



ENVIRONMENTAL COMMITMENTS AND MITIGATION MEASURES

Introduction
General Commitments

INTRODUCTION

This chapter discusses the environmental commitments that have been made by the Bureau of Reclamation (Reclamation) during the development of the San Juan River Public Service Company of New Mexico (SJRPNM) Alternative (Reclamation's preferred alternative). Reclamation would share responsibility by implementing measures that would avoid or reduce potential environmental impacts of the Navajo-Gallup Water Supply Project (proposed project). This responsibility would be shared with other Federal agencies, the Navajo and Jicarilla Apache Nations, and the city of Gallup, as well as third-party entities that could include New Mexico and Arizona State agencies and local governments.

This chapter summarizes the commitments made during the planning process and incorporated into the proposed project plan as discussed in chapter IV and mitigation measures proposed in chapter V to reduce or avoid impacts that would otherwise occur as a result of the implementation of the preferred alternative.

As discussed below, the commitments described herein would be implemented by Reclamation, or Reclamation would require their implementation by construction contractors or management authorities. Commitments for pre-construction activities would generally be completed by Reclamation or by the contractors during the final design process and prior to construction activities. Wildlife, wetland, cultural resources, and other mitigation would be completed by Reclamation as described in the following paragraphs. Some commitments, such as monitoring, would continue beyond completion of construction of structural facilities.

GENERAL COMMITMENTS

Throughout the planning process for the proposed project, efforts have been made to avoid impacts where practicable. If avoidance was not possible, then mitigation measures have been developed to reduce the level of impact. The proposed mitigation

measures for each resource, if appropriate, were discussed in chapter V. In addition to specific mitigation measures identified in chapter V, other management practices would be employed during construction activities to minimize environmental effects and would be included in construction specifications. Many of these measures are required in order to comply with Federal, State, or local laws and regulations, regardless of whether they are specifically identified in this document. Reclamation would comply with all relevant Federal, State, and local laws, ordinances, regulations, and standards during the implementation of the preferred alternative. Reclamation would prepare and implement an Environmental Commitments Plan for the proposed project to document and track the completion of the environmental commitments.

Navajo Reservoir Operations

Reclamation would be able to issue water service contracts to meet project demands from Navajo Reservoir provided a successful hydrological determination was completed. At full San Juan River Basin (Basin) development, depletions would increase by 5,270 acre-feet from the Basin over the baseline presented in chapter V, table V-3.

Releases would be similar to those described in the Navajo Reservoir Operations Final Environmental Impact Statement (Reclamation, 2006) to meet the San Juan River Flow Recommendations; however, additional flows would be released from Navajo Reservoir downstream when needed to meet project demands at the SJRPNM intake structure. The demands for the Cutter Lateral portion of the proposed project would be delivered from Navajo Reservoir through the existing Navajo Indian Irrigation Project (NIIP) intake structure in Navajo Reservoir.

Water Uses and Resources Commitments

Until depletions in the Basin reach the baseline depletion in table V-3 plus the 5,270 acre-feet added to the baseline for this project, the Flow Recommendations can be met or only missed less than 0.01 percent of the time for only one category. When the total depletions reached this new baseline depletion, the Navajo Nation would reduce an amount from one or more projects that are presently in the baseline to ensure that the total depletions in the basin remain below the baseline depletions (Navajo Depletion Guarantee).

Under the depletion guarantee, Reclamation would track actual depletions for the NIIP and Animas-La Plata (ALP) Project through the 5-year consumptive use and loss reporting. When the sum of depletions for the NIIP and ALP Project reach a 290,000 acre-foot yearly average, more detailed accounting will be required. Since the NIIP and ALP Project can be tracked, this will minimize monitoring requirements for the Basin. At that point,

hydrologic modeling would be completed for the limits the Navajo Nation would propose putting in place to meet flow conditions described here. No modifications of operating rules are proposed until the method of meeting the depletion guarantee is finalized and the model runs are completed to determine the needed operating criteria. The Navajo Nation would then implement the limitations necessary to keep Navajo's Basin depletions under the baseline depletion unless future consultations, a change in San Juan River Basin Recovery Implementation Program (SJRBRIP) Flow Recommendations, or changes in endangered species' status removed the requirement for such a guarantee.

If there is a different approach taken to the section 7 consultation that will provide for full development of the proposed project in the absence of the depletion guarantee, or there are other changes in terms of water development or status of listed species, Reclamation may have to re-initiate section 7 consultation. If such re-initiation were to occur, additional measures could be required for the proposed project to be in compliance with the ESA and to avoid jeopardy to the Colorado pikeminnow and razorback sucker.

Indian Trust Assets Commitments

No mitigation measures for Indian Trust Assets are proposed at this time. On March 6, 2006, letters requesting identification and consultation regarding Indian Trust Asset issues were sent to 18 Tribal governments. After consultations with affected Tribes/Tribal Nations are completed, mitigation measures may be developed and incorporated into the next draft of this document.

Water Quality Commitments

Reclamation would develop and implement a program to reduce, minimize, or eliminate temporary, short-term increases in suspended sediment loading or other water quality constituents potentially caused by project construction through the incorporation of permits, Best Management Practices (BMPs), and sediment control structures as described under mitigation measures for water quality in chapter V.

Vegetation Commitments

Reclamation would ensure that construction contractors limit ground disturbance to the smallest feasible areas and that they implement BMPs along with the planting or re-seeding of disturbed areas using native plants to assist in the re-establishment of native vegetation as described under mitigation measures for vegetation resources in chapter V.

Reclamation would use accepted erosion control measures during construction, supplement grass seeding with native shrub seed in upland areas where shrub cover is diminished due to pipeline disturbance, monitor planting to ensure establishment, and control noxious weeds in disturbed areas.

Reclamation would replace riparian and wetland habitat with the creation of acre-per-acre replacement or enhancement of 3 acres for each acre lost to mitigate for impacts to riparian and wetland habitat. This includes re-vegetation of 17 acres of non-native riparian (Russian olive and tamarisk) and 3.6 acres of wetland temporarily removed during pipeline construction. Approximately 0.9 acre of nonnative riparian and 1.1 acres of wetlands would be permanently removed for project features.

Wildlife Commitments

Reclamation would ensure that construction contractors limit ground disturbance to the smallest feasible areas and that they implement BMPs along with the planning or re-seeding of disturbed areas using native plant species to assist in the re-establishment of native vegetation, as described under mitigation measures for vegetation resources in chapter V.

Reclamation would restrict activities along the Nutria and Defiance Monoclines, Cutter Canyon, Blanco Canyon, and the corridor from Cutter to Largo Canyons during the nesting season (January 15 to August 15). Reclamation would conduct extensive nest searches within a quarter mile of proposed activities immediately prior to construction and avoid active nests if construction activities could not be scheduled outside the January 15 to July 15 timeframe.

Reclamation would incorporate raptor perch guards or raptor safe configurations on all new transmission structures.

Reclamation would avoid removal of riparian and wetland vegetation between March 15 and August 15 to avoid potential impacts to migratory bird nesting.

Reclamation would trench and bury pipeline concurrently to minimize trapping of small wildlife. Reclamation would construct escape ramps for trenches left open overnight.

Aquatic Resources Commitments

The SJRBRIP would monitor and report total depletions in the Basin as described in the “Water Uses and Resources Commitments” section. The Navajo Nation would implement a Navajo Depletion Guarantee when needed to keep the Navajo Nation’s depletions within the ESA depletion baseline.

Reclamation would also incorporate BMPs, as previously described in the “Water Quality Commitments” section, to avoid or minimize project impacts to aquatic resources.

Special Status Species Commitments

Reclamation would implement conservation measures found in the biological opinion on the proposed project (see appendix C, part III). These measures address the Colorado pikeminnow, razorback sucker, bald eagle, Southwestern willow flycatcher, and Mesa Verde cactus. In addition, Reclamation would implement conservation measures for Navajo Nation listed species as described under mitigation measures for sensitive species in chapter V.

Reclamation would conduct surveys for ferruginous hawk and bald eagle in proposed construction areas 1 year in advance of construction for pipeline routes and construction sites not adjacent to highways, well-traveled roads, or areas of regular human activity. If active nests were found, Reclamation would implement appropriate protective measures to avoid or minimize nest disturbance.

Reclamation would conduct surveys for Southwestern willow flycatcher in riparian and wetland habitat prior to construction within one-quarter mile of disturbed areas and avoid construction activities during the nesting season (March 15 to August 15) if active nesting is found.

Reclamation would delineate and avoid beautiful gila plants where possible.

Reclamation would, where possible, refine the pipeline alignment to avoid individual Mesa Verde cactus and populations. Reclamation would mark individual cacti with protective cones when construction activities occurred in their vicinity. Where impacts were unavoidable, Reclamation would consult with a qualified botanist and temporarily relocate affected cacti during construction and re-plant once construction is complete.

Reasonable and prudent measures (RPMs) for Colorado pikeminnow and razorback sucker included in the biological opinion are not included as environmental commitments. RPMs are measures to reduce incidental take of threatened or endangered

species and are described as terms and conditions. The terms and conditions are nondiscretionary actions required by the action agency and are not included as mitigation measures.

Recreation Commitments

No environmental commitments are made for recreation resources.

Land Use Commitments

Reclamation would ensure that construction contractors limited ground disturbance to the smallest feasible area and that they implemented BMPs along with the planting or re-seeding of disturbed areas to minimize impacts to existing land uses as previously described in the “Vegetation Commitments” section.

Reclamation would ensure that construction contractors fenced re-vegetated areas to prevent grazing activities until disturbed areas became re-established, and Reclamation would work with the Navajo Nation to provide temporary relocation assistance to affected livestock owners along the pipeline corridor.

Reclamation would also provide relocation assistance to affected residences displaced by construction of the San Juan River water treatment facility.

Hazardous Materials Commitments

Reclamation would contact pipeline and gas well companies prior to construction activities to identify and avoid existing hazards. Pipeline alignments would be adjusted, as needed, to avoid impacts to pipelines and wells.

Soils Commitments

Reclamation would mandate that construction contractors use and implement measures contained in erosion control guidelines and BMPs to control soil erosion from construction areas, as described under mitigation measures for soils in chapter V.

Geology Commitments

No environmental commitments are made for geologic resources.

Paleontologic Commitments

During construction activities, Reclamation would monitor areas with exposure of geological units or settings that indicated a high likelihood of yielding vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. In the event of discovery, Reclamation would evaluate the significance before construction could continue.

Reclamation would manage, on a case-by-case basis, construction activities adjacent to the Lynbrook and Betonnie Tsosie Fossil Areas. Reclamation would conduct paleontologic clearances prior to any surface-disturbing activities along the pipeline corridor in the Lynbrook and Betonnie Tsosie Fossil Areas.

Air Quality and Noise Commitments

Reclamation would require that construction contractors implement measures to control fugitive dust during construction, as described under mitigation measures for air quality and noise in chapter V. No environmental commitments are made for noise abatement.

Socioeconomics Commitments

No environmental commitments are made for socioeconomic resources.

Environmental Justice Commitments

No environmental commitments are made for environmental justice.

Cultural Resources Commitments

Reclamation would implement a program to compensate for losses of archaeological sites that would occur as a result of construction and operation of the proposed project and the construction of conveyances, as defined in the mitigation measures for cultural resources in chapter V.

Reclamation would coordinate the program with the New Mexico State Historic Preservation Officer, the Navajo Nation Tribal Historic Preservation Officer, Bureau of Land Management, Bureau of Indian Affairs, the city of Gallup, and the Advisory Council on Historic Preservation.

Reclamation would ensure compliance with mitigation measures developed in accordance with the Native American Graves Protection and Repatriation Act and Executive Order 13007, as described under the mitigation measures for cultural resources in chapter V.