

Summary of the
Ninemile Creek Watershed Restoration Plan WRP (72 pages)
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Background on causes and sources of pollution for Ninemile Creek:

MT DEQ's 2005 Water Quality Restoration plan and Total Maximum Daily Loads (TMDLs) for the Ninemile Planning Area listed these causes of water quality impairments: flow alterations, habitat alterations, sedimentation/siltation, and metals (copper, lead, zinc, and mercury). The most significant probable sources (activities) contributing to these impairments are: mining and other resource extraction, transportation infrastructure, and agricultural practices. The fires of 2000 and historical timber harvests contributed appreciable quantities of sediment to Ninemile Creek.

What actions does the Ninemile WRP call for to address the impairments in the Ninemile TMDL?

Extensive management measures will need to be implemented to achieve the load reductions outlined in the TMDL and other watershed assessments. The Ninemile Creek TMDL listed multiple proposed restoration activities to address the primary source of pollution, sediment, in the watershed (p. 14). These restoration activities include:

- Upgrade forest roads to meet Montana Forestry BMPs.
- Reclaim forest roads that are surplus to the needs of forest managers.
 - Implement Montana's Forestry BMPs on all timber harvest operations.
- Continue post fire restoration and sediment mitigation efforts.
 - Encourage riparian restoration and implementation of agricultural BMPs.
- Manage noxious weeds.
- Promote non-structural erosion control.
- Upgrade undersized culverts over time to better accommodate large floods and reduce the risk of culvert failure.
 - Correct priority fish passage barriers that are significantly affecting the connectivity of native fish habitats.
- Continue riparian management and monitoring in areas impacted by livestock use.
- Encourage floodplain development setback.
- Pursue funding for restoration of historic mining impacts.
- Coordinate with the local watershed group to implement TMDL recommendations on private land and to bring local residents and land owners into the TMDL and watershed restoration process. (Education component)

There are three general categories of management measures that have been implemented and will continue to be implemented in the Ninemile Creek watershed: road decommissioning, culvert removal/replacement and mine reclamation of hard rock mines on tributaries and historic placer mining of the mainstem.

Projects in all of these categories address the primary cause of impairment in the Ninemile watershed: sedimentation/siltation. Mine reclamation/restoration projects can also address metals impairment. These types of projects involve multiple partners and have been successfully implemented throughout the last decade. These projects have occurred primarily on Lolo National Forest land and patented mining claims in the upper reaches of Ninemile Creek, as well as on major tributaries.

Furthermore, to fully address sedimentation issues, grazing and agricultural inputs in the lower, private reaches of Ninemile Creek should be addressed. This will require the cooperation of private landowners, and an increase of organizational capacity among project partners for project development and planning.

Does the WRP go beyond the TMDL to address problems beyond pollutants?

The TMDL process helped to identify many of the probable causes and sources of impairment in the Ninemile watershed. However, to fully address the impairments on Ninemile Creek, the loads must be addressed on many non-listed waterbodies flowing into Ninemile. Listed in the document are waterbodies in the Ninemile Creek watershed and their respective causes, sources, load allocations and reductions (P. 8).

In addition, efforts to restore floodplains and other wetlands should benefit both water quality and water quantity issues.

The full 72 page Nine Mile WRP can be seen at

https://deq.mt.gov/Portals/112/Water/WPB/Nonpoint/Publications/WRPs/NinemileCreek_WRP_Final_02132013.pdf