# USDA Forest Service - Montana Units

# FY2023 Accomplishment Highlights

## Introduction

The latest iteration of the Memorandum of Understanding (MOU) between the U.S. Forest Service (USFS) in Montana and the Montana Department of Environmental Quality (MT DEQ) was signed in early 2020 as a five-year update to the longstanding MOU. Among those notable changes to the MOU was addition of Section IV (J), which states:

              IV. The Forest Service shall:

                            J. Provide DEQ with the annual U.S. Forest Service accomplishment report for activities  
                            on NFS lands in Montana. Production of this annual accomplishment report would be  
                            coordinated by the FS R1 regional hydrologist. Report contents would be drawn  
                            primarily from the U.S. Forest Service’s Watershed Improvement Tracking (WIT)  
                            database and would include all regional soil and water resource improvement activities  
                            that occurred during the previous federal fiscal year.

The format and content of this report has been mutually agreed upon as a work in progress; each subsequent iteration of the report will be refined in effort to best meet the needs of both agencies.

For 2023, geospatial data has again been shared with MT DEQ representing locations where selected watershed restoration activities have occurred on USFS-managed lands.

In effort to improve transparency and communication with partners like MT DEQ, USFS Region 1 has been coordinating with Washington Office database managers to develop a publicly accessible dashboard for viewing selected soil, aquatic, and watershed restoration activities completed on National Forest System lands. The dashboard is currently in beta testing and is anticipated to be available in late spring or early summer 2023. The dashboard will be an ArcGIS Online platform that provides both mapped locations of selected activities coupled with tabular and graphical display of associated statistics and information.

This 2023 report provides a statewide snapshot of accomplishments in four reporting categories: soil and watershed acres improved; stream miles improved/linear feature restoration activities; Best Management Practices monitoring; and priority watersheds improved. Annual accomplishment reports from individual forests can be forwarded to MT DEQ where available.

The 2021 Bipartisan Infrastructure Law (BIL) created multiple new programs for funding watershed and aquatic restoration activities on NFS lands. USFS Region 1 was the beneficiary of these programs, in particular the Legacy Roads and Trails program and Collaborative, Aquatic-Focused Landscape Restoration (CALR) program. Funding from these programs was made available late in Fiscal Year (FY) 2022, resulting in much of the funded work being deferred to Fiscal Year 2023. Depending on the BIL program, Forests are actively working with the Regional Office on 2024, 2025, and in some cases 2026 proposals. More information on BIL-related funding accomplishments will be provided to Montana DEQ during coordination meetings and in subsequent years’ reports.

Data included in this FY2023 annual report have been drawn from the Forest Service’s national accomplishment reporting databases. Reported watershed restoration activities have been filtered to showcase accomplishments most pertinent to attainment and improvement of water resource beneficial uses. While national and regional reporting guidance is provided, individual Forests retain the flexibility to decide which activities they elect to report subject to the needs of their programs. More restoration and mitigation activities may have been completed by some Forests than reported here.

Though efforts have been made to ensure equitable accounting of accomplishments, not every acre reported can be assumed to have the same level of landscape benefit or effect. As noted above, accomplishment reports from individual National Forests can further contextualize the scope of work completed.

## Soil and Water Acres Improved

Figure 1 shows selected soil and water resource acres improved on USFS managed lands in Montana. USFS Montana Forests performed a variety of activities in service of watershed restoration ranging from channel reconstruction and streambank stabilization to road obliteration. Road and trail improvements highlighted many of the forests’ programs of work; Montana Forests realigned, decommissioned, stored, stormproofed, and repaired greater than 200 acres of road and trail prisms across the state. Additionally, on the order of 50 acres of wetland restoration and crossing reconstruction occurred across three National Forests in Montana during FY2023.

## Stream Miles Improved/Linear Feature Restoration Activities

Figure 2 provides a statewide snapshot of stream miles improved through various restoration activities. As an illustrative example, total miles of road decommissioned should be interpreted as miles of stream habitat benefiting from road decommissioning, not the total mileage of roads decommissioned.

Road-stream crossing improvement efforts occurred across multiple Montana Forests in FY2022. Aquatic Organism Passage (AOP) improvements or barrier removals contributed to greater than 25 miles of stream habitat accessibility across the state. Conversely, AOP barrier construction created approximately 15 miles of habitat available for native species. Nearly forty miles of stream habitat conditions were restored via nonnative fish removal and native fish reintroduction. Two national forests secured instream flow water rights protecting baseflows for aquatic habitat across roughly 20 miles of streams.

###### Figure 1. Selected soil, water, and aquatic habitat improvement activities completed by USFS Montana Forests during Fiscal Year 2023.

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###### Figure 2. Miles of stream habitat improvement or road miles restored by Montana forests in Fiscal Year 2023.

## Best Management Practice (BMP) Monitoring

The Forest Service’s National Core Best Management Practice (BMP) program was initiated in 2012. The intent of this program is to improve water quality management through consistent and effective application of BMPs associated with management activities conducted on NFS lands. In doing so, this program provides important tools to help ensure Forest Service management activities comply with the Clean Water Act. Prior to development of the national program, BMP planning and implementation was directed by overlapping state-specific guidance and individual forest and regional policies and protocols. The National Core BMP program provides a standardized set of core BMPs for avoiding or mitigating effects to soil and water resources associated the range of management activities. In addition to the core BMPs, it provides a series of systematic monitoring protocols for virtually all management activities conducted on NFS lands (USDA Forest Service 2012). The Forest Service’s BMP monitoring program is administered on a biennial basis; Montana forests completed 42 BMP reviews during the FY2021-2022 monitoring timeframe. Difficulties with field meetings due to COVID and workloads associated with the Bipartisan Infrastructure Law (BIL) project implementation hampered the ability to conduct more reviews. BMP reviews included both implementation and effectiveness ratings. A composite rating is assigned based on the matrix shown in Figure 3.

###### Figure 3. Composite scoring matrix for BMP implementation and effectiveness reviews under that Forest Service’s National Core BMP Monitoring Program.

Roughly one quarter of the 42 reviews were roads-related, while the rest of the reviews were distributed across the spectrum of other resource areas reviewed (Figure 4). Twenty four of the 42 reviews (57 percent) had composite ratings of “Excellent” or “Good” and the remainder (43 Percent) had composite ratings of “Fair” or “Poor”.

In terms of results for specific resource categories, BMP reviews for Vegetation Management, Minerals, and Fire Management resulted in composite ratings of exclusively “Excellent” or “Good”. Most Facilities and Aquatic Ecosystem Improvement project reviews also resulted in “Excellent” or “Good” composite ratings.

In two resource categories (Roads and Recreation), greater than 50 percent of reviews resulted in “Fair” or “Poor” composite ratings. For roads, specific categories where concerns were identified included:

          – Road BMPs following construction or reconstruction,  
          – BMPs used to protect water/aquatic/riparian resources associated with long term management  
              of open Forest Service (Maintenance level 2-5) roads, and  
          – BMPs used to protect water/aquatic/riparian resources associated with stored roads.

Review locations were both random and nonrandom; in at least one instance, a review was undertaken specifically to evaluate a road segment with known issues. Most of these road reviews with adverse findings were isolated geographically and corrective actions were undertaken following the BMP review. Five recreation reviews were conducted across the region in FY2021-2022. Recreation reviews resulting in “Poor” composite ratings included two reviews of construction or reconstruction projects at ski areas and a developed recreation site review. Corrective actions were undertaken following the site review.

Five reviews resulted in a composite rating of “No BMPs”. These ratings are a result of having no BMPs or nonpoint source pollution management plans tied to a specific management activity. In many cases, it is not typical to have specified BMP plans directly associated with certain management activities, such as dispersed recreation site management. In practice, abatement or restoration activities are undertaken whenever water quality concerns are identified. This deficiency in protocol structure has been shared with National Core BMP program administrators.

## Priority Watershed Conditions Improved

The Watershed Condition Framework (WCF) is the Forest Service’s nationally consistent approach to classifying and tracking watershed condition, identifying priority work locations, and carrying out essential project activities in effort to improve or maintain watershed conditions across NFS-managed lands. The Forest Service’s publicly accessible online Watershed Classification Interactive Map Viewer can be found at the following link: <https://usfs.maps.arcgis.com/apps/MapSeries/index.html?appid=f4332e5b80c44874952b57e1db0b4407>.

Priority subwatershed (i.e. HUC12) designation is accompanied by development of a Watershed Restoration Action Plan (WRAP), which consists of a suite of designated “essential projects” designed to address restoration needs within the watershed. When all essential projects have been completed in an action plan, watershed condition is designated as improved in the database or record. Completion of all essential projects in a WRAP requires substantive funding and often takes many years to complete. Monitoring is conducted to evaluate longer-term efficacy of restoration efforts.

The Northern Region did not complete any Watershed Restoration Action Plans (WRAPs) in designated priority watersheds in FY2022. The region, including Montana national forests, has been consistently completing one or two WRAPs every fiscal year for the last few years. In FY2022, funding sources and essential project activities did not align (i.e. projects were completed in non-WRAP watersheds).. Essential project work across multiple units is ongoing or slated to be completed in Fiscal Year 2023, which will result in completion of WRAPs in as many as three priority watersheds. Additionally, multiple new priority watershed designations and developed WRAPs are anticipated in FY2023.

## References

USDA Forest Service. 2012. National Best Management Practices for Water Quality Management on National Forest System Lands, Volume 1: National Core BMP Technical Guide FS-990a.