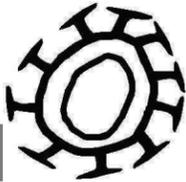


Sah-gwah-ghowhidz
The Green Basin
The Animas-La Plata
Ute Water Rights Project



Acknowledgements

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The Ute Mountain Ute Tribe (UMUT) took the lead on consulting with numerous tribes who desired involvement with ALP. UMUT thanks all of the consulting tribes for their cooperation over the course of this project: Southern Ute Indian Tribe (SUIT), Hopi Tribe, Jicarilla Apache Tribe,

Navajo Nation, Uintah-Ouray Tribe, Pueblo of Acoma, Pueblo of Cochiti, Pueblo of Isleta, Pueblo of Jemez, Pueblo of Laguna, Pueblo of Nambe, Pueblo of Picuris, Pueblo of Pojoaque, Pueblo of San Ildefonso, Pueblo of San Felipe, Pueblo of San Juan, Pueblo of Sandia, Pueblo of Santa Clara, Pueblo of Taos, Pueblo of Tesuque, Pueblo of Zia, Pueblo of Zuni, Santa Ana Pueblo, and Santo Domingo Pueblo.



Aerial photo of Lake Nighthorse and the Dam. Taken in 2010.

Cover inset photos, **Top:** Ute riders. (Photo courtesy of Terry Knight) **Middle:** Chief Ignacio of the Weenuche band. **Bottom:** Ute Indians. (Photos courtesy of the Colorado Historical Society)



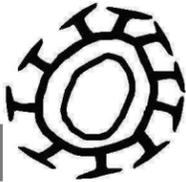
The Colorado Ute Tribes acknowledge the commitment of the ALP Cultural Resources Oversight Committee. The committee was headed by Terry Knight, Cultural Resources Contract Coordinator for the Ute Mountain Ute Tribe. He was assisted by Contract Administrator Lynn Hartman. Also on the committee from the Ute Mountain Ute Tribe was Harold Cuthair, and Doug Bowman, tribal archaeologist contracted to coordinate the affairs of both tribes. Committee members from the SUIT were Pathimi Goodtracks and Howard Richards. The Bureau of Reclamation was represented by Warren Hurley and Joe Tuomey.

SWCA Environmental Consultants, under contract to the Ute Mountain Ute Tribe, ran a multi-year archaeological project under the direction of Dr. Jim Potter, Principal Investigator, and Tom Yoder, Field Director. SWCA subcontracted field personnel from two local companies, Woods Canyon Archaeological Services and Michael A. Frost Environmental Services. Weeminuche Construction Authority (WCA) staff included WCA Construction Manager Robin Halverson, Don Soden, Rob Englehart, Vergil Gray, Sheldon House, Kirk Porambo, Don Flaugh, Larry Darling, and John Siegrist.

Unless otherwise credited, all photos and images are courtesy of SWCA Environmental Consultants.

WCA workers celebrate the excavation of 1 million cubic yards of material for the dam in July of 2004. (Photo courtesy of WCA)





**Table of
Con-**

- Acknowledgements1**
- Introduction4**
- “As Long as the Water Flows”7**
- History of the ALP Water Project.....9**
 - The Original ALP Plan.....9
 - The Dolores Project10
 - Important Laws Affecting ALP and the Utes10
- The Utes in Colorado and Utah.....12**
 - The Ute Trail18
- Timeline of the ALP Project22**
 - Detailed Timeline24
- The Project Begins26**
 - Key Components.....26
 - Ridges Basin Dam27
 - Lake Nighthorse (Ridges Basin Reservoir)28
 - Ridges Basin Inlet Conduit (pipeline).....28
 - Durango Pumping Plant.....28
 - The ALP Wildlife and Wetlands.....29
- Weeminuche Construction Authority.....30**
- In the Beginning.....32**
 - The ALP Archaeological Project32
 - Ancient Peoples in the Durango Area33
 - The Pueblo I People in Ridges Basin.....34
 - The Sacred Ridge Site36
 - The People Leave37
 - To Learn More.....38
- Valley Families39**
 - The Thompson Family, in Ridges Basin from 1880–191939
 - The Harper Family, in Ridges Basin from 1896–196939
 - The Kikel Family, in Ridges Basin from 1915–1930s.....40
 - John Porter, the Porter Mine, and the Town of Porter, 1890–192040
 - The Bodo Family, in Ridges Basin from 1919–197141
- For Further Information44**



Introduction

This book tells the story of the Animas–La Plata Project: one of the last major water projects in the West. The Animas–La Plata project (or just “ALP,” as it is usually called) was conceived as a way to deliver large amounts of water from the Animas River westward to “the dry side” and into the La Plata River basin. The water could be used as drinking water or for irrigation. Government officials proposed building several reservoirs, miles of canals and pipelines, and multiple water pumping plants to take water from the Animas River into the dryer areas. The ALP project was supposed to follow directly on the heels of the Dolores Project, a massive Bureau of Reclamation pro-

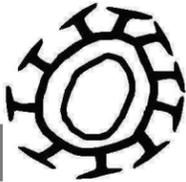
ject in the 1970s and 1980s. But this proposal did not acknowledge the U.S. government treaties with the native Ute Indian tribes of southwest Colorado that had been signed over 140 years before. Those treaties, signed in 1868, guaranteed water from this region to the Ute tribes. So the ALP project could not be built without Ute cooperation.

In 1968, when Congress authorized the gigantic project, the Ute tribes were not happy. Their 100-year-old legal rights to the water were being ignored. Environmental groups were not happy, either. They were worried that many species of fish, including endangered species, could not survive if large amounts of water were taken out

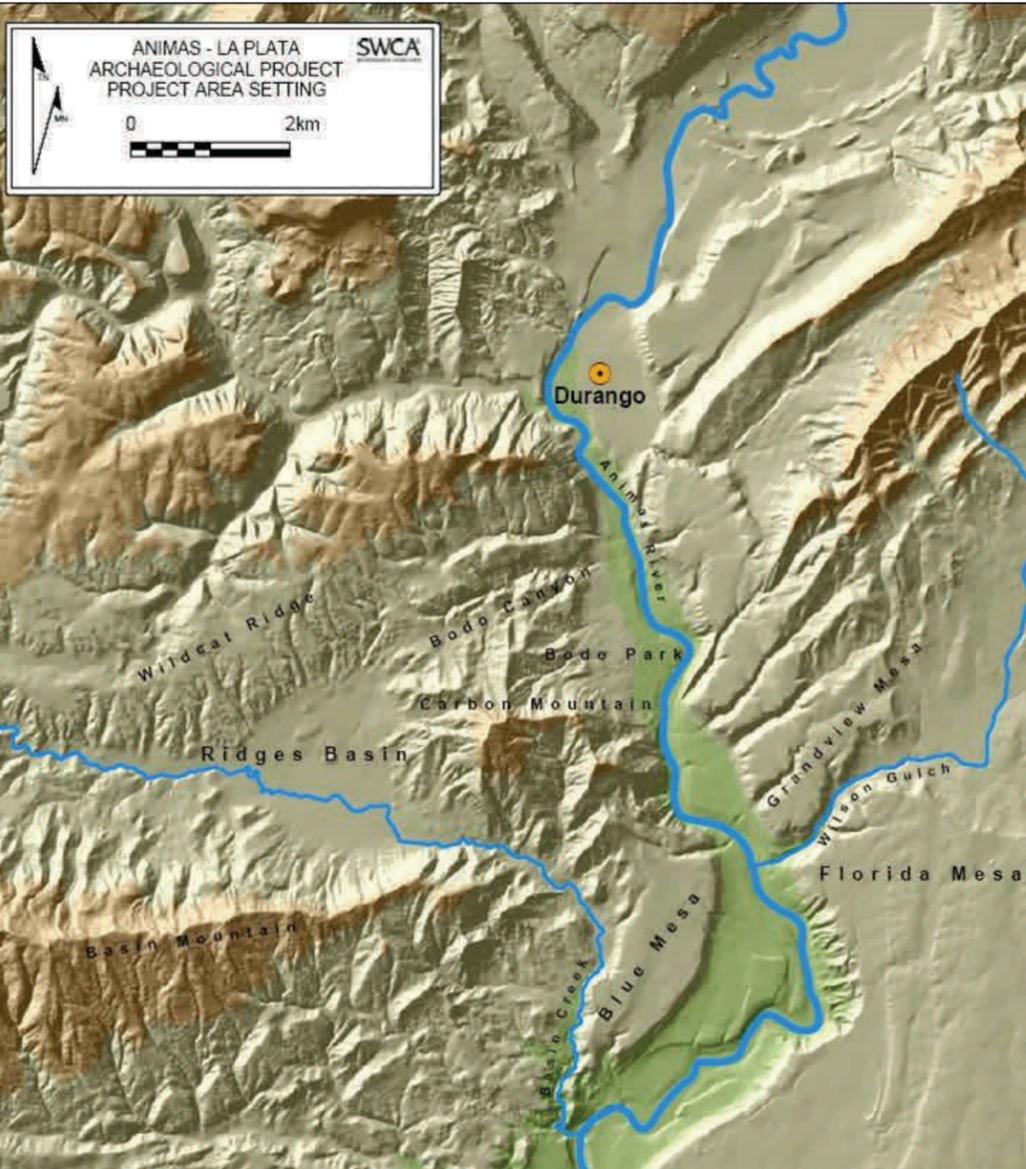
*Ute Indians.
(Photo courtesy
of the Colorado
Historical
Society)*



THE ANIMAS-LA PLATA UTE WATER RIGHTS PROJECT



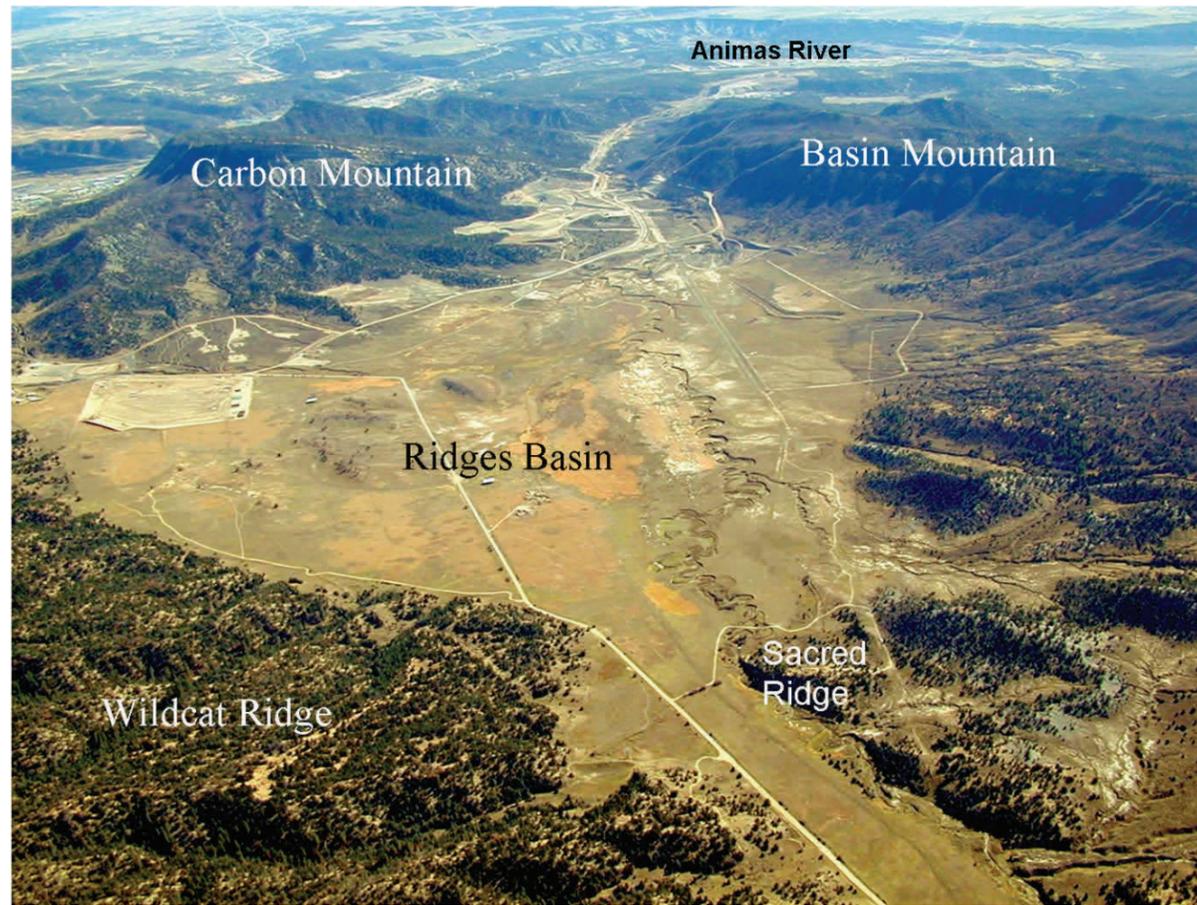
of the Animas River. Archaeologists knew that hundreds of prehistoric sites would be flooded or destroyed by construction. It seemed that the federal government, the Ute Indian tribes, and everyone concerned with the landscape and the environment all wanted different things from the Animas River and its water. Starting in the 1930s, and for decades following, Colorado Congressman Wayne Aspinall, Ute Mountain Ute Indian Chief Jack House, and various environmental groups tried to negotiate a compromise. Finally, in 1988, a landmark law was passed: the Colorado Ute Indian Water Rights Settlement Act. This law allowed some parts of the ALP water project to be built, but still protected the tribes' water rights.



This map shows the locations and topography of Ridges Basin, Blue Mesa, and the surrounding areas near Durango, Colorado.



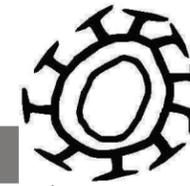
Aerial photo of Ridges Basin taken in 2003, facing east, with the Animas River in the background. In the Ute language, Ridges Basin has always been called Sah-gwah-ghowhidz—"The Green Basin."



Ridges Basin is a triangular, open valley about 3 miles long and 2 miles wide. In the eastern corner of Ridges Basin was a small gap, where Basin Creek flowed between

Carbon Mountain and Basin Mountain. That gap is where the Lake Nighthorse Dam is now built.

For the ALP project the Bureau of Reclamation contracted WCA to build the Durango Pumping Plant to pump water from the Animas River uphill 511 feet, across a divide, and into Ridges Basin. The dam across Basin Creek holds the water back to create Lake Nighthorse. The surface of this reservoir is almost 1,500 acres. The dam was built with local materials from nearby Blue Mesa and the surrounding area.



“As Long as the Water Flows...”

The treaties that forced the Ute Indians onto reservations, beginning in 1868, promised water rights to the local Ute tribes “as long as the water flows and the grass grows.” These promises are only now being fulfilled, by the construction of the ALP water project.

Left with only a small fraction of their original territory, the Utes had a long-standing need for a dependable water source. Led by the personal efforts of Chief Jack House and Congressman Wayne Aspinall, the Utes began the decades-long process of returning water to the tribes.

The Ute tribe and Ute-owned businesses were significantly involved in the construction, management, and archaeological work for the ALP project. A construction company owned by the Ute Mountain Ute Tribe, Weeminuche Construction Authority, built the dam and inlet conduit for the Ridges Basin reservoir. The Ute Mountain Ute Tribe hired SWCA Environmental Consultants to do the archaeological work, and SWCA hired some of its personnel from Michael A. Frost Environmental Services, Inc., another local company owned by Stanley Frost of the Southern Ute Tribe. The Ute tribes also took the lead on consulting with more than 22 pueblos and tribes that claim ties to the ancient ruins in the area.

The ALP project represents the culmination of more than 100 years of concessions and compromise between the Ute tribes and the federal government. It is difficult to convey here how important this project has become to the Ute people and their many water partners.



Utes gathered for the 1913 Shan Kive festival at Garden of the Gods, near Colorado Springs. (Photo courtesy of the Colorado Historical Society)



Upper left: Ute Indian camp in front of Sleeping Ute Mountain. (Photo courtesy of the Colorado Historical Society)

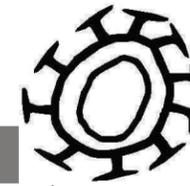


Right: Water flows into Lake Nighthorse. (Photo courtesy of WCA)



Lower left: Lake Nighthorse begins to fill behind the Dam. (Photo courtesy of the Bureau of Reclamation)





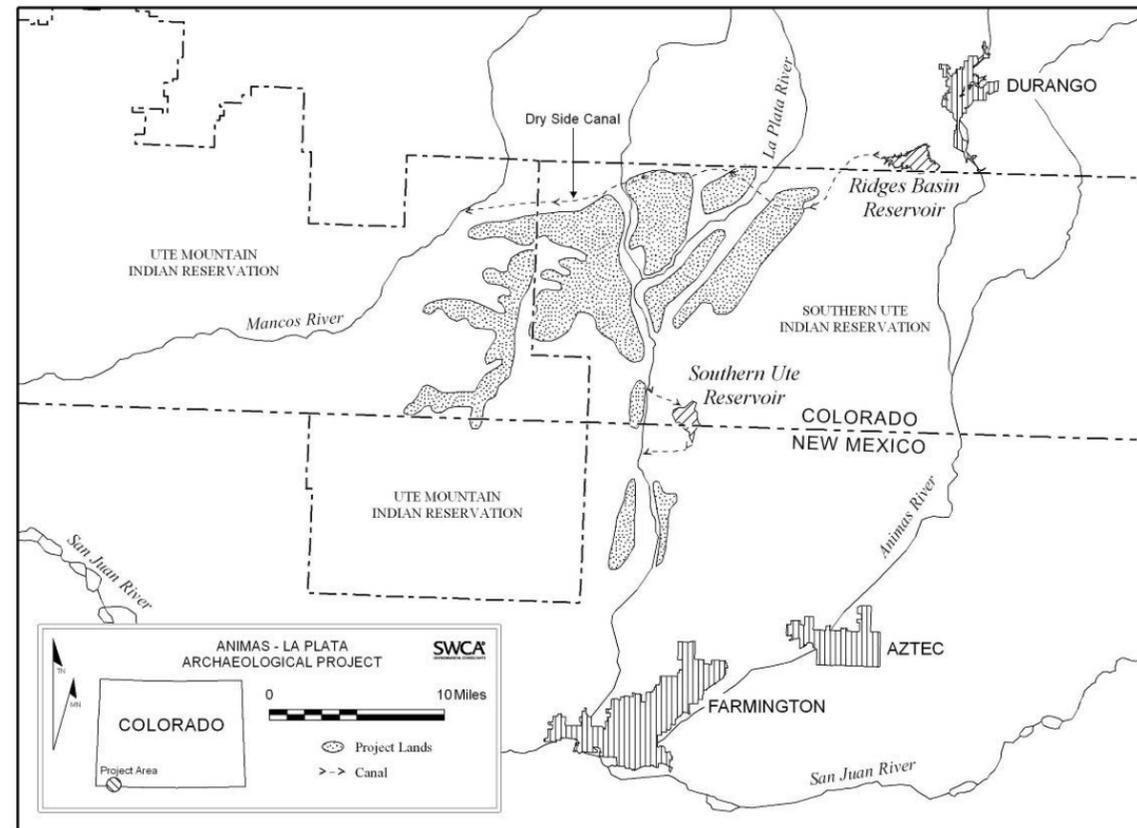
History of the ALP Water Project

The Original ALP Plan

In the 1960s the U.S. government wanted to build not only Ridges Basin Reservoir just outside of Durango, but also two other reservoirs—one 25 miles west of Durango, and one south of Durango on the Colorado–New Mexico state line. From these reservoirs was planned a giant network of irrigation canals and water pipelines many miles long. Several pumping plants would pump the water from rivers into the reservoirs and then out along the irrigation lines.

By the 1980s, the ALP project idea was down to only two reservoirs: the Southern Ute Reservoir on the state line, and the one in Ridges Basin. The plan was still to

extend irrigation pipelines to the La Plata River basin north of the Colorado–New Mexico border, and all the way into portions of the Mancos Valley farther west.



Map of the once-proposed Southern Ute Reservoir, Ridges Basin Reservoir, and Irrigated Lands in the La Plata and Mancos valleys of southwest Colorado.



The Dolores Project that built McPhee Reservoir, authorized by the Colorado Ute Indian Water Rights Settlement Act, enabled the Ute Mountain Ute Tribe to bring the first piped drinking water to the reservation. It also brought irrigation water to their 7,600-acre Farm & Ranch project.

The Dolores Project

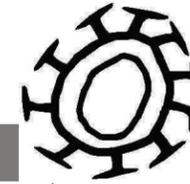
For the Dolores Project, the Dolores River was dammed downstream from the town of Dolores, Colorado, creating McPhee Reservoir. Completed in 1985, McPhee Reservoir is the second largest reservoir in Colorado. (Blue Mesa Reservoir near Gunnison is the largest.) The water stored in McPhee is used to irrigate Montezuma County, Dolores County, and the Ute Mountain Indian Reservation.

Hundreds of archaeologists joined the Dolores Archaeology Program—one of the largest archaeological efforts in American history—to excavate sites in the broad Dolores River valley, which was eventually flooded. The Anasazi Heritage Center, near the town of Dolores, is a museum with nearby Indian ruins to visit. All of the artifacts from the Dolores excavations are kept in the Anasazi Heritage Center. It is also where the artifacts of both water projects and information of both water projects are safely preserved for researchers to study long into the future.

Important Laws Affecting ALP and the Utes

The U.S. government promised water to the Ute tribes in the Kit Carson Treaty, signed in 1868. The Colorado Ute Water Settlement Act of 1988 said that reservoir water would be used to fulfill the federal government's promise of water to the Ute tribes. With their long-standing water rights finally recognized by the federal government, the Ute tribes became major players in the ALP project.

- ◆ Congress passed the **Colorado River Basin Project Act** in 1968. For ALP, large amounts of water were to be taken from both the Animas River and the La Plata River, stored in reservoirs, and put into pipelines to use for drinking and irrigation.
- ◆ **Colorado Ute Indian Water Rights Final Settlement Agreement** (signed in 1986) and the **Colorado Ute Indian Water Rights Settlement Act** (signed in 1988) protected the Ute tribal claims to the water.



- ◆ The **Colorado Ute Settlement Act Amendments** (signed in 2000) authorized a scaled-down ALP project with only one reservoir and one pumping plant. The water would benefit the Ute tribes of Colorado. Some of the water would also be used by the City of Durango, the Navajo Nation, and other water partners.

In the 1800s and early 1900s the U.S. government took over Indian lands and forced the tribes onto reservations. Native people were not allowed to govern themselves until 1934. Even then, and for decades after, tribal laws and money had to be approved and managed by the federal Bureau of Indian Affairs (BIA). It was President Richard M. Nixon who in 1970 publicly proclaimed a new era in Indian affairs—that of true Indian self-determination.

“We must assure the Indian that he can assume control of his life without being separated involuntarily from the tribal group. And we must make it clear that Indians can become independent of federal control without being cut off from federal concern and federal support.”

—Richard M. Nixon, July 8, 1970

- ◆ Following Nixon’s proclamation, “**Public Law 638,**” the **Indian Self-Determination and Education Assistance Act of 1975, Title I**, was passed. This law guaranteed that Indians would participate in their own government and education.

Public Law 638 means that now, when federal dollars are spent for a project on tribal lands, or for a project that significantly affects an Indian tribe, tribal members have the right to run that project themselves.

Under Public Law 638: 1) a Ute-owned company, Weeminuche Construction Authority, built the ALP Ridges Basin dam; 2) the Ute Mountain Ute Tribe (in an agreement with the Southern Ute Indian Tribe) hired SWCA Environmental Consultants, a private company, to run the ALP archaeological program; and 3) the Ute Mountain Ute Tribe worked with more than 20 other tribes that claim ancestry in the ALP project area.

The ALP water project is paid for with federal money through the Bureau of Reclamation. It also directly benefits tribes by providing them water. Therefore, Public Law 93-638 applies. Even though most of the project is on federal land, it was the aboriginal land of the Utes.

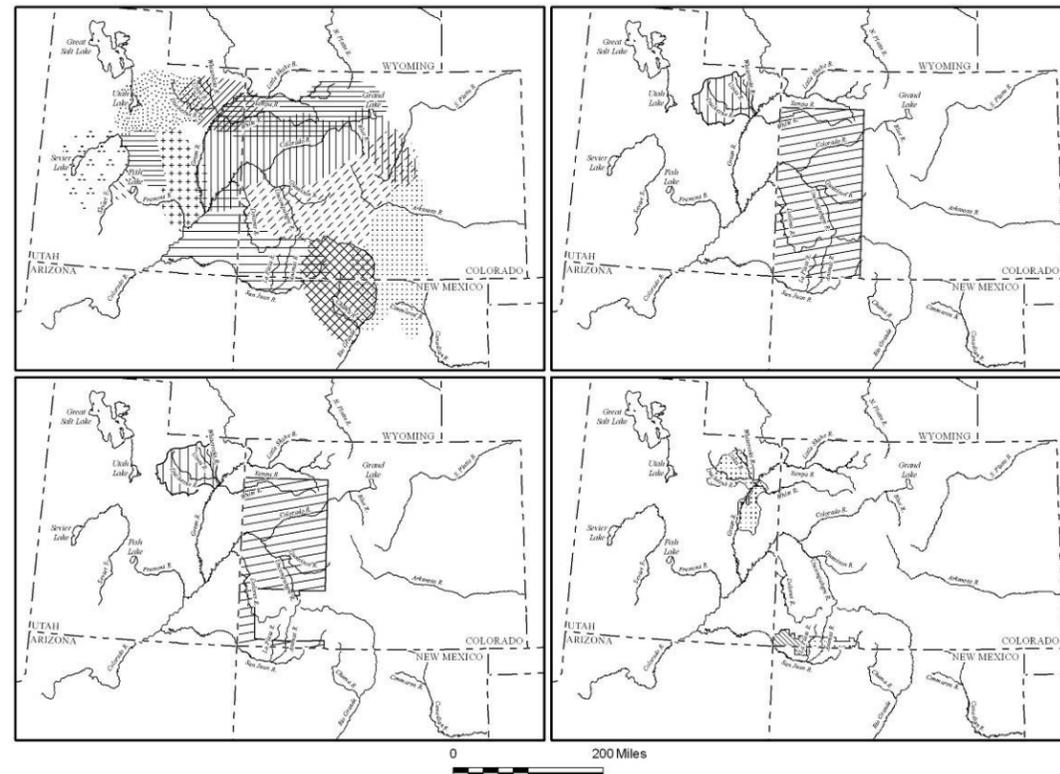


The Utes in Colorado and Utah

As early as A.D. 1300, the Utes began to call the Southwest home. They were a nomadic people who lived by hunting and gathering, and for the next 400 years they dominated the Rocky Mountains. For centuries, the Utes had much of this area to themselves. European settlers would not encroach on their territory until the mid 1700s.

Historically, the Utes had seven bands: the Moache and Capote bands (who today are the Southern Ute Indian Tribe), the Weenuche band (now known as the Ute Mountain Ute Tribe), and the Tabegauche, Grand River, Yamparicas, and Uintah bands (now known as the Ute Indian Tribe, on the Uintah and Ouray Indian Reservation in northeastern Utah).

Exactly when the earliest of these nomads arrived is still a



Maps showing how Ute territory shrunk over time.
Upper left, pre-1860;
upper right, 1868;
lower left, 1873;
lower right, 1911 to the present.

matter of debate. Archaeologists have found that only a few stone tools, scatters of stone flakes, and small patches of burned earth—the remains of ancient camp fires and tool makers—still exist. It's hard to know for certain what people left these kinds of remains. What is known, is that it seems that ancestors of today's Utes moved into the area from the west, and ancestors to today's Apaches and Navajos moved in from the north.

THE ANIMAS-LA PLATA UTE WATER RIGHTS PROJECT



Sometime between A.D. 1400 and 1600, the Utes and other tribes began moving through the Ridges Basin area. These hunter-gatherers probably lived very much as people had for thousands of years: as small groups of no-

mads camping, eating wild plants, nuts, and seeds, and hunting a variety of animals. They would move on to other areas when the seasons changed or the local food sources were used up.



Left: Chief Sapia of the Moache and Capote bands was also known as Charles Buck, or "Buckskin Charlie." (Photo courtesy of the Colorado Historical Society)

Right: Chief Ignacio of the Weenuche band. (Photo courtesy of the Colorado Historical Society)



This antique postcard shows a band of Utes including Chief Sapia ("Buckskin Charlie"). (Photo courtesy of the Colorado Historical Society)



A Ute Indian tipi camp. (Photo courtesy of the Colorado Historical Society)





THE ANIMAS-LA PLATA UTE WATER RIGHTS PROJECT



Left: A Ute boy.
(Photo courtesy of the Colorado Historical Society)

Right: Ute girls, including a baby in a cradleboard, pose next to a tipi.
(Photo courtesy of the Colorado Historical Society)

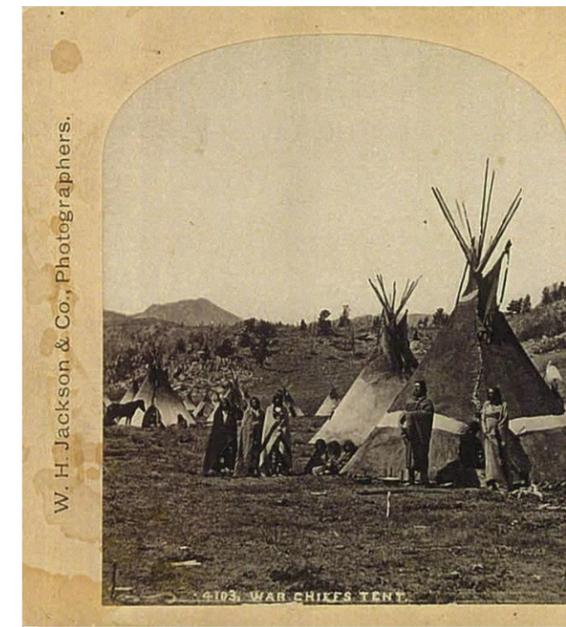


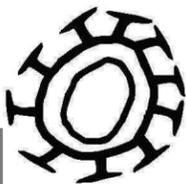
Left: Ute mother and child in a cradleboard. (Photo courtesy of the Colorado Historical Society)

Right: This postcard was labeled "War Chiefs Tent." (Photo courtesy of the Colorado Historical Society)



Prior to the 1860s, most of Colorado, much of Utah, and parts of northern New Mexico were Ute territory. But as Euro-American settlers moved into the West in great numbers, there was fighting between the Utes and the newcomers. The federal government began to force Ute Indians onto reservations. In the span of a few decades all of the Ute people were forcibly moved to three separate reservations, one for the Northern Ute, one for the Ute Mountain Ute, and one for the Southern Ute tribes. These same reservations exist today.





The photographer labeled this 1907 photograph "Four Ute Indian agitators," indicating it was not a peaceful time. The men are, from left to right, Chuponas, Pompy, Apona, and Rainbow. (Photo courtesy of the Colorado Historical Society)



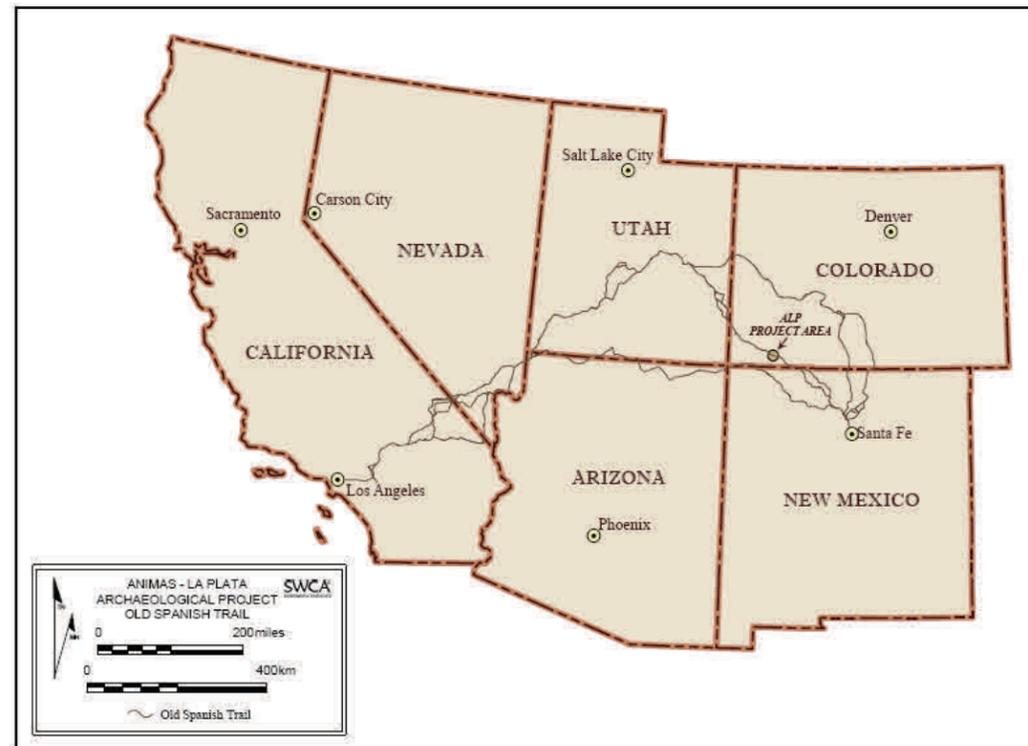
The Ute Trail

The Ute Trail is an important historical trail that ran directly through Ridges Basin. In prehistoric times, people walked long distances to trade and barter items—passing right through Ridges Basin, following a natural pathway from the Animas River to points west. In Ridges Basin, archaeologists have found ancient sites with pieces of ceramic pots that were made in southeastern Utah, and in northern Arizona, by Hopi Indians. This shows that the

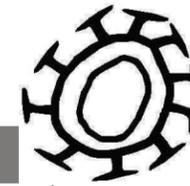
local people traded with people living hundreds of miles away.

The Ute Trail was later followed by Spanish explorers and eventually became a branch of the Old Spanish Trail. This ancient trail, which had been used for hundreds or even thousands of years, had several branches and reached from Santa Fe, New Mexico, to Los Angeles, California.

The Old Spanish Trail had several routes stretching from Santa Fe to Los Angeles.



The earliest written accounts of trails running through southwestern Colorado come from Spanish expeditions. In 1765 the Rivera Expedition, seeking to expand the Spanish empire and find precious metals like silver and gold, passed very near Ridges Basin. Eleven years later, on August 9, 1776, the Domínguez–Escalante Expedition, trying to reach California from Santa Fe, passed through Ridges Basin. Travelers followed this route until 1876.



called Animas City (which is now part of the north end of Durango). The Ute Trail/Old Spanish Trail could still be seen on the ground as late as 1890.

Tipis with horses in the background. (Photo courtesy of the Colorado Historical Society)

The Ute Trail linked the towns of Ignacio, headquarters of the Southern Ute Indian Tribe,

The eastern portion of the Ute Trail, from Ignacio through Ridges Basin, and the northern portion, from the west side of Ridges Basin to Cortez, were used until about 1876. A different branch of the trail then became more popular, curving slightly more to the north through a place

and Towaoc, headquarters of the Ute Mountain Ute Tribe. From Ignacio the trail ran west through Ridges Basin, then forked. The northern branch ran northwest through the present towns of Hesperus and Mancos and then along the north and west sides of Mesa Verde. The



Ute riders. The person second from right is Terry Knight's grandmother. (Photo courtesy of Terry Knight)

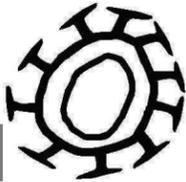
southern branch ran southwest to the present-day locations of Breen, Kline, Marvel, and Red Mesa, then followed the Mancos River west, eventually reaching Towaoc.

Mr. Terry Knight, member of the Ute Mountain Ute Tribe, remembers that his great-grandmother had a camp along the trail west of the Animas River near Cherry Creek. By horse, the trip from Towaoc to Ignacio would take two days. Families leaving Towaoc to visit friends or relatives at Ignacio, or traders hoping to make a deal, would head into the rising sun and follow the Mancos River.

They would travel to Terry Knight's great-grandmother's camp, where riders would spend the night and trade their horses for fresh horses to continue their journey the next



day. By late morning of the second day, they would arrive at the banks of the Animas River, and at many times of the year only the largest horses could cross without having to swim. On the return journey, the riders would again camp overnight, returning the borrowed horses to the camp in exchange for their own refreshed horses.



The prehistoric residents of the area must have had similar trails and perhaps walked the very same path. Some Pueblo tribes describe prehistoric trails leading from northern New Mexico to ancestral homes at Mesa Verde and Chaco Canyon, with shrines and springs along the way, offering a cool place to rest and drink. The earliest prehistoric immigrants, traders, and

pilgrims may have walked parts of what we now call the Ute Trail. From about 1908 to 1915, mapmakers began marking the “Ute Trail” or “Ute Indian Trail” on maps. As late as the 1930s, the southern branch of the “Old Ute Trail” (sometimes also called “The Utah Road”) was still visible crossing the La Plata River valley.



By 2003, this portion of the Ute Trail had grown to become a dirt road. Carbon Mountain is visible on the horizon.



Timeline of the ALP Pro-



1968
Congress authorizes construction of the ALP Project.

1986
The Colorado Ute Indian Water Rights Final Settlement Agreement is signed. Also, Reclamation accepts a cost-sharing arrangement resulting in phasing the ALP Project.



1990
Based on new biological information, the U.S. Fish and Wildlife Service concludes that the ALP Project would jeopardize the existence of the Colorado pikeminnow.



1992
Environmental groups go to the courts to halt construction of the project.



1998
Reclamation recommends scaling down the ALP Project, taking out the irrigation systems and considering Endangered Species Act and Clean Water Act requirements.

1968

1980-81
Reclamation releases their Final Environmental Impact Statement for the ALP Project. With construction set to begin, the Carter Administration suspends the start of any new public works water projects.



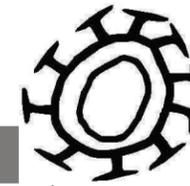
1988
Congress passes the Colorado Ute Indian Water Rights Settlement Act to resolve the senior water rights claims of the Southern Ute Indian and Ute Mountain Ute tribes.



1991
The U.S. Fish and Wildlife Service issues a Final Biological Opinion that includes an endangered fish recovery program and allows only 57,100 acre-feet of water to be removed from the Animas River each year.

1996-97
Reclamation releases a Final Supplement to the ALP Environmental Impact Statement. Colorado Governor Romer and Lt. Governor Schoettler hold meetings with supporters and opponents of the project, proposing several different alternatives to the original ALP Project plan.





THE ANIMAS-LA PLATA UTE WATER RIGHTS PROJECT



2000 Reclamation declares their acceptance of the scaled-down project in a Final Supplemental Environmental Impact Statement and Record of Decision.

Congress authorizes the scaled-down project with the passage of the Colorado Ute Settlement Act Amendments of 2000.



2002 Four major tasks begin: 1) Archaeologists start their fieldwork. 2) Construction begins on the inlet conduit pipeline sleeve and is completed in October of 2002.

3) Weemuniche Construction Authority begins constructing haul roads for dam construction traffic. 4) A final route selection starts for the Navajo Nation Municipal Pipeline.



2005 The foundation and first floor concrete in the main pumping plant bay are complete. A ceremony is held at the dam on August 12, 2005, and religious leaders of the Colorado Utes and Acoma Pueblo bless the building of the dam and associated structures.



2009 The pumping plant is finished and Lake Nighthorse begins to fill.

2010-11 The reservoir is projected to be full in 2011.

2001 Reclamation Commissioner John Keys approves the start of ALP Project construction. Construction formally starts November 9, 2001.



2003 The estimated cost for the ALP Project increases from \$338 million to \$500 million, and the completion date moves from 2009 to 2011. From May to November, 108 blasts are fired at the base of the pumping plant site to remove rock.



2004 Over 1 million cubic yards of material is excavated from the Ridges Basin Dam foundation. Pumping plant excavation, the intake structure, and fish bypass are substantially completed. Ridges Basin Reservoir is renamed Lake Nighthorse to honor retiring Colorado Senator Ben Nighthorse Campbell.

2007 Ridges Basin Dam is completed in November.



2011

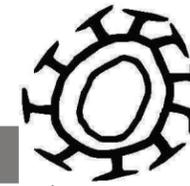


Detailed Timeline

From Spanish contact with the Utes to final settlement of Ute water rights:

1598	Spanish trade begins with the Utes	1873	Continued violent conflict between Indians and encroaching settlers force a group of Ute leaders, including Chief Ouray, to sign the Brunot Treaty, losing their rights to the San Juan Mountains and most of the land they had received in the 1868 Kit Carson Treaty.
1650-60	Each of the seven Ute tribes holds well-defined territory	1880	Southern Ute band restricted to a small reservation in southern Colorado. Four other Ute bands forced out of Colorado into eastern Utah.
1760-70	Utes grant Spain the right to trade up the Gunnison River	1895	The Southern Ute Indian Reservation is "checkerboarded" with federal and privately held land. Some Utes move to what is now the Ute Mountain Ute reservation.
1776	Dominguez and Escalante expedition travels through Ute territory and Ridges Basin	1937	Restoration Act returns 222,000 acres to Southern Utes
1821	Mexico gains independence from Spain and part of present-day Colorado becomes Mexican domain	1938	30,000 acres returned to Ute Mountain Utes
1848	Mexican–American war ends; New Mexico and southern Colorado becomes U.S. territory	1950	Utes receive \$32 million in reparations for lands taken by the federal government. Ute water rights are not resolved.
1850s	The U.S. government creates "Indian Agencies" to try to control and reduce the Native American populations of the West. Kit Carson and soldiers pursue and fight Ute people. Conflict between the Utes and the U.S. military is common.	1962	A government study finds the ALP project to be feasible
1859	The great Colorado Gold Rush begins	1968	Congress authorizes construction of ALP as part of the Colorado River Basin Act, which, in large part because of the influence of Colorado Congressman Wayne Aspinall, included five major reclamation projects: ALP, Dolores, Dallas Creek, West Divide, and San Miguel projects. The West Divide and San Miguel projects were never built, and the ALP project becomes one of the last major water projects in the West.
1861	The U.S. government creates the Colorado Territory and declares it open for Anglo settlement, causing continued conflict between the resident Ute peoples and incoming settlers.		
1868	Ute tribes sign the Kit Carson Treaty, confining Utes to western Colorado for their "absolute and undisturbed use and occupation" on the condition that they release the rest of their land to settlement. Ute water rights, as recognized by the U.S. government, stem back to this treaty.		

THE ANIMAS-LA PLATA UTE WATER RIGHTS PROJECT



25



- 1972** Southern Ute and Ute Mountain Ute tribes file a claim in federal court to establish their water rights. The tribes assert that a water supply to meet tribal needs, now and into the future, was guaranteed by treaty in 1868.
- 1980** First of the ALP Final Environmental Impact Statements is released
- 1986-88** Colorado Ute Indian Water Rights Settlement Act passes through Congress and is signed into law by President Reagan. The Ute's outstanding water rights are recognized in the development of the ALP project.
- 1990-91** Concern grows over the survival of two endangered fish—the Colorado pikeminnow and the razorback sucker—if large amounts of water were to be removed from the Animas River.

- 1991** Concern about the pikeminnow leads to a plan to pump less water out of the Animas River. The Sierra Club gives notice of intent to sue the federal government.
- 1992** Construction stops due to legal actions
- 1996** The Bureau of Reclamation files its final ALP Environmental Impact Statement
- 1998** U.S. Department of the Interior recommends "ALP Lite"
- 2000** Colorado Ute Settlement Act Amendments gives "ALP Lite" the go-ahead
- 2001** ALP archaeology and construction begins
- 2002** Pipeline (Ridges Basin inlet conduit) and dam construction begin
- 2003** Durango pumping plant construction begins
- 2004** The name "Ridges Basin Reservoir" is changed to Lake Nighthorse
- 2007** Dam construction complete
- 2011** Lake Nighthorse full

Dam construction complete in 2007. (Photo courtesy of WCA)



“ALP Lite”—less than half the size and much more environmentally sensitive than the original ALP—considered Ute water rights and laws protecting endangered species and Native American sites.

Before: Ridges Basin in 2002. Carbon Mountain is on the left, and part of Basin Mountain is on the right. The dam was built across the narrow gap between the two.

The Project Begins

In 1968, the ALP plan spanned two counties in southwest Colorado and one in northern New Mexico. But the water right claims of the Southern Ute and Ute Mountain Ute Indian Tribes were not settled until twenty years later. Ten years after that, studies showed that pumping large amounts of water out of the Animas River could harm two endangered species of fish that

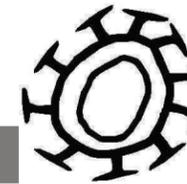
lived there: the Colorado pikeminnow and the razorback sucker. The government shrunk its idea of the ALP project, eliminating plans for the La Plata River, and removing much less water from the Animas River to protect the endangered fish. This down-sized version of the ALP project was nicknamed “ALP Lite.”

Key Components

The scaled-down project included four main components:

Ridges Basin Dam, Ridges Basin Reservoir, the Durango Pumping Plant, and Ridges Basin Inlet Conduit. An average of 57,100 acre-feet of water could be taken from the Animas River each year. Construction of the ALP water project officially began November 9, 2001, and by the summer of 2002, haul roads were built to the dam site and construction of the inlet conduit had begun. By July 2002, archaeological crews were excavating sites on the valley floor. In 2003, the estimated cost of the project rose from approximately \$338 million to \$500 million, and the completion date was moved from 2009 to 2011.



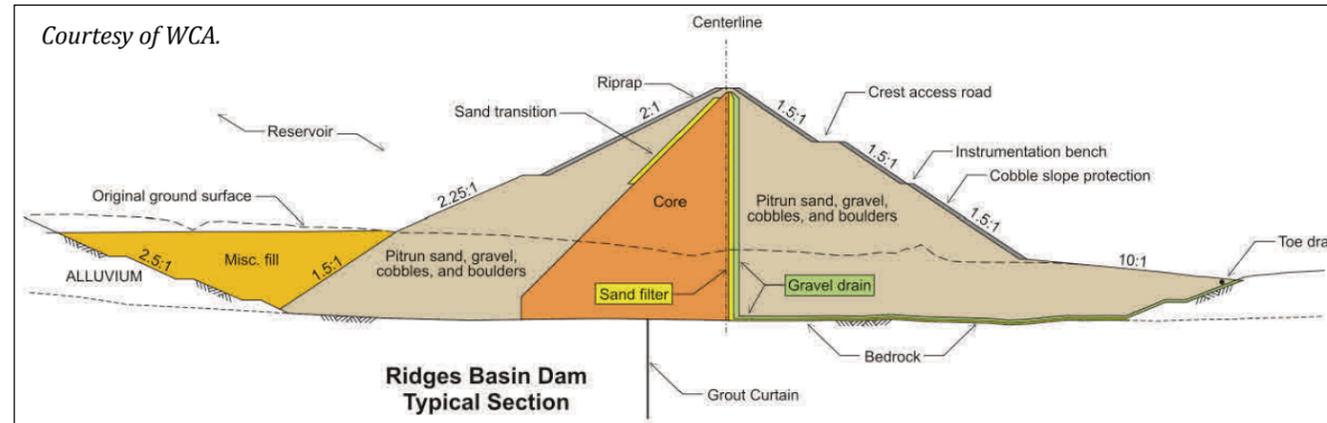


THE ANIMAS-LA PLATA UTE WATER RIGHTS PROJECT

Ridges Basin Dam

The dam is constructed between Carbon Mountain and Basin Mountain on Basin Creek, 4 miles upstream from the Animas River. The dam foundation sits on bedrock and the top of the dam is 270 feet high. About 2.3 million cubic yards of material were excavated to reach bedrock for the foundation of the dam.

The dam is an earth-fill dam built with approximately 5.6 million cubic yards of fill material. The dam's core is made of clay dug from the reservoir area. The core sits directly on the foundation bedrock. The core is bordered by sand, gravel, and cobbles obtained from a downstream borrow area on Blue Mesa.



Ridges Basin Dam
 Structural height – 270 feet
 Crest length – 1,640 feet
 Water releases to Basin Creek – 110 cfs* (with peaks to 200 cfs*)
 *cfs = cubic feet per second

Lake Nighthorse
 Total capacity: 120,000 acre-feet of water
 Water surface area when full: 1,490 acres

After: Ridges Basin is transformed into Lake Nighthorse. Photo taken June 8, 2010.



Ridges Basin Inlet Conduit

Length – 2.1 miles
Capacity – 280 cfs*
*cfs = cubic feet per second

Durango Pumping Plant Dimensions –
About 65 × 230 feet
Plant Height – About 100 feet high (40 feet above ground and 60 feet below ground)

Maximum pump capacity – 280 cfs
Maximum dynamic lift – 550 feet

Animas River water rushes from the inlet conduit to fill the reservoir.

Page 29: Aerial view of the Durango Pumping Plant on the Animas River. (Photo courtesy of WCA)

Lake Nighthorse (Ridges Basin Reservoir)

Ridges Basin Reservoir was renamed Lake Nighthorse in 2004, to honor retiring Colorado Senator Ben Nighthorse Campbell. Lake Nighthorse has a surface area of almost 1,500 acres. The reservoir began filling April 20, 2009, and should be full in late summer 2011 if runoff conditions are good. At the latest it will be full by the spring of 2012.

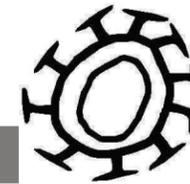


Ridges Basin Inlet Conduit (pipeline)

How does water get from the Animas River to Lake Nighthorse? It is pumped into a pipeline called the Ridges Basin inlet conduit. This pipe is 6 feet in diameter and over 2 miles long. It raises the water 511 feet up from the level of the river into the basin. The pipeline is buried 3 to 8 feet below the ground to protect it from freezing.

Durango Pumping Plant

Located directly across from Santa Rita Park and next to the Animas River, the Durango Pumping Plant lifts water from the river up into the Ridges Basin inlet conduit all the way to Lake Nighthorse. Water is diverted from the river through three control gates into the pumping plant. Large screens across these intake gates prevent most fish from entering the pumping plant. If any fish do get into the pumping plant, they can swim back to the river through a 36-inch-diameter pipeline.



The pumping plant has eight different pumps of different sizes and strengths. The pumps use electric motors, and different pumps are used at different times. This is because the natural flow of the river changes with the seasons and with different amounts of rainfall and snowmelt.



Water flowing in a river or a pipeline is measured in cubic feet per second, or **cfs** for short. Downstream from the pumping plant, the river must still maintain a certain amount of water in it at all times, for the fish, wildlife, and wetlands (see box on right).

The ALP Wildlife and Wetlands

Wildlife habitat is where birds and animals are “home”—where they find the food and shelter they need in brush, trees, and meadows. Wetland and riparian habitats, such as marshes and stream banks along rivers, provide particularly important wildlife habitat.

The ALP project impacted about 2,700 acres of wildlife habitat and about 134 acres of wetland/riparian habitat. To replace that flooded habitat, the Bureau of Reclamation bought 6,000 acres of land along the La Plata River, west of the Animas River and Lake Nighthorse. They are working to improve wildlife habitat there. Over 200 acres of wetland/riparian habitat has been created, protected, and restored.

Seasonal cfs requirements for the Animas River downstream from the Durango Pumping Plant:

- Winter—December through March: 125 cfs
- Summer—April through September: 225 cfs
- Fall—October through November: 160 cfs

Construction Schedule

Ridges Basin Inlet Conduit, Stage 1:
June 2002–November 2002

Ridges Basin Dam:
November 2002–November 2007

Durango Pumping Plant:
April 2003–Spring 2009

Navajo Nation Municipal Pipeline:
2008–2011

Ridges Basin Inlet Conduit, Stage 2:
2007–2009

Relocation of County Road 211:
2008–2010

Lake Nighthorse Filling:
April 20, 2009–2011



Weeminuche Construction Author-

Weeminuche Construction Authority (WCA) of Towaoc, Colorado, a Ute Mountain Ute tribal enterprise founded in 1985, built the Ridges Basin Dam, the Durango Pumping Plant, and the connecting pipeline, under contract with the Bureau of Reclamation. During the ALP construction efforts, WCA provided significant job training for Native Americans and employed approximately 300 workers including subcontractors. Approximately 70 percent were Native American.



The ALP materials processing plant. (Photo courtesy of WCA)

Weeminuche Construction Authority Timeline

June 17, 2002	Inlet conduit sleeve
Nov. 27, 2002	Outlet works excavation
Apr. 15, 2003	Durango Pumping Plant Stage I excavation
Sept. 8, 2003	Right abutment excavation
Oct. 21, 2003	Dam excavation
July 9, 2004	Material Processing Plant
Aug. 9, 2004	Durango Pumping Plant Stage 2 excavation
Sept. 7, 2004	Outlet works tunnel excavation
Mar. 11, 2005	Dam completion contract
Nov. 28, 2006	Inlet conduit
Sept. 29, 2008	Upper County Road 211 and boat ramp
March 2010	Permanent operating facility
April 29, 2010	Lake Nighthorse boundary fencing



Upper right: the inlet conduit sleeve.

Left: Outlet works tunnel excavation.

Lower right: Dam foundation excavation. (Photos courtesy of WCA)



Archaeologists documented and excavated 74 sites in the ALP project area that otherwise would have been destroyed by construction or flooded by the new reservoir. This was required by federal law—specifically, Section 106 of the National Historic Preservation Act.

An archaeologist sieves dirt through a hanging screen to recover artifacts while others carefully excavate with shovels and hand tools.

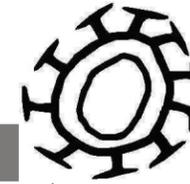
In the Beginning

The Animas–La Plata Archaeological Project

Ridges Basin contained hundreds of prehistoric sites and several historic ranches. In January of 2002, the Ute Mountain Ute Tribe hired SWCA Environmental Consultants to conduct several years of archaeological excavations in Ridges Basin and on nearby Blue Mesa. From 2002 to 2005, during four six-month-long field seasons (spring through fall), the archaeologists would dig in the field. In the late fall and winter, artifacts that were brought into the lab were carefully washed, photographed, and analyzed. Computerized maps were made, and all of the information was put into a highly specialized computer database. The Animas–La Plata archaeological project was one of the largest archaeological projects in the country at the time.

During each field season 20 to 30 archaeologists worked in the field with shovels, pick-axes, trowels, and screens (and sometimes with a specially trained backhoe operator). Nearly a quarter of the field personnel were Native American. Throughout the field seasons, they uncovered prehistoric homes and campsites buried beneath the modern ground surface. They also carefully recorded the historic ranch buildings and their artifacts that still remained in Ridges Basin.





While the dam and pumping plant were being built, SWCA excavated the archaeological sites, most of which were in Ridges Basin (where the new reservoir, Lake Nighthorse, would soon be). They also dug several sites on Blue Mesa, located just east of Ridges Basin on the west bank of the Animas River. (An area of Blue Mesa was used as a borrow pit for dam fill.) This work revealed a very long history of humans using the area—a history spanning about 9,000 years, in fact, starting about 8400 B.C. On Blue Mesa, one fire pit was over 10,000 years old.

All of the artifacts and information recovered from the ALP excavations are stored and cared for at the Anasazi Heritage Center outside of Dolores, Colorado. The Anasazi Heritage Center is operated by the Bureau of Land Management (BLM). It also holds the artifacts from the Dolores Archaeological Program and the Dolores Project, when the Bureau of Reclamation built McPhee Reservoir, years before.

Ancient Peoples in the Durango Area

Archaeologists have named the different people of ancient times the Paleoindians, the Archaic people, and lat-

er the Basketmaker people. Later prehistoric groups are referred to as Ancestral Puebloan people. These were followed by Protohistoric and, most recently, the people of the Historic era.

Paleoindians lived in the time before about 7500 B.C. Paleoindians and the early Archaic culture that followed lived by hunting and gathering and were the earliest people in North America. The Archaic era (from about 7500 B.C. to about A.D. 1) was also a time of hunters and gatherers, although the Archaic people became less nomadic and began to grow corn for food sometime between 1000 B.C. and 500 B.C. The sites of the Basketmaker people near Durango generally date from about the year A.D. 1 to A.D. 700. The Pueblo I period is from A.D. 700 to A.D. 900.

Before the ALP project, only a handful of Archaic sites were known locally and even fewer had been excavated. However, during archaeological survey in Ridges Basin—when archaeologists scour the ground surface for artifacts and other evidence of buried sites, and sometimes dig test pits to explore beneath the ground—many Archaic sites were found. These sites had stone

Most of the archaeological sites in Ridges Basin were created by people living there around the year A.D. 800, in the Pueblo I era.



Upper left: This projectile point was found in Ridges Basin and is from the Archaic era. It was made out of petrified wood sometime between 3200 B.C. and 1800 B.C.



projectile points (arrow heads) made in the Archaic style, but no ceramic sherds, because the Archaic people did not yet make pottery.

The Durango area also contains some of the most spectacular and best-preserved Basketmaker II sites in the Southwest. For example, two sites found in shallow caves in the Animas River valley north of Durango are some of the most well-known Basketmaker sites in the Southwest. Basketmaker II sites were also found around the edges of Ridges Basin. The ALP excavations provided a great opportunity for scientists to better understand the Basketmaker II people in the region.

Lower right: An artist's depiction of an Ancestral Puebloan (Anasazi) family. (Photo courtesy of the BLM-Anasazi Heritage Center)

The Pueblo I People in Ridges Basin

The Basketmaker II people migrated out the area about A.D. 500, and no one moved in to replace them for hundreds of years after that. Then, by about A.D. 700, small groups of peo-

ple began filling up the Durango landscape, including Ridges Basin and Blue Mesa. These people probably came from New Mexico, as their ceramic pottery and architecture shows. Archaeologists call this period of time the early Pueblo I period.

These people lived in pit structures—small houses dug into the ground and roofed with wooden beams, branches, and mud. They made and traded ceramic jars and



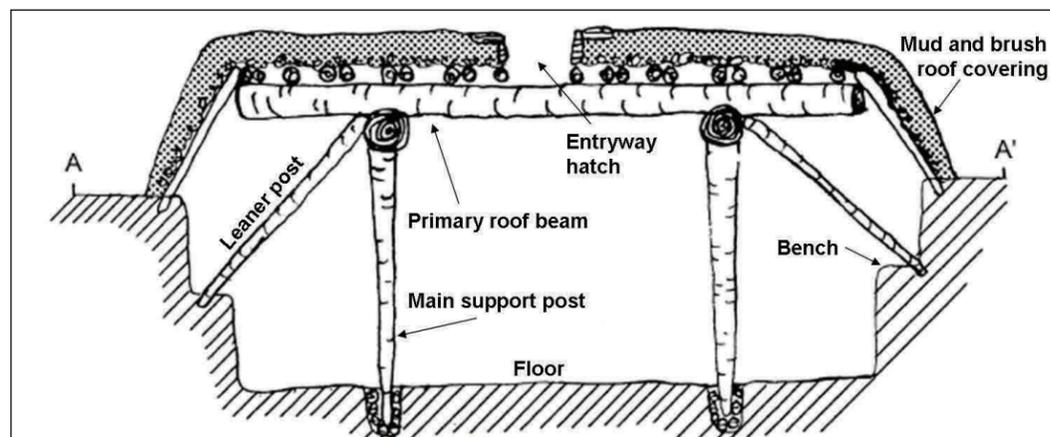


bowls for cooking, storing, and serving food and water. They made stone tools such as projectile points, knives, axes, and manos and metates (stones to grind up corn, nuts and seeds). They wove baskets and sandals and fashioned delicate tools such as bone needles. They strung beads and pendants made out of animal bone, sea shell, and stone such as turquoise. They gathered plants from all over the landscape and hunted large and small game for meat, bone, and fur; kept domesticated turkeys and dogs; and had some success growing their food, especially corn.



Upper right: Birds-eye view of an excavated pit structure from the ALP project. Two small wing walls made of stone and adobe separated the front part of the structure from the main living area. A stone metate is leaning up against the front wall.

Sipapu is a Hopi word for a small hole in the floor that symbolizes a passageway to the spirit world. To enter this pit structure, one would climb down a ladder through the center of the roof.

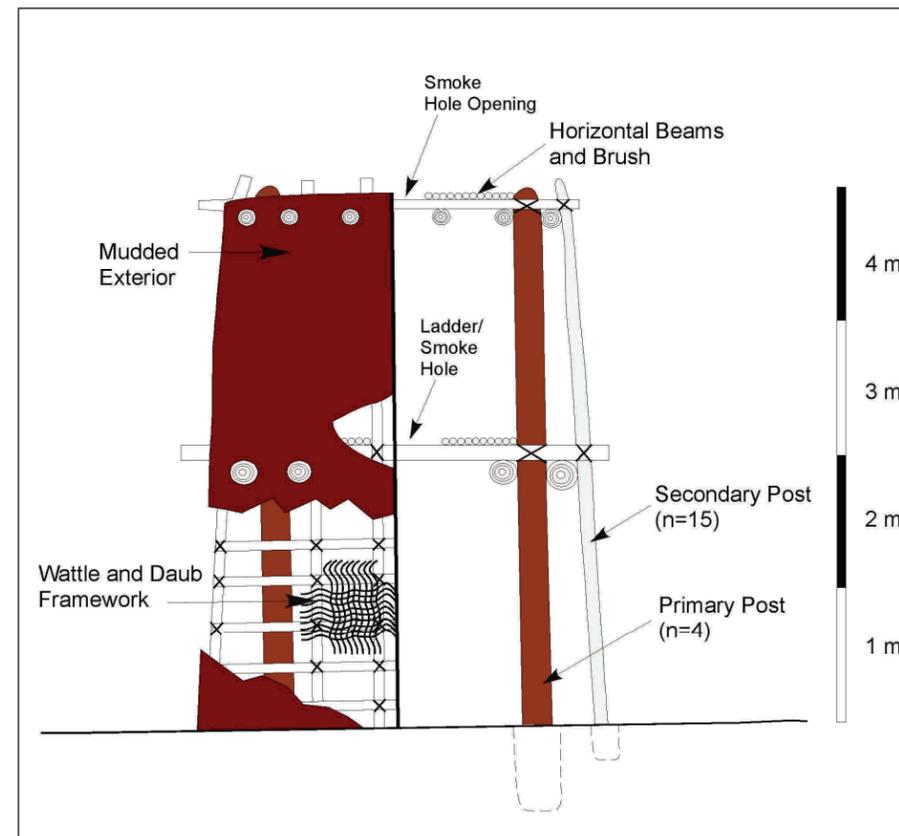


In Ridges Basin, archaeologists have recovered 3,000-year-old corn pollen preserved in a hearth (fire pit). Through radiocarbon dating, it was determined that the hearth was probably used sometime between 1000 and 790 B.C.

Lower left: Cross-section drawing of a pit structure.



Archaeologists have found the remains of scores of Pueblo I pit structure homes in and around Ridges Basin. Prior to the ALP project, however, very few of these sites had been excavated. The ALP archaeological project provided an incredible amount of data about the Pueblo I people and that time period.



This cut-away drawing shows the interior and exterior construction of the Sacred Ridge tower.

Most Pueblo I families lived in a single pit structure, by themselves. At some sites, however, a few pit structures were found close together, showing families living as a group. But still you could not really call any of these family groups a village. Only one site in Ridges Basin seems to have been something larger, a community that formed a small village: the Sacred Ridge site.

The Sacred Ridge Site

From about A.D. 750–820, the Sacred Ridge site was the biggest site around. Its pit structures and other buildings covered about 12 acres of land on a large knoll, high at the west end of Ridges Basin. The village had a commanding view in all directions and also sat directly above a good water source, Basin Creek.

The ruins at the top of the knoll were very unique. On this very highest spot of land were the ruins of a small adobe-covered dome and a two-story round tower. These types of struc-



tures had not been found any place else. To archaeologists it looked as if the top of the ridge had been used not just for everyday living, but for something special, perhaps ancient rituals and ceremonies.

In the late 1960s a man named Homer Root and students from Fort Lewis College explored these ruins and named them “Sacred Ridge.” Unfortunately they did not keep very good records of their excavations or the artifacts they found. SWCA’s archaeologists had a lot of questions about the homes at Sacred Ridge and the special structures on the ridge top. They also wondered about the relationship between the people who had lived there and the other, smaller groups of people in Ridges Basin. Did the people of Sacred Ridge “rule” the valley? Or did something happen to make people gather at Sacred Ridge? When did the people abandon this village—and why?

The People Leave

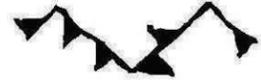
By A.D. 850 there were no people living in the entire Durango area, including all of Ridges Basin, Sacred Ridge, and Blue Mesa. Why did they leave, and where did they go? Archaeologists have tried to answer these questions.

One possibility is that it became too hard to live and survive in the Durango area because of environmental reasons. That is, long periods of drought, or a few seasons with killing frosts, would not only discourage these early farmers from trying to grow corn, beans, and squash, but could threaten them with starvation if their crops failed.

Another possibility is that the people began fighting amongst themselves and decided to leave the area.



Many types of Pueblo I period ceramic vessels were recovered from the sites excavated in Ridges Basin. These include whiteware jars, bowls, and pitchers such as these. Each vessel, found broken in numerous sherds, was pieced back together and given a “reconstructible” (RC) number to identify it. The scale measures 10 cm (about 4 inches).



Left: Projectile points found in Ridges Basin were made in a wide range of sizes and styles. Many were used as arrow heads, and the largest may have been fashioned into spears. Varieties of local stone, petrified wood, and even volcanic obsidian from the Jemez Mountains of northern New Mexico were used to make these tools. The scale measures 5 centimeters (about 2 inches).



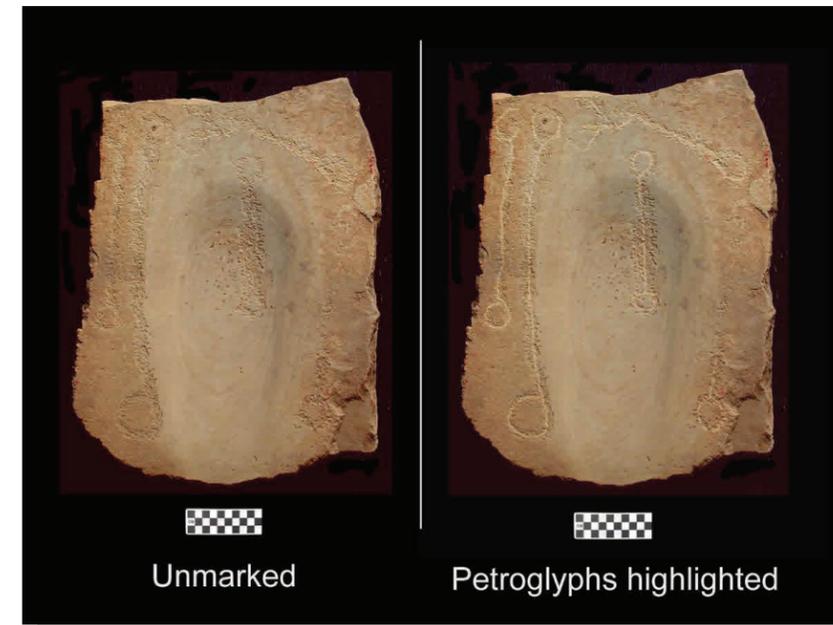
Right: This metate—a large flat stone with a trough worn into it from grinding corn—is very unusual because of the designs pecked into it. Scale measures 10 centimeters (about 4 inches).

There is some archaeological evidence of conflict between the different small communities living in Ridges Basin in the Pueblo I period. It is believed that some of these groups went south, back to northern New Mexico, and some moved north, to the Dolores area. After the Pueblo I people left, sometime after A.D. 825, Ridges Basin remained unoccupied for centuries. As far as archaeologists can tell, it would be another

500 years before Protohistoric groups such as the Utes and other tribes began moving through the area, sometime between A.D. 1400 and A.D. 1600. The Utes called this area home for the next four centuries.

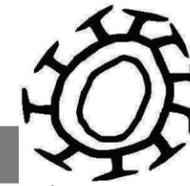
To Learn More

For those interested in learning more about the history and archaeology of Ridges Basin and Blue Mesa, SWCA has published a series of technical reports that describe in detail the sites, artifacts, and prehistoric life of the early inhabitants of Ridges Basin. There is also a volume devoted to the historic ranchers and miners of the area. These reports, and website locations, are listed in the For More Information section at the end of this book.



Unmarked

Petroglyphs highlighted



Valley Families

The Thompson Family, in Ridges Basin from 1880–1919

In the 1800s people began moving into southwestern Colorado in greater numbers, spurred by the chance of finding silver or gold, by the chance of landing a job building a railroad, and by the chance to graze cattle over large tracts of land. A man named George Thompson was the first to set up a ranch in the Ridges Basin area. He was a wealthy landowner and stockman from southeastern Colorado, running cattle between the San Juan River in northwestern New Mexico north to the La Plata Mountains in southwestern Colorado. Around 1880, Thompson began using Ridges Basin as his summer headquarters, and over the next forty years, other members of the Thompson family, and several other people and families, placed claims on the land in and near Ridges Basin. In 2002, 12 historic ranch house sites remained in the basin. Most of these were in ruins, and by researching historic documents, six could be tied to specific homesteaders.

The Harper Family, in Ridges Basin from 1896–1969

Also around 1880, the Two Cross Ranch, headquartered on the La Plata River in New Mexico, established its summer headquarters in Ridges Basin. Eight years later homesteaders began to move in, and for a time, the population of Ridges Basin was large enough to support a school. (The schoolhouse was a wooden building that was moved out of the basin in 1927.) Most of the homesteaders quickly sold their land, however, so that by



An old car body and a log cabin covered in corrugated metal at the historic Harper Ranch in 2005. The cabin was built by Durango Sherriff Bob Dwyer in the 1870s or 1880s for his ranch in Sheep Springs Canyon, east of Hesperus Hill. Thomas Harper moved it to Ridges Basin in 1897.



Left: Thomas and Elizabeth Harper.



Right: Joseph John and May Edith Harper Kikel, wedding photo, June 29, 1913.

end of Ridges Basin in 1915. By the late 1930s the Kikel brothers had acquired some of Thomas Harper's land and some from another homesteading family, the Deckers, as well.

John Porter, the Porter Mine, and the Town of Porter, 1890–1920

A few homesteaders also lived in Wildcat Canyon, just west of Ridges Basin, but most activity there was centered around coal mining. Mining began in Wildcat Canyon in 1886, and in 1890 John Porter, the manager of the Durango smelter, established the Porter Coal Mine and the coal mining

1950, only two ranches remained in Ridges Basin: the Harper Ranch and the Bodo Ranch.

Thomas Harper first settled in Ridges Basin in 1896, and over the decades he and his descendants acquired more and more land in the basin. The Harpers lived there until 1969.

The Kikel Family, in Ridges Basin from 1915–1930s

Joe Kikel and his brother George settled in the western

town of Porter. The Rio Grande Southern Railroad reached the town in 1890, helping the Porter Mine to become the largest coal mine in La Plata County, and the town of Porter grew to more than 400 people. The Porter Mine closed in 1908, and two years later a fire destroyed most of the mine facilities. The town lingered on for a number of years but by 1920, no one at all lived there. After the Porter Mine closed, a small coal mine called the Gates Mine operated in Ridges Basin, from about 1910 to 1930.





The Bodo Family, in Ridges Basin from 1919–1971

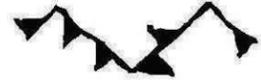
Unlike the Harpers and the Kikels, the Bodos did not homestead in Ridges Basin. All of their land was purchased from homesteaders. In 1912 and 1919, members of the Thompson family sold their ranches to a man named Mike Bodo, Sr. Mike Bodo was born in Italy under the name Michele Bodoira. He had come to Colorado to work in the coal mines. After winning the jackpot in a game of roulette, Bodo returned to Italy, found a wife, Rosetta, and brought her back to southwest Colorado. He worked a few more years in the coal mines before taking up farming and moving his family to Ridges Basin.

Over the next twenty years, Mike Bodo and his son Mike Jr. bought out other homesteaders, and by 1940 they controlled everything from Wildcat Creek to the summit of Basin Mountain and from the Harper Ranch (at the western end of Ridges Basin) to the Animas River. Mike Bodo died in 1960, and Rosetta died in 1968. Mike Jr. continued to run the ranch until his death in

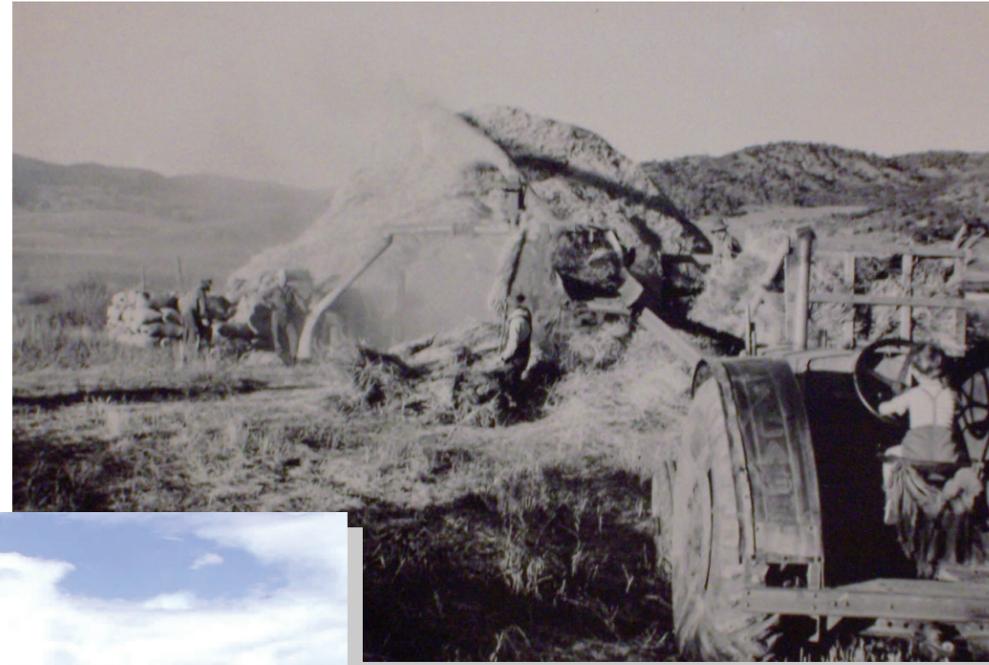
1971. The Bodo family then sold the ranch to the Nature Conservancy, which in turn passed it on to the Colorado Department of Wildlife to be used as a wildlife refuge. They created the Bodo Wildlife Refuge, with its headquarters in the old Bodo Ranch house. In the 1980s the Department of Wildlife turned the land over to the Bureau of Reclamation, who began planning the ALP Project and the reservoir. Lake Nighthorse will fill Ridges Basin by 2011, fulfilling the federal government's long-standing treaty obligations to the Utes.



Mike and Rosetta Bodo and their family in 1916. From left to right, Mike Jr. (age 10), Archie (age 6), Rosetta (standing), Vernon (age 3), Mike Sr., Rose (age 8). (Photo courtesy of Ron and Randy Bodo)

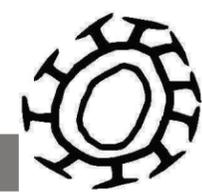


Right: Threshing on the Bodo Ranch in Ridges Basin, 1944 or 1945. Ron Bodo (age 5) is sitting on a Case tractor that provided power to the conveyor belt and thresher. (Photo courtesy of Ron and Randy Bodo)



Left: The ruins of a barn at the historic Harper Ranch in 2005.





Left and Right:
The historic Bodo Ranch in Ridges Basin.



For Further Information

The U.S. Department of the Interior Bureau of Reclamation, Upper Colorado Region website for the Animas–La Plata Project: <http://www.usbr.gov/uc/progact/animas/index.html>

The website for the Ute Mountain Ute Tribe: <http://www.utemountainute.com/>

The website for the Crow Canyon Archaeological Center: <http://www.crowcanyon.org/>

SWCA Environmental Consultants (<http://www.swca.com>) has published 16 volumes of information related to the archaeology of the ALP project. These volumes contain detailed data, discussion, and interpretation related to the project research design, field excavations, artifact analyses, and results. The series is entitled SWCA Anthropological Research Paper Number 10: Animas–La Plata Project. All of these volumes are available through the University of Arizona Press (online at <http://www.uapress.arizona.edu/>).

Volume I – Cultural Resources Research and Sampling Design, by James M. Potter (2006); ISBN No. 1-931901-15-5

Volume II – Cultural Affiliation Study, by Elizabeth M. Perry and James M. Potter (2006); ISBN No. 1-931901-16-3

Volume III – Blue Mesa Excavations, by Jason P. Chuipka and James M. Potter (2007); ISBN No. 1-931901-17-8

Volume IV – Ridges Basin Excavations: Eastern Basin Sites, edited by Thomas D. Yoder and James M. Potter (2007); ISBN No. 1-931901-18-X

Volume V – Miners, Railroaders, and Ranchers: Creating Western Rural Landscapes in Ridges Basin and Wildcat Canyon, Southwestern Colorado, by Dennis Gilpin (2007); ISBN No. 1-931901-20-1

Volume VI – Historic Site Descriptions, by Dennis Gilpin and Thomas D. Yoder (2007); ISBN No. 1-931901-19-8

Volume VII – Ridges Basin Excavations: North-central Sites, edited by Thomas D. Yoder and James M. Potter (2008); ISBN No. 1-931901-21-X

Volume VIII – Ridges Basin Excavations: Western Basin Sites, edited by Thomas D. Yoder and James M. Potter (2008); ISBN No. 1-931901-23-6

Volume IX – Ridges Basin Excavations: Archaic, Basketmaker II, and Limited Activity Sites, edited by James M. Potter (2008); ISBN No. 1-931901-24-4

Volume X – Environmental Studies, edited by James M. Potter (2008); ISBN No. 1-931901-25-2

Volume XI – Lithic Studies, by Jim A. Railey and Alexander L. Wesson (2009); ISBN No. 1-931901-26-0

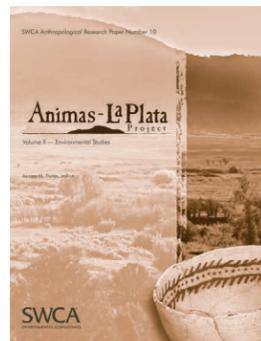
Volume XII – Ridges Basin Excavations: The Sacred Ridge Site, by Jason P. Chuipka (2009); ISBN No. 1-931901-27-9

Volume XIII – Special Studies, edited by James M. Potter (2009); ISBN No. 1-931901-28-7

Volume XIV – Ceramic Studies, by James R. Allison (2010); ISBN No. 978-1-931901-29-1

Volume XV – Bioarchaeology, edited by Elizabeth M. Perry, Ann L.W. Stodder, and Charles A. Bollong (2010); ISBN No. 978-1-931901-30-7

Volume XVI – Final Synthetic Report, by James M. Potter (2010); ISBN No. 978-1-931901-31-4





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