



# Public Notice

US Army Corps  
of Engineers

Sacramento District  
1325 J Street  
Sacramento, CA 95814-2922

Number: 200575030

Date: January 24, 2005

Comments Due: February 22, 2005

**SUBJECT:** The U.S. Army Corps of Engineers, Sacramento District, (Corps) is evaluating a permit application to re-construct the Lake Christine Dam (Cedar Brook Lake) proposed by the Colorado Division of Wildlife. This activity would result in impacts to approximately 0.85 acre of waters of the United States, including wetlands, adjacent to the Roaring Fork River. This notice is to inform interested parties of the proposed activity and to solicit comments. This notice may also be viewed at the Corps web site at <http://www.spk.usace.army.mil/regulatory.html>.

**AUTHORITY:** This application is being evaluated under Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States (U.S.).

**APPLICANT:** Colorado Division of Wildlife  
50633 Highway 6 & 24  
Glenwood Springs, Colorado 81601  
(970) 927-2920  
Contact: Mr. Ron D. Velarde

**AGENT:** Claffey Ecological Consulting, Incorporated  
1371 17 Road  
Fruita, Colorado 81501  
(970) 858-1670  
Contact: Mr. Michael Claffey

**LOCATION:** The project site is located near the Town of Basalt within Section 7, Township 8 South, Range 86 West, Eagle County, Colorado, and can be seen on the Basalt USGS Topographic Quadrangle and attached Figure 1.

**PROJECT DESCRIPTION:** The applicant is proposing to re-construct an existing dam to raise the current water level of Lake Christine and meet specific dam safety requirements. The existing dam was constructed in the early 1900's. In December of 2000, Lake Christine overflowed compromising the existing dam.

In 2001, the State Engineers Office required that the lake be maintained at a lower water surface elevation for dam safety considerations. The required lower level is currently being maintained. The existing dam material is proposed for removal with a new dam re-constructed and expanded. The dam construction activity would discharge fill material within the existing lake and outlet stream and impact adjacent wetlands.

The discharge sites at the dam include fill placed in 0.11 acre of wetlands for the dam, fill placed in 0.01 acre for the outlet structures and fill placed in 0.07 acre of open waters of the lake at the north side of the

dam. This activity would impact 0.19 acre of waters of the U.S. The dam fill material volume is estimated at 411 cubic yards in the lake and 788 cubic yards in wetlands.

An outlet structure will also be constructed at the dam that allows dewatering of the lake with a spillway/outlet structure constructed on the west end of the existing lake. The spillway will be constructed to convey normal outflow and carry the 100-year flow event. The spillway channel will be constructed entirely in upland areas. A culvert will be installed for the spillway channel under Two Rivers Road to outlet in a side channel of the Roaring Fork River (sheet 4). The outlet at the dam site will be located at the existing pipe outlet to reduce wetland impacts.

After dam re-construction, the new water surface elevation will inundate an additional 0.66 acre of wetlands around the perimeter of the lake with the greatest impact at the east end of the lake. The east end of the lake contains an extensive lacustrine and slope wetland near the stream inlet. This wetland complex is supported partially by ground water and the existing lake. The extent of impact for this area has been determined by using the upper limit of inundation [1.5 feet below the designed water surface elevation of 6,607 feet above mean sea level (msl)] and the lower limit of inundation (1.5 feet below the current water level). This limit accounts for existing wetland plant communities 1.5 feet below the existing water level of 6,600 above msl. Total impact to all waters of the U.S., including wetlands, is 0.85 acre (0.19 and 0.66 acre). However, wetland impacts are calculated at 0.78 acre.

Lake Christine is a recreational fishery and waterfowl habitat area on a State managed recreational property. Based on the available information, the overall project purpose is to restore a recreational fishery by rebuilding a compromised dam. The applicant believes there is a need to increase existing fishable acreage for the public while maximizing trout biomass of the lake. A larger lake with more shoreline and deeper water close to the shore improves the fishing opportunities for the public. The attached drawings provide additional project details.

#### **ADDITIONAL INFORMATION:**

**Environmental Setting.** The wetlands on the north side of the dam along the lake shoreline (0.02 acre) are a narrow band of emergent wetlands comprised of reedtop (*Agrostis alba*), water sedge (*Carex aquatilis*), cattail (*Typha latifolia*) and Baltic rush (*Juncus balticus*). The discharge of fill material in the outlet channel and wetlands on the south side of the dam (0.09 acre) include wetlands on the steep face of the dam created by the outlet channel and seepage from the lake.

This discharge of surface water also feeds wetlands at the base of the dam and adjacent to Two Rivers Road. This plant community includes cattails, reedtop, willow (*Salix geyeriana*), river birch (*Betula occidentalis*) and an unidentified escaped ornamental shrub along the outlet stream. Reedtop, Nebraska sedge (*Carex nebraskensis*) and willow (*S. geyeriana and monticola*) dominate in the flat area at the base of the dam. Along the Roaring Fork River, where the outlet structure for the spillway is proposed, the plant community is primarily reed canary grass (*Phalaris arundinacea*). The wetland area adjacent to the existing outlet pipe is comprised of mostly of willow with an understory of Canada reedgrass (*Calamagrostis canadensis*). The wetland area at the east end of the lake is dominated with cattail to an inundated depth 1.5 feet below the current water level.

Prior to construction, the inlet stream will be diverted as shown on the attached Sheet 10. The diversion involves excavating through the access road to a nearby shooting range and placing an 18-inch culvert to divert inlet flows to the east. No fill will be placed in the creek at the point of diversion and the existing culvert inlet will be blocked with a board. The stream flow will be carried by a system of ditches and pipes with a return to the Roaring Fork River.

Once flows are diverted and the lake is drained, approximately 3,500 cubic yards of existing lake bottom is being proposed for excavation. This activity will deepen the lake and provide bed material for the wetland creation area in the east bay (Sheet 5). Approximately 2,000 cubic yards will be removed by

excavation, stockpiled in the lake bed and then transported to the mitigation site. The additional 1,500 cubic yards of dredge material will be transported to an on-site upland disposal site.

**Alternatives.** The applicant has provided information concerning project alternatives. Regarding the applicant's proposed project purpose; alternative sites, larger, smaller or re-configured designs and the no action alternative were considerations presented to the Corps. Additional information concerning project alternatives may be available from the applicant or their agent.

**Mitigation.** The Corps requires that applicants consider and use all reasonable and practical measures to avoid and minimize impacts to aquatic resources. If the applicant is unable to avoid or minimize all impacts, the Corps may require compensatory mitigation.

The applicant has proposed to offset impacts by creating 0.78 acre of wetlands (a 1:1 ratio of creation to impact for 0.12 acre of fill at the dam site and outlet structures and 0.66 acre of fill in the east bay area) at an onsite mitigation area. The mitigation area is at the east end of the existing lake near the inlet. The mitigation proposal would utilize existing inlet water as a source of hydrology and salvage dredge material from the lake bottom to stage and bed wetland plant communities.

The wetland creation described in the applicant's plan includes two types of creation; a lacustrine wetland (0.56 acre) created within the new lake's water surface and the creation of a riverine/slope wetland (0.22 acre) adjacent to the lake. The plans as portrayed on Sheet 5 demonstrate that 0.94 acre of wetlands could be created at the project site. At a minimum, the applicant has committed to replacing the wetland losses at 0.78 acre. Additional wetland plant communities will likely develop around the perimeter of the lake once the water surface is re-established.

**OTHER GOVERNMENTAL AUTHORIZATIONS:** Water quality certification or a waiver, as required under Section 401 of the Clean Water Act from the Colorado Department of Public Health and Environment (CDPHE), is required for this project. The applicant has indicated they have applied for certification. Other permits necessary for this project and identified by the applicant are the following; Dam Construction permit to be issued by the Colorado Division of Water Resources, Stormwater Management permit to be issued by the CDPHE, Development Approval and Grading permit to be issued by Eagle County and a Right of Way clearance to issued by the Town of Basalt.

**HISTORIC PROPERTIES:** Based on the available information (including applicant and agent review information), cultural resources are not within the project's area of potential effect.

**ENDANGERED SPECIES:** The project may affect Federally-listed threatened or endangered species or their respective critical habitat. The Corps will initiate consultation with the U.S. Fish and Wildlife Service, pursuant to Section 7 of the Endangered Species Act, as appropriate.

The above determinations are based on information provided by the applicant and our preliminary review.

**EVALUATION FACTORS:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described 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 described activity, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain 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. The activity's impact on the public interest will include application of the Section 404(b)(1) guidelines promulgated by

the Administrator, Environmental Protection Agency (40 CFR Part 230).

The Corps 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 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 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.

**SUBMITTING COMMENTS:** Written comments, referencing Public Notice 200575030, must be submitted to the office listed below on or before February 22, 2005:

Mr. Mark Gilfillan, Project Manager  
US Army Corps of Engineers, Sacramento District  
Colorado/Gunnison Basin Regulatory Office  
400 Rood Avenue, Room 142  
Grand Junction, Colorado 81501-2563  
Email: [Mark.A.Gilfillan@usace.army.mil](mailto:Mark.A.Gilfillan@usace.army.mil)

The Corps is particularly interested in receiving comments related to the proposal's probable impacts on the affected aquatic environment and the secondary and cumulative effects. Anyone may request, in writing, that a public hearing be held to consider this application.

Requests shall specifically state, with particularity, the reason(s) for holding a public hearing. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time, date, and location. Please note that all comment letters received are subject to release to the public through the Freedom of Information Act. If you have questions or need additional information please contact the applicant or Mr. Gilfillan, the Corps' project manager at telephone number 970-243-1199, extension 15, or by email at [Mark.A.Gilfillan@usace.army.mil](mailto:Mark.A.Gilfillan@usace.army.mil).

Attachments: 11 drawings