

APPENDIX Q. APPROVED RMP MONITORING PLAN

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Monitoring is the repeated observation and measurement of activities and conditions over time. BLM planning regulations (43 CFR Part 1610.4-9) call for monitoring resource management plans on a continual basis and establishing intervals and standards based on the sensitivity of the resource to the decisions involved. CEQ regulations implementing NEPA state that agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR Part 1505.2(c)). There are three types of monitoring. These include implementation, effectiveness, and validation monitoring.

- *Implementation Monitoring* – This type of monitoring is the most basic type and simply determines whether planned activities have been implemented in the manner prescribed by the plan. It may be called compliance monitoring. It documents BLM's progress toward full implementation of the land use plan decision. There are no specific thresholds or indicators required for this type of monitoring.
- *Effectiveness Monitoring* – The monitoring is aimed at determining if the implementation of activities has achieved the desired goals and objectives. Effectiveness monitoring asks the question: Was the specified activity successful in achieving the objective? This requires knowledge of the objectives established in the RMP as well as indicators that can be measured. Indicators are established by technical specialists in order to address specific questions, and thus avoid collection of unnecessary data. Success is measured against the benchmark of achieving the objectives (desired future conditions) established by the plan.
- *Validation Monitoring* – Validation monitoring is intended to ascertain whether a cause-and-effect relationship exists among management activities or resources being managed. It confirms whether the predicted results occurred and if assumptions and models used to develop the plan are correct. This type of monitoring may be done by contract with another agency, academic institution, or other entity, and is usually expensive and time consuming since results are not known for many years.

Since land use plan monitoring is the process of (1) tracking the implementation of land use planning decisions and (2) collecting and assessing data/information necessary to evaluate the effectiveness of land use planning decisions, monitoring related to the RMP will consist of implementation and effectiveness monitoring. All monitoring efforts will be documented in the Annual Monitoring Report for the Approved RMP.

The BLM will monitor the Approved Resource Management Plan (RMP) to determine whether the objectives set forth in this document are being met and if applying the land use plan direction is effective. Monitoring for each program area is outlined in the *Management Decision* section of the Approved RMP. If monitoring shows land use plan actions or best management practices are not effective, BLM may modify or adjust management without amending or revising the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed. Where the BLM considers taking or approving actions which will alter or not conform to overall direction of the plan, the BLM will prepare a plan amendment or revision and environmental analysis of appropriate scope.

The BLM will review the plan on a regular schedule in order to provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation. Land-use plan evaluations will be used by the BLM to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid. Evaluation of the RMP will generally be conducted every five years per BLM policy, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation. Land Use Plan evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there is new data of significance to the plan, and if decisions should be changed through amendment or revision. Evaluations will follow the protocols established by the BLM Land-use Planning Handbook H-1601-1 in effect at the time the evaluation is initiated.

Environmental Justice

The number and type of actions projected to result in disproportionate negative effects to minority or low income populations will be reported in the Annual Program Summary and Planning Update. This information will be identified from environmental documents completed for actions in the planning area.

Socioeconomics

BLM records will be used to determine the amounts of commodities generated from BLM lands providing economic benefit (barrels of oil produced, cubic feet of gas produced, AUMs, board feet, etc.) during the life of the Approved RMP. The recreation management information system and other site-specific information will be used to estimate visitor use levels. Employment levels in the Vernal Field Office will be tracked using BLM payroll records. These numbers will be documented in the Annual Report.

Tribal Consultation

At least one, general consultation and project coordination meeting will be held on an annual basis with the Ute Indian Tribe. Consultation meetings will be held with the appropriate representatives of other tribes as requested or as deemed necessary. Additional project specific coordination will be conducted as necessary, particularly for projects involving oil and gas development. The appropriate tribal representatives will also be maintained on the Field Office NEPA and project notification mailing lists. Dates of consultation meetings and other tribal contacts will be documented.

Monitoring – Best Management Practices

Surface disturbing projects will be periodically inspected to ensure that Best Management Practices (BMPs) for weed control and prevention of weeds are being followed.

Monitoring – Hazardous Materials

Site clean-ups will be monitored to protect and safeguard human health, prevent/restore environmental damage and to limit the BLM's liability. The performance of the clean-up contractor for all release on public lands will be monitored to ensure full compliance and damaged land restoration. HAZMAT monitoring data will be kept in monitoring files and in the BLM's site cleanup data base. All data will be collected at the time and place of the incident or until the cleanup is completed and there is no future threat to human health or environment. The number of site cleanups (if any) will be reported as required.

Monitoring – Abandoned Mine Lands (AMLIS)

Reclamation and mitigation work done on abandoned mine sites will be monitored to ensure compliance with laws and regulations and with the terms of the work order or contract.

Clean-up sites will be monitored to protect and safeguard human health, prevent/restore environmental damage and to limit the BLM's liability. This monitoring includes such things as conducting periodic water and soil sampling, monitoring for revegetation of reclaimed areas, dust control, erosion and other signs of potential danger to human health and harm to the environment.

The number of clean-up efforts in progress on BLM lands and the number of acres inventoried to identify AMLIS issues will be reported the Annual Monitoring Report for the Approved RMP.

Monitoring – Air Quality (AQ)

Monitoring of air quality and other conditions, conducted in coordination with the Environmental Protection Agency (EPA) and the Utah Department of Air Quality (UDAQ), will be used to determine whether BLM actions that may contribute to air quality concerns (e.g., oil and gas exploration and development or prescribed fire) may proceed or be deferred until conditions improve. The BLM is required to be in compliance with all local, state, federal and tribal air quality regulations and will do so with Utah regulations, including Utah Administrative Code (UAC) regulations as determined applicable by the State of Utah.

The number of BLM actions contributing to any violation of national air quality standards will be tracked annually (expected to generally be none given BLM's coordination with EPA and UDAQ). The number of areas/acres assessed will also be reported in the annual report.

The BLM will continue to cooperate with the EPA on the permitting of ROWs for the establishment of air monitoring stations, as appropriate, within Indian Country upon BLM managed lands.

The BLM will comply with UAC Regulations R307-205-5 through R307-205-7, which prohibit the use, maintenance, or construction of roadways without taking appropriate dust abatement measures. Inspections will be conducted periodically on BLM projects to ensure that the project is in compliance dust abatement control stipulations. The inspections will be summarized in the annual report.

Monitoring – Cultural Resources (CUL)

Periodic visitations of previously recorded cultural properties will be made by the cultural resource specialist or designated representative. The purpose of the visits will be to monitor the condition of the site(s) and document any noted disturbance or deterioration. The condition of the site and other data collected will be entered into the cultural data base. If the sites are listed on the National Register of Historic Places, or have been determined eligible for listing, consultation with the Deputy Preservation Officer and State Historic Preservation Officer will be conducted, when necessary, to determine the appropriate action to stop the deterioration of the site, provide mitigation, or, in the case of criminal removal or damage to site materials, determine the appropriate legal action to be taken.

A long-term monitoring program will be established for the Nine Mile Canyon ACEC in coordination with the Price Field Office. The monitoring program will include the visitation of a representative sample of cultural resource values within the designated ACEC to establish baseline information on the current condition of cultural resource values. Once the baseline condition assessment information has been compiled, the ACEC will be monitored on an annual basis to identify any potential adverse impacts that might occur and identify trends in resource condition and/or deterioration, and to determine whether any actions taking place in the area are causing detrimental changes to the cultural values deemed relevant and important. Any changes will be reported to the Field Manager.

A periodic review of the cultural resource program will be conducted to ensure that the program is meeting established parameters for proactive cultural resources inventory under Section 110 of the

National Historic Preservation Act. The number of acres inventoried by BLM under Section 110 and the number of outreach programs will be documented in the annual report.

Specific plans will be developed for culturally sensitive areas unless included in other integrated activity plans. Such plans will include protective measures, Native American Consultation, and regulatory compliance. The name and number of these plans will be documented in the annual report.

Ensure that all authorizations for land and resource use comply with Section 106 of the National Historic Preservation Act, consistent with and subject to the objectives established in the RMP for the proactive use of cultural properties in the public interest. The number of Section 106 consultations will be reported in the annual report.

Periodic inspections will be conducted in culturally sensitive areas such as the Uinta Foothills, Little Hole, Devils Hole, Upper Willow Creek, and non-WSA lands with wilderness characteristics to ensure cultural resources are not being impacted. The inspections will be in the annual report.

Excavation of cultural sites will be inspected periodically to ensure compliance with stipulations. The inspections will be documented in the annual report.

Monitoring – Fire Management (FIRE)

Monitoring will determine whether fire management strategies, practices, and activities are meeting resource management objectives and concerns. Fire management plans and policies will be updated as needed to keep current with national and state fire management direction. Scheduled program reviews (post-season fire review) will be conducted to evaluate fire management effectiveness in meeting goals and to re-assess program direction.

Pre-fire condition and post-fire effects will be determined by monitoring vegetative response to treatments and progress towards meeting objectives. Monitoring methods include but are not limited to: fuels and vegetation transects, photo points, density, cover and frequency plots, and ocular estimates. As available, applicable remote sensing data will also be incorporated into ecological condition monitoring. The number of acres in Condition Class 1, 2, and 3 will be re-evaluated during the watershed assessment process, and tracked and reported in the Annual Program Summary and Planning Update.

Wildfire rehabilitation effectiveness monitoring studies will be encouraged to determine whether emergency rehabilitation objectives are met. Monitoring requirements and methods will be project specific.

Prescribed burns will be consistent with the Utah Department of Environmental Quality (UDEQ) permitting process and timed to minimize smoke impacts.

Monitoring – Forage (FOR)

Periodic inspections will be completed in all localities to determine the amount of forage available for livestock, wildlife, and wild horses until the wild horses are gathered and removed. Results of monitoring will be used to adapt management strategies to prevent deterioration of rangelands, to achieve desired resource conditions, and to meet other resource objectives.

Monitoring – Lands and Realty Management (LAR)

Land use authorizations will be monitored by field examinations to ensure compliance with the terms and conditions of the authorizing document and the appropriate completed workload measures of accomplishment. On-the-ground monitoring will occur immediately upon issuance of the authorization and periodically throughout the life of the authorization.

Land ownership adjustment actions will be monitored by and the appropriate completed workload measures of accomplishment.

Access acquisition will be monitored through the BLM accomplishment tracking process. Management, realty personnel, and other key staff members in the Vernal Field Office will meet periodically to review program status. Existing easements and other acquisition documents will be reviewed periodically to ensure that both the landowner and the BLM are complying with the terms of the documents.

Withdrawal actions will be monitored through the BLM accomplishment tracking process. Management, realty personnel, and other key staff members in the Vernal Field Office will meet periodically to review program status.

Periodic on-the-ground inspections of the existing right-of-way corridors and use areas will be conducted to ensure they are being managed correctly and that conflicting uses are not occurring which could preclude the use of these locations for their intended purpose.

The Annual Report will include the following:

- The number of use authorizations monitored annually and the number of those in compliance with terms and conditions of the authorization in any given fiscal year.
- The number of acres acquired and/or disposed of through land exchanges, acquisitions, sales, and Recreation and Public Purpose Act patents.
- The number of easements acquired or renewed.
- All new withdrawals.
- Identified compliance issues in right-of-way corridors.

Monitoring – Livestock and Grazing (GRA)

Periodically, allotments will be assessed to ensure the number of allotments/acres that meet the Utah Rangeland Health.

Monitoring – Minerals (MIN, MLE, MLO, MSA)

Monitoring of oil and gas exploration, development, and production activities will be completed in accordance with the National Oil and Gas Strategy. New surface disturbance and reclaimed acres will be tracked.

Periodic field inspections of leasable mineral activities will be conducted to determine compliance with applicable laws, regulations, lease stipulations, and the requirements of approved exploration and development plans.

Periodic field inspections of mining operations will be done to ensure compliance with 43 CFR 3809, 3802 and 3715 and other regulations and conditions of approval

Periodic inspections of salable mineral operations will be done to ensure compliance with applicable laws, regulations, BLM policy contained in BLM Manual Section 3600 and Handbook H-3600- 1.

Monitoring – Non-WSA lands with Wilderness Characteristics (WC)

On-the-ground inspections of the delineated wilderness characteristics areas will be conducted periodically to determine to if any detrimental changes to identified values are occurring. The results of the inspections will be documented in the annual report. Any changes will be noted and reported to the Field Manager.

Inspections of areas with wilderness characteristics that were not delineated will be conducted periodically for compliance with approved action stipulations. The results of the inspections will be documented in the annual report.

Monitoring – Paleontology Resources (PAL)

A representative sample of major fossil-bearing localities will be visited annually to identify if any adverse impacts are occurring. The number of localities visited on an annual basis and their condition will be documented in the annual report.

Monitoring – Rangeland Improvements (RNI)

Rangeland improvement projects will be inspected periodically to ensure compliance with project conditions/stipulations. Any improvements to rangeland health due to the projects will be documented in the annual report.

Monitoring – Recreational Resources (REC, SRMA, TMD)

Monitoring of recreation resources will occur with emphasis placed on developed recreation sites and Special Recreation Management Areas. Monitoring will include regular patrols to check on signing, visitor use, recreation use-related impacts, and user conflicts. Monitoring will also emphasize identification of areas where there may be problems with compliance with rules and regulations resulting in user conflicts or resource damage. Actual visitor and/or vehicle counts will be documented at all developed recreation sites as sites are visited and then projected into an average visitor use.

Monitoring of Special Recreation Permits will be conducted for compliance with terms, conditions, and special stipulations, as well as monitoring and evaluation of compliance with administrative requirements. Average visitor use numbers at developed recreation sites will be reported in the annual report.

Designated roads and trails will be monitored to ensure compliance with the administrative goals of maintaining or meeting Utah Rangeland Health Standards. Designated dispersed campsites will be visited to ensure that motorized camping vehicles are using single paths to the campsite.

Monitoring – Riparian Resources (RIP)

Evaluations will be conducted to determine changes in miles/ acres of riparian wetland in Proper Functioning Condition (PFC) proper functioning condition and to establish trends in plant composition, canopy, age class diversity, and utilization. Detrimental changes will be reported to the Field Manager. Documentation will be provided for the annual report.

Monitoring – Soil and Water Resources (SOLW)

Periodically, a representative number of ground-disturbing projects with the potential to affect soil and/or water resources will be evaluated to determine if Best Management Practices (BMPs) and identified mitigation measures were followed and how effective the practices and measures were in maintenance and/or restoration of the area's waters and soil quality.

Monitoring – Areas of Critical Environmental Concern (ACEC)

On-site monitoring of the designated ACEC areas for identified relevant and important criteria will be completed on a periodic basis. The designated ACEC areas are Browns Park, Lears Canyon, Lower Green River Corridor, Nine Mile Canyon, Pariette Wetlands, Red Creek Watershed, and Red Mountain- Dry Fork Complex. Monitoring will include visitation to the designated ACECs to establish baseline information concerning the relevant and important criteria values. Once the baseline condition assessment information has been compiled, the ACECs will be monitored at least once every four years to identify any potential adverse impacts that might be occurring; identify any trends or deterioration of the criteria values; and, to determine whether any actions taking place in the ACEC are causing any

detrimental changes to the values deemed relevant and important. Any changes will be noted and reported to the Field Manager.

Monitoring may include but not be limited to the: checking the travel routes to the area for road conditions, locked gates, and other obstructions; the condition of signs; for litter or weeds; and, for any deterioration of identified relevant values. The density and placement of facilities or land use authorizations proposed in the area will also be reviewed every two years to insure that the integrity of relevant and important values are protected and that surface disturbing activities are not resulting in habitat fragmentation. Any significant problems will be reported to the Field Manager.

Those potential ACEC areas that were not designated as ACECs include: Bitter Creek, Coyote Basin, Four Mile Wash, Lower Green River Expansion, Main Canyon, Middle Green River, and White River. Periodic on-site monitoring of these lands will occur to ensure that the relevant and important criteria values are maintained and protected by existing regulations, stipulations, and Best Management Practices.

Monitoring – Wild and Scenic Rivers (WSR)

Periodically, the Upper Green River and Lower Green River segments that were found suitable and recommended for designation will be monitored through on-the-ground visits to ensure that no impairment of outstandingly remarkable values within line of sight up to one-quarter mile from high water mark on each side of the segment has occurred. Changes will be documented and provided to the Field Manager and provided for the annual report.

Monitoring – Wilderness Study Areas (WSA)

Wilderness Study Areas will be monitored in accordance with direction provided in the *Interim Management Policy for Lands Under Wilderness Review* (BLM Handbook H- 8550-1). The policy requires monitoring of all WSAs, at least once per month during the months the area is accessible by the public. The number of visits and condition of the WSAs will be reported in the Annual Program Summary and Planning Update.

Monitoring – Special Status Species (SSS)

In coordination with the U.S. Fish and Wildlife Service (USFWS) and the Utah Division of Wildlife Resources (UDWR), fish populations and habitat assessments will be on a periodic basis to monitor populations and to track changes in streamside vegetation composition. This monitoring will be supplemented with data collected for riparian and wetland monitoring to determine if goals and objectives are being met. The data gathered will be tracked and reported in the Annual Program Summary and Planning Update, as will the number of habitat restoration or improvement projects initiated.

Surveys will be conducted to determine the distribution, resource conditions, and trends of special status plant species and representative habitats. This will include determining plant composition at the site, checking for invasion of exotic species, monitoring localized disturbances (from OHV use, livestock and wildlife use, recreational use, etc.), and determining trends in special status plant attributes.

The number of acres surveyed and trends identified will be reported in the Annual Program Summary and Planning Update. The number of acres inventoried annually for special status plants will also be reported.

Monitoring – Travel Management-Roads & Trails (TRC)

Travel management and OHV use monitoring within the planning area will focus on compliance with specific route and area designations and restrictions, with primary emphasis on those routes or areas causing the highest levels of user conflicts or adverse impacts to resources. Route or area closures will be regularly monitored for compliance. Findings will be reported in the annual report.

Monitoring – Vegetation Resources (VEG)

Ecological trends due to changes in vegetation composition over time will be measured through periodic rangeland health assessments. The number of allotments/acres that meet the established standards and the total number of allotments/acres assessed will be reported in the Annual Program Summary and Planning Update.

Periodically, a representative sample of known noxious weed sites identified for treatment will be visited each year and evaluated for weed control effectiveness. The monitoring visits and data collected will be documented in the annual report.

Monitoring – Visual Resource Management (VRM)

Any project design features or mitigation measures identified to address visual resource management concerns will be monitored to ensure compliance with established VRM classes. The number of areas/projects monitored for compliance with VRM objectives will be reported in the annual report.

Monitoring – Wild Horse Management (WHB)

The Bonanza Herd Area will be monitored periodically to document the presence, if any, of horses that are considered to be in trespass and subject to removal. The presence of horses will be reported to the Field Manager and the findings placed in the annual report.

The Hill Creek and Winter Ridge Horse Areas will be monitored periodically to determine the number of wild horses and any changes in forage and rangeland health. After the wild horses have been gathered and removed, the areas will be monitored periodically to document the presence, if any, of horses that are considered to be in trespass and subject to removal. The findings will be reported to the Field Manager and placed in the annual report.

Monitoring – Wildlife and Fisheries (WL)

Periodically monitor wildlife habitat. Assess changes in vegetation composition and condition on a landscape and watershed basis. Continue to monitor known populations of special status species, in conjunction with Federal, state and private agencies or organizations (bald eagle, peregrine falcon, sage grouse, pygmy rabbit, trumpeter swan, raptors). This information will be included in the annual report.

Monitoring – Woodlands and Forest Resources (WDF)

Pre-Treatment: Data will be collected within forest stand(s) or woodlands using the FORVIS data collection format. In commercial treatment units, the pre-treatment basal area of the live and dead component, the average stand diameter- at-breast height, the average stand total height, and fuel loading information will be collected. Estimated volume per acre or biomass tons per acre will be obtained, if applicable, in stands that will be treated. In commercial and non-commercial treatment units, photo point(s) will be established to show approximate percent cover, habitat types, and occurrence of insect infestations/diseases

Post-Treatment: Measurements as described above will be obtained after project implementation on any given unit to evaluate if stand objectives were reached. Representative sample(s) of established photo points will be periodically revisited on a 10 year cycle to document longer term trends. The number of acres treated and number of small sale/public use permits issued each fiscal year will be reported in the Annual Program Summary and Planning Update.