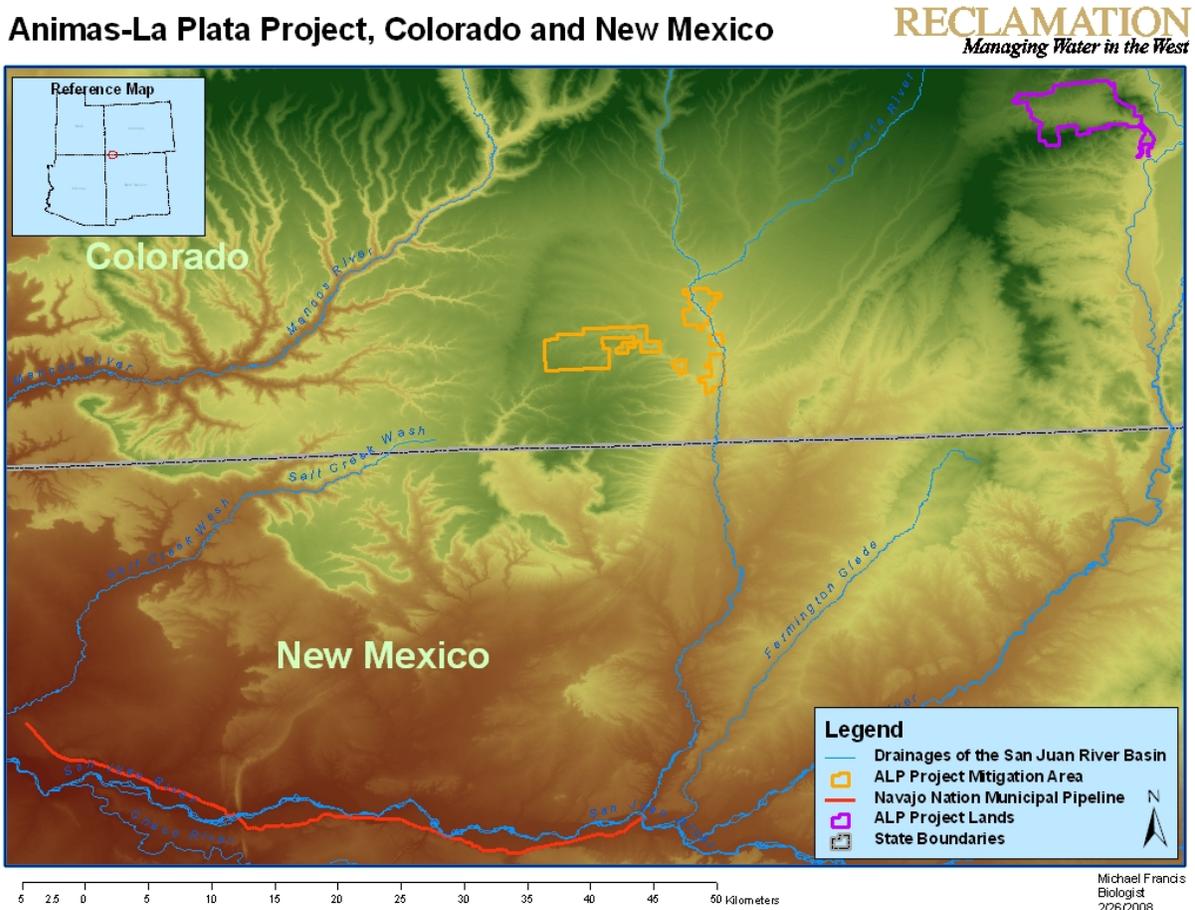


CHAPTER 1. INTRODUCTION

1.1 Background

In July 2000, the Bureau of Reclamation (Reclamation), in cooperation with the Environmental Protection Agency (EPA), the Ute Mountain Ute Tribe (UMUT) and the Southern Ute Indian Tribe (SUIT), completed the Final Supplemental Environmental Impact Statement (FSEIS) for the Animas-La Plata (ALP) Project, located in and serving southwestern Colorado and northwestern New Mexico (Figure 1).

Figure 1. General Project Area Map.



The purpose of the ALP Project is to implement the Colorado Ute Indian Water Rights Settlement Act of 1988 (P.L. 100-585), as amended by the Colorado Ute Settlement Act Amendments of 2000. The FSEIS identified mitigation for 134 acres of combined wetland/riparian vegetation that would be impacted as a result of the ALP Project. Reclamation

will mitigate for these impacts at a ratio of 1.5:1, requiring a minimum of 201 acres of wetland/riparian mitigation that includes some elements of enhancement, protection, restoration and creation. Reclamation is also required to mitigate for wildlife habitat and upland vegetation losses in Ridges Basin by the enhancement and protection of 2,700-2,900 acres in upland areas. The purpose of this report is to document the completion of mitigation required for the ALP Project for impacts made to wetland vegetation, upland vegetation and wildlife habitat.

In the 2000 FSEIS Reclamation committed to purchasing the Mitigation Area (MA) for wetland/riparian vegetation purposes prior to initiation of construction of the ALP Project. In 2002 Reclamation completed the purchase of the MA which consists of three separate purchased parcels (tracts) in 6 non-contiguous blocks, totaling nearly 6,000 acres (Table 1, Figure 2, below, and Appendix A). The MA also serves as the location for wildlife habitat mitigation and upland vegetation mitigation needs also identified in the FSEIS. A significant portion of the MA contains segments of the La Plata River and its floodplain. There are approximately 232 acres of wetland/riparian vegetation within the MA in tracts II and III, along with associated buffer zones (Figure 3, below).

Table 1. Acreage of Land Types within the MA as Revised in 2007.

| Tract | Block | Land Unit Name | Upland | Riparian | Riparian Buffer | Acres by Unit |
|----------------------|----------|-----------------------------|---------------|--------------|-----------------|---------------|
| <i>I</i> | <i>A</i> | <i>Red Horse Gulch</i> | 3607.4 | 0.0 | 0.0 | 3607.4 |
| | <i>B</i> | <i>Maverick Gulch</i> | 155.6 | 0.0 | 0.0 | 155.6 |
| <i>II</i> | <i>C</i> | <i>Johnny Pond Arroyo</i> | 164.0 | 0.0 | 0.0 | 164.0 |
| | <i>E</i> | <i>La Plata River North</i> | 106.8 | 32.6 | 15.4 | 154.7 |
| | <i>F</i> | <i>La Plata River South</i> | 585.6 | 77.0 | 21.4 | 684.1 |
| <i>III</i> | <i>D</i> | <i>Redmesa</i> | 990.1 | 122.7 | 42.4 | 1155.2 |
| Acres by Type | | | 5609.5 | 232.3 | 79.1 | 5920.9 |
| TOTAL ACRES | | | | | | |

Note that these acreages were updated in 2007 based upon cadastral survey data acquired from the Bureau of Land Management. The remainder of the MA acreage well exceeds the acreage required (2,700-2,900 versus actual 5,609.5) for vegetation and wildlife related mitigation for the ALP Project. Refer to the 2003 Wetland/Riparian Mitigation and Monitoring Plan (WMMP) and its appended Integrated Vegetation Management Plan (IVMP) for a detailed description of riparian habitat types and the relative quality of those riparian habitat types evaluated in 2001 and updated in 2005.

In the future, Reclamation will oversee management of the MA to assure wetland/riparian vegetation, wildlife habitat and upland vegetation mitigation resource values remain protected.

Figure 2. ALP Project Mitigation Area Map.

Animas-La Plata Project, Mitigation Area

RECLAMATION
Managing Water in the West

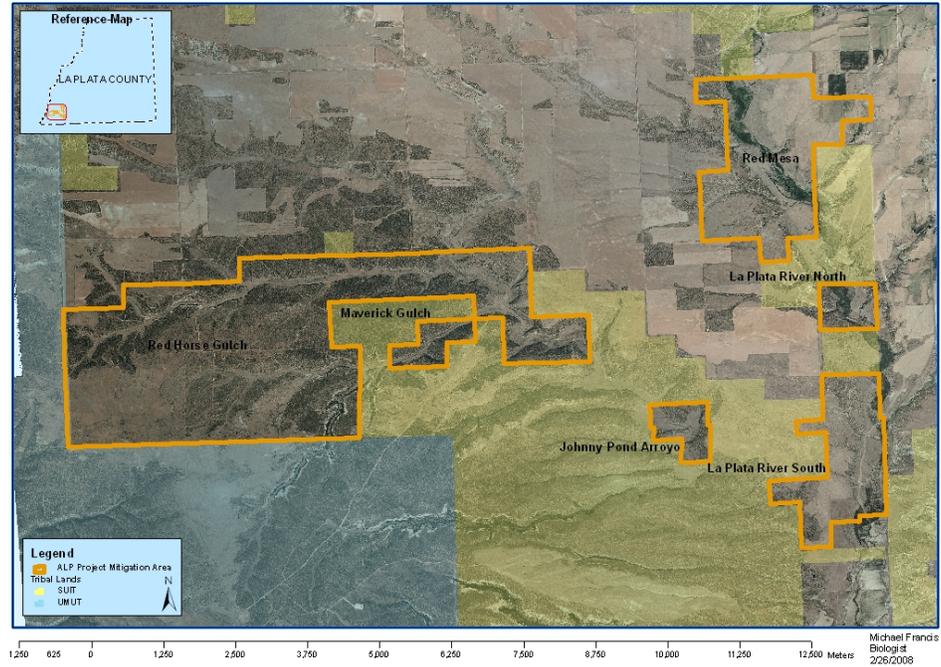
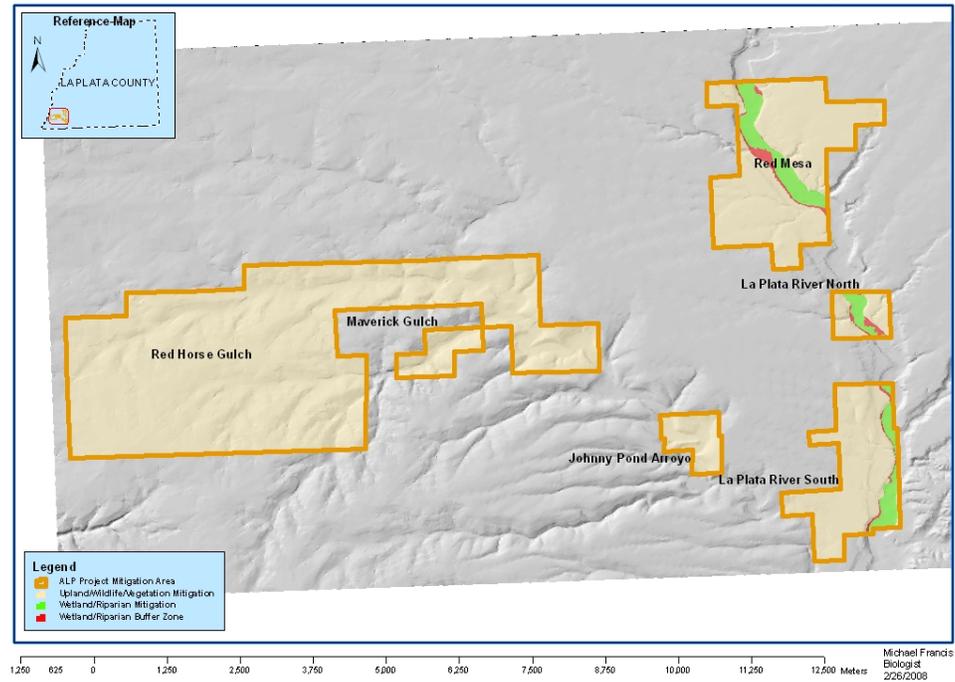


Figure 3. ALP Project Mitigation Area Zones.

Animas-La Plata Project, Mitigation Area Zones

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1.2 Wetland/Riparian Vegetation Mitigation Requirements

1.2.1 Limiting Factors and Mitigation Goals and Objectives

The overall goal of the WMMP is to restore a naturally self-sustaining riparian ecosystem within the MA that supports the best functional conditions that can be practicably established. The objectives outlined in the WMMP focus on two management areas (hydrology health and integrated vegetation management) each containing three factors that are affecting the functional conditions of the MA. The limiting factors identified in the two management areas as follows:

- **Hydrology Health:**
 - Monitor to ensure adequate hydrologic conditions are maintained within the MA and continue use of water rights associated with the MA.
 - Protect or stabilize eroding stream banks as needed.
 - Restore degraded floodplain within straightened, armored and leveed river reaches.

- **Integrated Vegetation Management:**
 - Remove the negative effects of livestock grazing.
 - Reduce proliferation of undesirable (noxious weed) species and replace with desirable species.
 - Improve the condition of degraded buffer areas adjoining riparian habitats.

In combination, these six factors have negatively affected the quality and function of riparian habitats within the MA, but the majority of their effects have been corrected with mitigation measures. Reclamation's mitigation progress to date is described below in Chapter 2, "Wetland/Riparian Vegetation Mitigation Progress".

1.2.2 Milestone - 95% Completion of Developed Physical Features

In the FSEIS for the ALP Project, Reclamation committed to completion of 95% of the physical features of wetland/riparian vegetation mitigation development before initiation of ALP Project operation. In the 2003 WMMP, Reclamation defined this 95% completion milestone by the following factors:

- All lands to mitigate ALP wetland/riparian vegetation loss will have been acquired by Reclamation.

- All of the wetland/riparian parts of the MA will have been adequately fenced to prevent livestock trespass and no livestock will be allowed to graze in the MA unless it is determined that it would be beneficial to the MA to periodically graze portions of the MA, such as to promote vigor or to control weeds.

- All river restoration construction downstream of Long Hollow will have been completed and monitored to ensure the constructed banks and plantings are functioning properly.
- All river banks outside of the channel restoration segment within the MA will have been monitored to ensure natural recovery is occurring.
- 100% of tamarisk (*Tamarix chinensis*¹, *T. ramosissima* and *T. parviflora*) and Russian olive (*Elaeagnus angustifolia*) trees will have been removed from the tree and shrub canopies of the MA. Reclamation will have implemented an IVMP that includes herbaceous weed control for the riparian area of the MA.
- Planting and re-seeding with desirable species will have been accomplished and monitored for the riparian areas being restored.

Chapter 2, below, discusses how Reclamation has reached the milestone of 95% completion of the physical features of wetland/riparian vegetation mitigation development to allow for initiation of Project operation.

1.2.3 Performance Criteria for Full Mitigation Success

In the 2003 WMMP, as refined in the 2005 IVMP, Reclamation defined the full mitigation success for wetland/riparian mitigation with the following factors:

- All of the fencing will have been installed around the MA to prevent livestock trespass. Grazing will remain prohibited in the MA unless in the future Reclamation determines that it would be beneficial to the MA to have periodic controlled grazing on portions of the MA.
- Within the MA all tamarisk and Russian olive trees will have been removed from the riparian forest-scrub/shrub (tree and shrub) canopies. The tamarisk and Russian olive shoots and re-sprouts within the herbaceous canopy layer (defined as less than 1 meter in height here) will be controlled by the implementation of the IVMP.
- During the monitoring period belt transects will have been used to monitor the vegetation in the MA. Data gathered by Reclamation using belt transects prior to initiation of MA development will have been used as a reference of areal coverage of noxious weeds in the MA and as a reference to determine the level of weed control effectiveness and development of desired species coverage over time. Reclamation will have reduced noxious weed coverage through the implementation of an IVMP.
- All weed-treated areas within the MA will have been re-seeded with desirable herbaceous

¹ All scientific names for plant species referenced in this document use the United States Department of Agriculture, Natural Resources Conservation Service PLANTS database (<http://plants.usda.gov/>) for current designations at the time of authorship. See Appendix B for a summary listing of species recorded in the MA.

(native grass/forb mix) species where undesirable herbaceous species have been removed or herbaceous canopy cover has been reduced due to weed treatment activities. Some of the more disturbed areas will have additional spot and/or systematic plantings and seeding to ensure mitigation objectives as described later in this section of groundcover (herbaceous canopy) improvement are reached. Reclamation will have seeded in excess of 30 riparian acres with an appropriate native grass/forb mix to offset groundcover lost by weed treatment. Groundcover loss and re-establishment will have been monitored by annual vegetation monitoring transects.

- All areas cleared of Russian olives and tamarisks were to be revegetated with native vegetation, emphasizing native cottonwood and willow species. This was to be accomplished by spot plantings and systematic plantings for more disturbed areas as described below. In the IVMP, Reclamation refined this objective to focus plantings in the river restoration area as other areas had sufficient other native vegetation to fill in the small voids created in the respective tree and shrub canopies.

While Reclamation did not expect to reach full mitigation success until the end of the 2008 growing season, our current analysis indicates that we have fully met our wetland/riparian and wildlife mitigation requirements as of autumn, 2007.

Chapter 2, below, illustrates how Reclamation has reached the full wetland/riparian vegetation mitigation completion stage.

1.3 Wildlife Habitat and Upland Vegetation Mitigation Requirements

Reclamation purchased the MA to meet wetland/riparian vegetation, wildlife habitat and upland vegetation mitigation needs. For wildlife habitat and upland vegetation mitigation, Reclamation is required to replace and enhance 2700-2900 acres of wildlife habitat and 1645 concurrent acres of upland vegetation impacted as a result of the ALP Project. Reclamation has well exceeded the acreage needed for mitigation acquisition as described above under section 1.1.

For enhancement, Reclamation has determined that seeding, weed management, water feature management and wildlife-friendly livestock exclusion fence installation would serve to enhance the habitat values needed to mitigate for impacts resulting from development of the ALP Project.

As an added enhancement, Reclamation has committed to leaving the last cutting of hay in the irrigated portion of the MA for wildlife values of cover and forage. Chapter 3 discusses Reclamation's wildlife habitat and upland vegetation mitigation efforts and completion.