



US Army Corps  
of Engineers

Sacramento District  
1325 J Street  
Sacramento, CA 95814-2922

# Public Notice

Public Notice Number: 200375243

Date: November 7, 2003

Comments Due: December 8, 2003

In reply, please refer to the Public Notice Number

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## TO WHOM IT MAY CONCERN:

**SUBJECT:** Application for a Department of the Army permit under authority of Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge fill and dredged material within Long Hollow Creek and Government Draw, as shown in the attached drawings.

**APPLICANT:** La Plata Water Conservancy District  
Attn: Mr. Brice Lee  
940 C.R. 119  
Hesperus, CO 81326-

**LOCATION:** The project is located at the confluence of Long Hollow Creek and Government Draw, south of Red Mesa, La Plata County, Colorado (Sections 29, 32, and 33, Township 33 North, Range 13 West)

**PURPOSE:** The applicant's purpose for the proposed project is to satisfy the 1922 La Plata River Compact between the states of Colorado and New Mexico.

**PROJECT DESCRIPTION:** The La Plata Water Conservancy District (LPWCD) has applied for a Department of the Army permit to construct an on-channel reservoir in Long Hollow, a tributary to the La Plata River. This facility would allow Colorado to deliver water to New Mexico, as stated in the 1922 La Plata River Compact. The dam embankment would be located approximately 0.5 mile upstream of the confluence of Long Hollow and the La Plata River, approximately 4 miles upstream of the Colorado-New Mexico state line (see Figure 1).

The facility will capture flows from 43 square miles of the Long Hollow and Government Draw watersheds. The intent is to capture perennial flows supplied by groundwater irrigation return flows from and precipitation on Red Mesa. The dam embankment will be constructed from on-site materials. The dam embankment is shown in Figure 4. The embankment cross-section is shown in Figure 2.

As proposed, Long Hollow Reservoir would have a maximum pool of 5,432 acre-feet (AF), inundate approximately 160 acres, and extend 3.5 miles upstream. The reservoir pool will fluctuate dramatically from year to year and season to season. The reservoir is expected to reach capacity about 50 percent of the time. Most years, the reservoir will be drained entirely between April and July to help meet Colorado's Compact obligation. Some years, there will be carry-over storage of 500 to 2,500 AF.

The LPWCD will operate the reservoir. The reservoir typically will store water during non-Compact times (December 1st - February 15th) and other periods when water rights for the reservoir are in-priority.

The LPWCD will work closely with the Colorado Office of the State Engineer to manage releases from the reservoir for delivery of Compact water to New Mexico.

### Reservoir Construction

Sandstone with interbedded siltstone and silty shale in the Cliff House Sandstone (Kch) appears to be present at relatively shallow depths at the proposed dam site. An earth embankment roller compacted concrete (RCC) dam is proposed for the reservoir. The dam will be about 115 feet high with a crest elevation of 6,320 feet mean sea level (msl). The reservoir would extend approximately 3.5 miles upstream when full.

The outlet works would be tunneled in either the right or left abutment of the dam. An integrated, multi-level outlet works is being considered to provide water temperature control. The goal of the integrated, multi-level outlet is to provide a temperature profile comparable to natural existing conditions.

Seepage paths through highly permeable soil and rock are not present in the reservoir area and excessive reservoir seepage losses are not anticipated.

### La Plata River Compact

Article II of the La Plata River Compact states, in part:

- a. (2)(a) Between December 1st and February 15th, each state shall have the unrestricted right to use all the waters within its boundaries on each day when the mean daily flow at the Interstate Station is 100 cubic feet per second (cfs), or more.
- b. (2)(b) On all other days, the state of Colorado shall deliver at the Interstate Station a quantity of water equivalent to one-half of the mean flow at the Hesperus Station for the preceding day, but not to exceed 100 cfs.

The current delivery system for Compact water is via the La Plata River. Flows measured at Hesperus, Colorado, must travel approximately 31 river miles to the New Mexico-Colorado border (see Figure 1). However, during many years after spring runoff has occurred, the stream flow at Hesperus declines substantially, and due to natural stream conditions, flows do not reach the state line. After this decline, Long Hollow flows alone are not sufficient to satisfy one-half of the flow at Hesperus. This results in a partial delivery of Compact water to New Mexico.

Partial delivery occurs because water at the Hesperus Gauge flows downstream into a losing reach beginning near Breen and ending at the confluence with Cherry Creek (see Figure 1). The low flows at Hesperus and the losing nature of the La Plata River streambed can make the water rights call from New Mexico futile (i.e. water cannot physically be delivered) and often difficult to administer by the Water Commissioner and State Engineer. During other periods, there can be a surplus of Compact water.

The purpose of the Long Hollow Reservoir facility is to provide Compact water to New Mexico, particularly during periods of low or no flow when partial delivery to New Mexico occurs. A storage facility near the state line would allow the State Engineer of Colorado to effectively administer Compact water and meet Compact obligations. Long Hollow Creek and the La Plata River below the proposed reservoir to the state line typically are perennial, which allows for delivery of Compact water.

According to the applicant, the proposed reservoir is the best alternative for satisfying Colorado's Compact requirements for several reasons:

1. The inundated area is in a location that would cause minimal adverse environmental impacts.

2. Long Hollow Reservoir would be located downstream of two groundwater-fed, typically perennial streams in which the water easily can be captured.
3. The location is only 4 miles from the Colorado-New Mexico state line. Releases from this reservoir to satisfy the Compact would be to a perennial reach of the La Plata River, and losses to the stream would be low, especially compared to the current delivery system.
4. The location provides for more effective administration of the La Plata River Compact and improved irrigation scheduling for irrigators on Red Mesa in Colorado and in New Mexico.
5. It would allow Colorado to store water during non-Compact times (i.e. December 1st - February 15th)

The natural stream conditions of the La Plata River, coupled with the delivery requirement of the Compact, currently create an untenable water rights administration situation. The purpose of the construction of the proposed Long Hollow Reservoir would alleviate many of the administrative problems associated with the Compact.

### Project Area Description

The project area is located within the La Plata River Basin. The La Plata River originates high in the La Plata Mountains. The river is fed mainly by runoff of winter snowpack in the La Plata Mountains. The river leaves its canyon 4 miles north of Hesperus near the town of Mayday and runs through the ponderosa pine zone down to near Breen. The vegetation south of Breen is predominantly pinyon-juniper and sage on the mesas and riparian communities of cottonwoods and willows along the water sources.

The proposed reservoir would be built in a basin that is characterized by broad, nearly level glacial outwash terraces that rise above the La Plata River valley. Elevations within the project area range from 6,300 to 6,620 feet msl. Long Hollow is a relatively deep valley with steep canyon walls that have eroded approximately 130 feet below Red Mesa.

Government Draw has topography similar to Long Hollow, but has narrower, lower terraces. The dam site consists of a third terrace level, which forms a broad, nearly level upland that extends well beyond the valley rim. Both reservoir arms have steep valley sides that stand above the 100 to 300-foot-wide valley floors.

Long Hollow and Governmental Draw are perennial streams sustained by irrigation return flows from Red Mesa. Groundwater recharge to the Red Mesa Aquifer is derived primarily from infiltration of irrigation water and from precipitation in Red Mesa. No regional groundwater system supplies this area. The Red Mesa Aquifer is a closed system, affected only by surface water infiltration from irrigation and precipitation patterns.

The project site is in a semi-arid environmental. No seeps or springs exist within the reservoir footprint. The site has been historically used for livestock grazing. Approximately 2.5 acres of emergent wetlands were delineated in May 2003. Most of the wetlands within the project area are located in narrow strips along the Long Hollow and Government Draw drainages.

### Impacts to Waters of the U.S

The proposed project would directly impact a total of 18,560 linear feet (3.52 miles) of perennial channel and 2,180 LF of ephemeral drainage. The locations of the proposed impacts are shown on Figures 3-12. The reservoir could cause additional indirect and cumulative impacts, such as promoting erosion downstream and creating a precedence for possible future reservoirs.

### Impacts to Wildlife

This office has determined that the proposed project may affect the Federally endangered Colorado pikeminnow and razorback sucker, based on water depletions from the San Juan River drainage. This office is currently consulting with the U.S. Fish and Wildlife Service according to Section 7 of the Endangered Species Act. The District Engineer has made this determination based on information provided by the applicant and on the Corps' preliminary investigation.

Additionally, adverse impacts may potentially occur to the state sensitive roundtail chub, and flannelmouth sucker. In order to minimize potential impacts to these native fishes, the project will be coordinated with the Colorado Division of Wildlife and the New Mexico Fish and Game Department to establish a monitoring and flow release plan that meet the requirement of the Compact and seasonal flow requirements for these fishes.

### Depletions

Average annual calculated depletions associated with the proposed reservoir are 1,602 AF. These depletions consist of evaporative losses from the surface of the reservoir and additional depletions due to irrigation of land within the La Plata basin.

### Alternatives

The applicant investigated several alternatives to the proposed reservoir. These alternatives include:

1. Red Mesa Ward Reservoir Enlargement: A feasibility study for the enlargement of Red Mesa Ward Reservoir from 1,172 AF to 4,070 Af has been completed. This study determined that enlargement of Red Mesa Ward Reservoir is not practicable because the reservoir is approximately 21 miles from the state line, resulting in significant water loss through the channel and less water delivered to satisfy the Compact. In addition, inflows to the reservoir are inadequate to routinely fill and would be less than Long Hollow Reservoir, making it more difficult to meet the targeted flows at the state line.
2. Pipeline: A pipeline also was investigated from the Hesperus Gauge to the State Line Gauge. This alternative is not practicable due to cost. The estimated cost for material, construction, and right-of-way acquisition is approximately \$25 million to \$30 million, compared to \$12 to \$15 million for Long Hollow Reservoir.
3. No Action: No action could result in legal action between the States of New Mexico and Colorado. A lawsuit would be costly for both states. This alternative would not satisfy the 1922 La Plata Compact.
4. Soldiers Draw Reservoirs 1 and 2: These reservoirs have conditional water rights and are decreed for a combined 1,000 AF of storage, yielding much less water than Long Hollow. Also, the reservoir outlets are approximately 28 miles from the state line and would discharge to the dry reach of the La Plata River. This alternative would provide minimal advantage over the natural delivery of the La Plata water.

### Proposed Mitigation

Impacts to waters of the U.S. will require mitigation. The applicant has proposed the following conceptual mitigation options:

1. Wetland Creation: Wetland creation is proposed below the embankment and upstream of the proposed facility to mitigate for the 2.5 acres of emergent wetland impacts within the reservoir's footprint. Impact to emergent wetlands would be mitigated for at a ratio greater than 1:1.
2. Riparian Corridor Restoration and Enhancement: Additional mitigation may include enhancement and/or restoration of existing riparian areas along Government Draw and Long Hollow.

The applicant intends to work closely with the US Army Corps of Engineers and other agencies to best address the basin needs in terms of mitigation opportunity.

Construction of the proposed project will create a reservoir with a fluctuating water surface. These conditions along with the steep terrace walls do not favor mitigation opportunities along the shoreline of the proposed reservoir. A mitigation wetland downstream of the dam embankment is proposed. Other mitigation opportunities exist upstream from the proposed facility in the Long Hollow and Government Draw drainage. Surface water and shallow groundwater would provide for wetland hydrology.

Mitigation sites will be constructed by excavating to existing water sources and by expanding existing riparian wetland corridors. The mitigation areas will be more diverse and provide increased functional values compared to the impacted wetlands. Wetland mitigation areas will have multi-layered vegetation, including trees and shrubs. The mitigation wetlands will provide functions for water quality enhancement, wildlife habitat, and groundwater recharge. Earthwork will be done after construction of the dam embankment. All mitigation sites will be planted with native vegetation using potted nursery stock and/or seeded. Wetland creation areas will be fenced to prohibit livestock grazing.

Riparian wetlands above the proposed reservoir lack shrubs and trees. The presence of shrubs and trees within riparian areas enhance wetland functions, especially for wildlife habitat. Therefore, the applicant proposes to plant shrubs and trees along approximately 20,000 LF of riparian wetland adjacent to Government Draw and Long Hollow to restore and improve the riparian vegetation.

Restoration opportunities upstream and downstream of the proposed reservoir include the use of mechanical and vegetative bank stabilization techniques that will improve the stability of the drainage. The design of bank stabilization measures will depend on factors such as slope angle, soil type, and flow regime. Vegetative measures can include seeding, sodding, and/or planting trees and shrubs. Mechanical measures may include surface roughening, erosion mats/nets, terraces, blankets, riprapping, mulch, and soil seals. Enhancement would include plantings or nursery stock trees, shrubs, and herbaceous vegetation to complement existing conditions and increase biodiversity.

#### Water Quality Protection

Appropriate soil erosion and sediment controls would be implemented and maintained during construction of the proposed reservoir. Mitigation of water quality impacts to native and T&E species of concern as a result of the proposed reservoir are being addressed with the appropriate agencies. Any mitigation solutions, including a multi-level release design from the reservoir, resulting from discussions with the appropriate agencies will be incorporated into the construction, operation and maintenance of the reservoir.

#### **ADDITIONAL INFORMATION:**

The applicant has requested water quality certification from the Colorado Department of Public Health and Environment, Water Quality Control Division in accordance with Section 401 of the Clean Water Act. Written comments on water quality certification should be submitted to Mr. John Hranac, Planning and Standards Section, Colorado Department of Public Health and Environment, Water Quality Control

Division, 4300 Cherry Creek Drive South, Denver, Colorado, 80222-1530, on or before **December 8, 2003**.

The Colorado Department of Public Health and Environment, Water Quality Control Division also reviews each project with respect to the anti-degradation provision in state regulations. For further information regarding anti-degradation provision, please contact Mr. Hranac at the Colorado Department of Public Health and Environment, Water Quality Control Division, telephone (303) 692-3586.

A cultural resource survey had been prepared for the site. Three historic sites and two prehistoric site were found within the permit area. The Corps of Engineers is currently consulting with Colorado State Historical Preservation Organization (SHPO) in accordance with Section 106 of the National Historic Preservation Act.

Interested parties are invited to submit written comments on or before **December 8, 2003**. Any person may request, in writing, within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and in general, the needs and welfare of the people.

For activities involving 404 discharges, a permit will be denied if the discharge does not comply with the Environmental Protection Agency's Section 404(b) (1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria, a permit will be granted unless the District Engineer determines it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Written comments on this permit application should be submitted to the District Engineer at the address listed above. Please furnish a copy of your written comments to the attention of Ms. Kara Hellige, Durango Regulatory Field Office, U.S. Army Engineer District, Sacramento District, 278 Sawyer Drive, Unit 1, Durango, Colorado 81301. For further information, please contact Ms. Kara Hellige, at telephone number 970-375-9452, or email at [kara.a.hellige@usace.army.mil](mailto:kara.a.hellige@usace.army.mil).

Mark W. Connelly  
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District Engineer

Enclosures: Drawings