

# RECLAMATION

*Managing Water in the West*

## Animas-La Plata Project

Upper Colorado Region



U.S. Department of the Interior  
Bureau of Reclamation  
Four Corners Construction Office  
Durango, Colorado

## Project Background

The Animas-La Plata Project (ALP Project), located in southwestern Colorado and northwestern New Mexico, has been the subject of substantial public interest and environmental review since it was authorized. Following is a short history leading to initiation of construction of the project and current construction progress.

**1968** - United States Congress (Congress) authorized construction of the ALP Project

**1980** - The Bureau of Reclamation released a Final Environmental Statement on the project.

**1988** - Congress passed the Colorado Ute Indian Water Rights Settlement Act which authorized the implementation of a 1986 water rights settlement agreement.

**1990** - Based on new biological information, the U.S. Fish and Wildlife Service issued a draft biological opinion concluding that the project would jeopardize the continued existence of the Colorado pikeminnow.

**1991** - U.S. Fish and Wildlife Service issued a Final Biological Opinion that contained a reasonable and prudent alternative that limited the project depletions to 57,100 acre-feet per year. This opinion allowed construction of the project to begin.

**1992** - A lawsuit filed by environmental organizations halted construction of the project.

**1996** - Reclamation released a Final Supplement to the Final Environmental Statement, that addressed updated environmental information.

**1996-97** - Supporters and opponents of the project addressed unresolved issues associated with the original ALP Project to gain consensus on an alternative to the project.

**1998** - The Department of the Interior recommended construction of a substantially scaled-down project that was designed to satisfy the intent of Colorado Ute Tribes' 1986 water rights settlement agreement.

**2000** - Reclamation released a Final Supplemental Environmental Impact Statement and Record of Decision that identified the selected alternative as a down-sized project that focuses on providing the Colorado Ute Tribes, as well as others, an assured water supply. The selected alternative contained both structural and nonstructural components.

**2000** - Congress authorized construction of the scaled-down project with the Colorado Ute Settlement Act Amendments of 2000.

**2001** - November 9, 2001, Commissioner, Bureau of Reclamation, grants approval to initiate project construction.

**2002** - Construction began with installation of the Inlet Conduit Sleeve.

**2003** - Update of Project Construction Cost Estimate reveals increase of project cost from approximately \$338 million to \$500 million. Scheduled completion of the project moves from approximately 2008 to 2011. Ridges Basin Dam Outlet Works Excavation is completed. Durango Pumping Plant excavation was initiated.

**2004** - Construction continued on Ridges Basin Dam Foundation Excavation, with over two million cubic yards of material excavated. Durango Pumping Plant excavation, Intake Structure, and Fish Bypass are substantially completed. Three new contracts were awarded: Materials Processing Plant, Durango Pumping Plant Structure, and Outlet Works Tunnel Excavation. Preliminary design for the Navajo Nation Municipal Pipeline continues.

### Project Data

#### Ridges Basin Dam

Height above streambed ..... 217 feet  
Crest length ..... 1,670 feet  
Release ..... 125 cfs peaks at 200 cfs

#### Lake Nighthorse

Capacity  
Active storage..... 90,000 acre-feet  
Inactive storage..... 30,000 acre-feet  
Total storage..... 120,000 acre-feet  
  
Total water surface..... 1,490 acres

#### Durango Pumping Plant

Maximum Dynamic lift..... 550 feet  
Capacity..... 280 cubic feet per second

#### Ridges Basin Inlet Conduit

Length..... 2.1 miles  
Capacity..... 280 cubic feet per second

#### Navajo Nation Municipal Pipeline

Length..... 28.9 miles  
Initial Capacity..... 12.9 cubic feet per second

## Project Water Supply<sup>1</sup>

	Supply (acre-feet)	Depletion (acre-feet)
<b>Colorado</b>		
Southern Ute Indian Tribe	33,050	16,525
Ute Mountain Ute Tribe	33,050	16,525
Animas-La Plata Water Conservancy District	5,200	2,600
State of Colorado	<u>10,460</u>	<u>5,230</u>
<b>Total</b>	<b>81,760</b>	<b>40,880</b>
<b>New Mexico</b>		
Navajo Nation	4,680	2,340
San Juan Water Commission	20,800	10,400
La Plata Conservancy District	<u>1,560</u>	<u>780</u>
<b>Total</b>	<b>27,040</b>	<b>13,520</b>

<sup>1</sup>The difference between total depletion shown and the average annual 57,100 acre-foot depletion is the allowance for evaporation that will occur at Lake Nighthorse, approximately 2,700 acre-feet.

**2005** - Construction was initiated on the Durango Pumping Plant (DPP) structure. Erection of an onsite Sky Ute Sand and Gravel concrete batch plant at DPP was completed and brought into production. The foundation and first floor concrete in the main pumping plant bay was completed. The floor of the intake channel/fish screen was completed. The pipes to and from the pumps were installed and are being encased in concrete. Ridges Basin Dam Completion Contract was awarded on March 11th. Grouting was initiated on the foundation and both abutments. Placement of the zone materials (including sand and filter drains, impervious clay core, and Zone 4 shell) is ongoing. The materials processing plant was erected and produces Zone 2 (sand), Zone 3 (gravel), Zone 6 (rock), and road base materials. On August 12, 2005, the Ridges Basin Dam Zone One Clay Placement Ceremony was held. During the ceremony, religious leaders of the Colorado Ute Indian Tribes blessed the building of the dam. The outlet works tunnel and gate chamber was excavated. Concrete invert tunnel lining was initiated. Construction of Basin Creek Drop Structures 5 & 6 was initiated. After additional value engineering analysis, drop structures 9 and 11 were eliminated.

**2006** - Construction continued on Durango Pumping Plant. Approximately 20,000 cubic yards of concrete were placed at the intake fish screen, plant, and air

chamber structures. Installation, at the pumping plant site, of the 72 inch buried steel pipeline (Ridges Basin Inlet Conduit) was initiated and completed. In December, the contract to construct Ridges Basin Inlet Conduit was awarded.

Ridges Basin Dam construction continued. Approximately three million cubic yards of embankment zoned fill material were placed bringing the dam elevation to an average height of 6,783 feet. This is approximately 128 feet higher than the elevation at the conclusion of the 2005 construction year. At the end of the 2006 construction year, the embankment rose nearly 153 feet above the bedrock elevation of approximately 6,630 feet. Grouting operations continued through this season on the dam abutments and in the outlet works tunnel. The materials processing plant continued in full production until winter shutdown.

The outlet works tunnel upstream reinforced concrete lining and down stream arch lining were completed. Concrete lining in the gate chamber was initiated in late fall. The intake tower was completed to elevation 6,760 feet. Construction of Basin Creek Drop Structures 5 & 6 was completed. Drop structures 7, 8 and 12 were completed.

## Project Plan

The structural components consist of:

- An off-stream reservoir at Ridges Basin (Lake Nighthorse), southwest of Durango, Colorado, to store about 120,000 acre-feet (total capacity) of water pumped from the Animas River.
- A 280 cubic feet per second capacity pumping plant located south of the center of Durango on the west side of the Animas River.
- A buried pipeline (Inlet Conduit) that will carry project water from the pumping plant to Lake Nighthorse.
- Navajo Nation Municipal Pipeline, a buried pipeline to carry municipal water from Farmington, New Mexico, to the Shiprock, New Mexico area to benefit the Navajo Nation.

Water stored in Lake Nighthorse will be released as necessary back to the Animas River for municipal and industrial users within Colorado and New Mexico. Water could also be pumped from Lake Nighthorse and conveyed to rural areas west of Durango, however nec-

essary facilities to pump and convey the water would have to be provided by others. Lake Nighthorse will include an inactive pool of approximately 30,000 acre-feet for recreational, fishery, and water quality purposes. Recreation facilities will be provided by other entities.

The nonstructural component of the project administered by BIA is the Tribal Resource Fund for use by the Ute Mountain Ute and Southern Ute Indian Tribes for protection, acquisition, enhancement, or development of natural resources for the benefit of the Tribes and their members.



Artist concept of Ridges Basin Dam and Lake Nighthorse.

## Project Financing

The Colorado Ute Settlement Act Amendments of 2000 provide that project construction costs allocated to the three benefiting Indian Tribes are non-reimbursable (The Indian Tribes will not pay any of the construction costs of the project). The project costs allocated to the non-Tribal participants are reimbursable and may be satisfied upon the payment in full of the non-Tribal water capital obligations prior to completion of construction. However, the non-Tribal capital obligations will be subject to a final cost allocation upon project completion and may warrant additional payment. Certain project costs allocated to recreation, cultural resources, and fish and wildlife mitigation are non-reimbursable consistent with Federal Reclamation law.

## Additional Information

For additional information on the Animas-La Plata Project please write the Western Colorado Area Office, Bureau of Reclamation, Attention Ken Beck, 835 East 2nd Ave Suite 300, Durango, Colorado 81301, or call (970) 385-6558. You may also visit our web site at [www.uc.usbr.gov](http://www.uc.usbr.gov).

