land.</li> <li>Work in partnership with the State of Utah and others to reduce potential effects of selenium loading on the Ouray National Wildlife Refuge and Pariette Wetlands.</li> <li>Ensure the physical presence and legal availability of water on public lands. Ensure that those waters meet or exceed established federal and state water quality standards for specific uses, and mitigate activities to prevent water quality and watershed degradation.</li> <li>Reduce sediment and salinity production on important watersheds and critical soils through intensive management and construction measures to reduce water degradation of the Green River, White River, and their tributaries.</li> <li>The State of Utah’s Non-Point Source Management Plan would be used as a standard to reduce potential non-point source of pollution impacts. Coordinate with the Utah Division of Water Quality as needed.</li> <li>On a case-by-case basis, major water developments would be permitted if they are consistent with the plan.</li> </ul> <p><b>BIOLOGICAL SOIL CRUSTS</b></p> <ul style="list-style-type: none"> <li>Measures would be taken to identify and avoid biological soil crust areas when possible by considering the following factors: disturbance type, intensity, timing, frequency, duration, or event. Monitor on-going investigations regarding the values of biological soil crusts and relationships of other ecosystem parameters.</li> <li>Specific activities that would include biological crust considerations would be prescribed fire, post-fire management, invasive weed control, energy development, grazing, OHV use, and range improvement projects. Biological crusts will be considered along with all other resource values in site-specific NEPA analyses.</li> </ul>					
<ul style="list-style-type: none"> <li>The “Surface Operating Standards for Oil and Gas Exploration and Development” (Gold Book), would be used as a guide for surface-disturbing proposals on steep slopes/hillsides.</li> <li>Specific to oil and gas activities, steep hillsides should be avoided in the construction of routes, pipelines, and flowlines.</li> <li>If surface-disturbing activities cannot be avoided on slopes 21-40%, an approved plan would be required prior to construction and maintenance that would include:</li> </ul>	<ul style="list-style-type: none"> <li>Same as the Proposed RMP.</li> </ul>	<ul style="list-style-type: none"> <li>The “Surface Operating Standards for Oil and Gas Exploration and Development” (Gold Book), would be used as a guide for surface-disturbing proposals on steep slopes/hillsides.</li> <li>Specific to oil and gas activities, steep hillsides should be avoided in the construction of routes, pipelines, and flowlines.</li> <li>If surface-disturbing activities cannot be avoided on slopes greater than 20%, an approved plan would be required prior to construction and maintenance that would include:</li> </ul>	<ul style="list-style-type: none"> <li>The “Surface Operating Standards for Oil and Gas Exploration and Development” (Gold Book), would be used as a guide for surface-disturbing proposals on steep slopes/hillsides.</li> <li>Specific to oil and gas activities, steep hillsides should be avoided in the construction of routes, pipelines, and flowlines.</li> <li>If surface-disturbing activities cannot be avoided on slopes 21-40%, an approved plan would be required prior to construction and maintenance that would include:</li> </ul>	<p>For minerals only, no occupancy or other surface disturbance would be allowed on slopes in excess of 40%.</p>	<p>Same as Alternative C.</p>

**Table 2.1.17 Proposed RMP and Alternatives – Soil and Water Resources**

PROPOSED RMP	Alternative A (Draft RMP/EIS Preferred Alternative)	Alternative B	Alternative C	Alternative D Current Management (No Action)	Alternative E
<b>SOIL AND WATER RESOURCES</b>					
<ul style="list-style-type: none"> <li>○ An erosion control strategy</li> <li>○ GIS modeling</li> <li>○ Proper survey and design by a certified engineer</li> <li>○ For slopes greater than 40%, no surface disturbance would be allowed unless it is determined that it would cause undue or unnecessary degradation to pursue other placement alternatives.</li> </ul>		<ul style="list-style-type: none"> <li>○ An erosion control strategy</li> <li>○ GIS modeling</li> <li>○ Proper survey and design by a certified engineer</li> </ul>	<ul style="list-style-type: none"> <li>○ An erosion control strategy</li> <li>○ GIS modeling</li> <li>○ Proper survey and design by a certified engineer</li> <li>○ No surface disturbance would be allowed on slopes greater than 40%.</li> </ul>		
<ul style="list-style-type: none"> <li>• Old agricultural fields could be irrigated and existing ditches and diversion structures could be restored on acquired lands in Bitter Creek and Rat Hole Drainages.</li> <li>• New ditches and diversion structures would be constructed, as well.</li> </ul>	Old fields would be irrigated and existing ditches and diversion structures would be restored on acquired lands in Bitter Creek and Rat Hole Drainages.	Old fields in Bitter Creek and Rat Hole Drainages would not be irrigated.	Same as Alternative A plus new ditches and diversion structures constructed as well.	Unspecified in the current management plans.	Same as the Proposed RMP.
Implement BMPs adopted by UDEQ to limit surface discharges into water.	Unspecified in the Draft EIS.	Unspecified in the Draft EIS.	Unspecified in the Draft EIS.	Unspecified in the current management plan.	Same as Alternative C.