



US Army Corps  
of Engineers

Sacramento District  
1325 J Street  
Sacramento, CA 95814-2922

# Public Notice

Number: 199850400

Date: September 13, 2004

Comments Due: October 13, 2004

**SUBJECT:** The U.S. Army Corps of Engineers, Sacramento District, (Corps) and Utah Division of Water Quality are evaluating a permit application to construct the Cow Canyon Lower Spring Development (#3) project, which would result in impacts to approximately 0.21 acres of waters of the United States, including wetlands, tributary to the Yellowstone River. Specifically, the project would utilize 5,400 cubic yards of local native gravel, rock and soil to permanently fill 0.03 acres of shallow (<2 feet deep) spring-fed pond and 0.18 acres of adjacent riparian wetland. 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>. The Forest Service has completed a predecisional environmental assessment (EA), dated July 2004, for this project entitled Cow Canyon Municipal Water Development Project Environmental Assessment. This document may be obtained by submitting an electronic request to [comments-intermtn-ashley@fs.fed.us](mailto:comments-intermtn-ashley@fs.fed.us).

**AUTHORITY:** This application is being evaluated under Section 10 of the Rivers and Harbors Act of 1899 for structures or work in or affecting navigable waters of the United States and/or Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States and Section 401 for water quality certification.

**APPLICANT:** Ted Kappan  
Duchesne County Upper Country Water Improvement District  
P.O. Box 406  
Altamont, Utah 84001  
435-454-3513

**LOCATION:** The project site is located in Cow Canyon on the Ashley National Forest, Duchesne/Roosevelt Ranger District approximately 0.25 miles west of the Moon Lake Hydroelectric Project Diversion Dam on the Yellowstone River (Figure 1-2). The site can be specifically found in Section 15, Township 2 North, Range 4 West, Duchesne County, Utah, on the Burnt Mill Spring USGS Topographic Quadrangle (Figure 1-1).

**PROJECT DESCRIPTION:** The Duchesne County Upper Country Water Improvement District owns culinary water rights for two perennial springs in Cow Canyon, Spring #1 and Spring #2. Spring #3, located approximately 130 feet to the southeast of Spring #2, is considered to have the same water source as Spring #2 (Figure 2-1). Therefore, water rights to Spring #2 may be diverted from Spring #3.

In 1991, the Water District sought a Special Use Permit from the Forest Service for the development of Springs #1 and #2 in Cow Canyon. This included the construction of a buried pipeline to convey the spring water to its culinary system. The Forest Service completed an Environmental Assessment for the culinary water project and it issued a Decision Notice and Finding of No Significant Impact in July 1992 for the development of the two springs. It furthermore issued a Special Use Permit specifying the terms and conditions for the development of Springs #1 and #2, including the requirements for mitigation bypass

flows. The District completed construction for the spring development during the winter of 1992-1993. The Special Use Permit is renewable and its current expiration date is December 31, 2011.

In order to comply with Section 404 of the Clean Water Act, the Water District also obtained a Section 404 permit from the U.S. Army Corps of Engineers authorizing the development of Cow Canyon Springs #1 and #2. The permit was contingent upon the maintenance of mitigation bypass flows for downstream aquatic and wetland habitats.

Today, the applicant is proposing to develop Spring #3 in Cow Canyon and incorporate 413 gpm (0.9 cfs) directly into its existing culinary water system (Figure 2-1). In order to develop Spring #3, the applicant proposes to discharge approximately 5,400 cubic yards of native gravel, rock and soil from an on-site location into 0.03 acres of spring-fed pond and 0.18 acres of adjacent riparian wetlands. The spring would be encapsulated with a clay cap and 10-foot thick earthen mound, and enclosed with a wooden buck and rail (or post and rail) livestock enclosure fence to protect the water quality of the source flows. Fill material would be obtained from a new borrow site, approximately 8,000 square feet in size, located in an upland area on the south side of the spring. Both the earthen mound and borrow area would be regraded to a maximum 2:1 slope and revegetated with native plant species.

The source flow of Spring #3 is estimated to be approximately 525 gpm (1.2 cfs). Approximately 112 gpm (0.25 cfs) from Spring #3 would be continually bypassed at the redesigned spring box. The remaining 413 gpm (0.9 cfs) would be available for the Water District's use.

In order to access the project site, the applicant would need to cross the Yellowstone River and an intermittent drainage on the east side of the river with three pieces of heavy equipment. These crossings will cause temporary impacts to waters of the U.S. and will not total more than 2400 square feet. The crossings will not require the discharge of fill material because the bed and banks of both features are rocky in substrate. Heavy equipment will cross the river only at low-flow periods.

For the purposes of the 404(b)(1) guidelines, the **overall project purpose** is the development of 413 gpm (0.9 cfs) of water in order to 1) maintain compliance with State-mandated requirements; and 2) meet both present-day and future user demands. The Water District has stated that it does not have sufficient water supplies to meet the peak summer demands of its existing users. The shortage in water supply has precluded the Water District from issuing new connections to its system. In the summer of 2003, the State forced the Water District to enact a moratorium on the issuance of new connections until additional water supplies are brought into the system. The moratorium remains in effect today. The Water District has obligations to provide service for a total of 736 Equivalent Residential Connections (ERCs). This includes 675 ERCs that are currently in use, and an additional 61 ERCs that have been obligated but are currently not in use. As such, the Water District's water system is currently over-appropriated by a total of 262 ERCs and is out of compliance with State-mandated ERC requirements. For a map of the Water District's service area and culinary water distribution system, please see Figure 1-3.

#### **ADDITIONAL INFORMATION:**

**Environmental Setting.** The 5-acre project site is located at 7,980 feet in elevation, approximately 1.7 miles outside of the High Uintas Wilderness boundary. It is situated approximately 600 feet above the Yellowstone River, in an area forested with mixed spruce-fir and aspen on north- and west- facing slopes, and sagebrush rangeland on south- and east-facing slopes.

Cow Canyon is a tributary drainage to the Yellowstone River and all three springs are situated within this drainage at a point closer to the Yellowstone River than to the drainage headwaters (Figures 1-2 and 1-3). The three springs flow into channels that perennially drain into the Yellowstone River downstream of the existing diversion dam for the Moon Lake Hydroelectric Project. These channels range in width from 4-16 feet. Stream gradients reach 10% and channel beds are rocky. The stream channel below Spring #1 is 2,250 feet in length; the channel below Spring #2 is 550 feet in length; and the channel for Spring #3 is approximately 650 feet in length. Frontier Corporation, responsible for the project area wetland delineation (2002), has stated that the channel below Spring #1 is a gaining reach, receiving tributary input from

numerous seeps and smaller springs that appear to be unrelated to the groundwater source that feeds Spring #1. The channels below Springs #2 and #3 also appear to be gaining reaches, but are likely fed by groundwater sources that have some connection to Springs #2 and #3.

Within the 5-acre project site, Frontier Corporation delineated the wetlands and stream channel associated with Spring #3 and the proposed access road for the project. The pond at Spring #3 is approximately 1,300 square feet in size and 2-feet deep at the deepest point. It has an abundant growth of watercress (*Nasturtium officinale*). There exists approximately 0.31 acre of wetland and stream channel adjacent and downstream of Spring #3 within the project area. The following vegetation exists within the riparian wetlands: willow (*Salix* sp.), water birch (*Betula occidentalis*), mountain alder (*Alnus incana*), sedges (*Carex* sp.), and Muhly (*Muhlenbergia* sp.). The wetland delineation identified lesser amounts of reed canary grass (*Phalaris arundinacea*), baltic rush (*Juncus balticus*), woods rose (*Rosa woodsii*) and horsetail (*Equisetum* sp.).

The proposed access road crosses the Yellowstone River and its floodplain to the southeast of Spring #3. Most of the floodplain is occupied by upland forest dominated by lodgepole pine and Engleman spruce. The floodplain is very rocky and appears to be relatively well-drained and dry due to the predominance of coarse grain alluvium that is mostly sand, gravel, and cobble. The presence of wetlands is limited to a six-foot wide band of riparian wetland on either side of the Yellowstone River as well as an eight-foot wide wetland seep channel to the east of the Yellowstone River.

**Alternatives.** A total of nine alternatives exist to the proposed development of Cow Canyon Spring #3. These alternatives include: No Action; Full Utilization of Springs #1 and #2; Water Conservation; Groundwater Development: Development of Alternative Spring Sources; Storage of Unused Flows in Spring #1 and #2; Surface Water Storage; and Surface Water Diversions. Of the nine alternatives, the Forest Service eliminated six from detailed study in the EA based on four screening criteria:

- The alternative must be responsive to the purpose and need of the proposed project;
- The alternative must be responsive to issues identified during the scoping process;
- The alternative must be legally and administratively available to the Water District and compliant with applicable Federal, State, and/or local rules and regulations; and,
- The alternative must be reasonable considering costs, logistics and existing technology.

Three alternatives remain for consideration in the EA: No Action, Cow Canyon Spring #3 Development (proposed action), and Full Utilization of Cow Canyon Springs #1 and #2. For more information regarding the nine alternatives, please reference the [Cow Canyon Municipal Water Development Project EA](#).

For the purposes of the Section 404 (b)(1) guidelines, the applicant must demonstrate that the preferred alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA). An alternative is practicable if, in light of the overall project purpose, it is available and capable of being done after taking into consideration cost, existing technology, and logistics.

**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. This public notice includes the proposed mitigation for the applicant's proposed project. Proposed mitigation for the other alternatives may be found in the EA.

In order to minimize its impacts to water resources, the applicant has proposed to leave 21 percent of the total flow available from Spring #3 as in-stream flow. Therefore, approximately 112 gpm (0.5 cfs) would be continuously released as bypass flows to maintain existing downstream aquatic and wetland habitats. Unused surplus water would also be bypassed, but the Water District retains rights to that water and will likely use the full amount at some point in the future. In addition, the applicant has proposed to:

1. Implement and maintain erosion and sediment control best management practices (BMPs) to protect water quality during project construction and until 70 percent plant cover is reestablished in disturbed areas;
2. Submit a spill prevention plan and an erosion and sediment control plan to the Forest Service prior to the mobilization of any construction equipment to the spring development area;
3. Restrict construction activity to migratory bird non-nesting periods (September 15-March 15) ;
4. Revegetate disturbed areas with a native seed mixture approved by the Forest Service and cover these areas with certified weed-free straw mulch;
5. Monitor and treat noxious weeds until desired vegetation is re-established;
6. Clean any vehicle or equipment prior to its entrance onto National Forest Service lands in order to avoid the introduction of noxious or aggressive weed species and/or potential contaminants of soil and water;
7. Cross the Yellowstone River and the intermittent drainage to the east with heavy equipment only at low-flow periods.

In order to compensate for the permanent loss of 0.03 acre of spring-fed pond, the applicant has proposed to create a 0.03 acre pond on-site which would be sustained by the 112 (0.5) cfs bypass flows from Spring #3. The bypass flows would be conveyed via a buried pipeline that would have a bubble outlet to simulate the groundwater action that currently sustains the shallow pond at Spring #3. The substrates, plant materials, and macro-invertebrates that exist in the impacted pond would be removed and transplanted into the created mitigation pond. The created pond would be a flow-through system, and the overflows would maintain the existing downstream aquatic and wetland habitats below Spring #3.

In order to compensate for the permanent loss of 0.18 acre of riparian wetland, the applicant has proposed to restore the hydrology to a 0.4 acre abandoned beaver pond/wetland complex located approximately 200 feet east of Spring #3. The unused portions of the permitted flows (i.e., surplus flows) from Springs #2 and #3 would be conveyed by a buried pipeline to the two remnant drainages that were once supplied by overflows from a series of beaver ponds built in the Spring #1 drainage.

The surplus flows supplied to the remnant drainage would decrease over time as the Water District sells more connections to its culinary system. The amount of flow would remain constant throughout the non-irrigation months, but the amount of surplus flows during the summer months would diminish over time. Based on the Water District's growth projections, it is possible that there will be no surplus flows 25 years in the future during the peak summer demand period (month of July).

In order to protect the mitigation area from grazing, the Water District would install wooden buck and rail fencing.

The Water District estimates that the mitigation site will cost approximately \$75,000 to construct, and \$5,000/year for monitoring and maintenance.

**OTHER GOVERNMENTAL AUTHORIZATIONS:** Water quality certification or a waiver, as required under Section 401 of the Clean Water Act from the Utah Division of Water Quality, is required for this project. The Utah Division of Water Quality intends to issue certification, provided that the proposed work will not violate applicable water quality standards. Projects are usually certified where the project may create diffuse sources (non-point sources) of wastes which will occur only during the actual construction activity and where best management practices will be employed to minimize pollution effects.

Written comments on water quality certification should be submitted to Mr. William O. Moellmer, Utah Division of Water Quality, 288 North 1460 West, Post Office Box 144870, Salt Lake City, Utah 84114-4870, on or before **October 13, 2004**.

The applicant has applied for a Special Use Permit from the U.S. Forest Service, Ashley National Forest. It has also requested project approval from the Utah Division of Drinking Water. Both actions are pending.

**HISTORIC PROPERTIES:** ARCON archeological research consultants performed a cultural resources survey in 1991 prior to the development of Cow Canyon springs #1 and #2. This survey did not identify any cultural resources. Based on this information, it does not appear that there are any cultural resources within the project's area of potential effect. As lead Federal Agency, the U.S. Forest Service is responsible for compliance with Section 106 of the National Historic Preservation Act.

**ENDANGERED SPECIES:** As lead Federal Agency, the Forest Service has initiated informal consultation with the U.S. Fish and Wildlife Service for the following Federally listed threatened species: bald eagle (*Haliaeetus leucocephalus*), Mexican spotted owl (*Strix occidentalis lucida*), Canada lynx (*Lynx canadensis*), humpback chub (*Gilia cypha*, bonytail chub (*Ptychocheilus lucius*), Colorado pikeminnow (*Ptychocheilus lucius*), and razorback sucker (*Xyrauchen texanus*). It has also initiated informal consultation for the following Federally listed endangered and candidate species: southwestern willow flycatcher (*Empidonax traillii extimus*), black-footed ferret (*Mustela nigripes*) and the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

As lead Federal Agency, the U.S. Forest Service is responsible for compliance with Section 7 of the Endangered Species Act.

**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 199850400, must be submitted to the office listed below on or before October 13, 2004:

Amy Defreese, Office Chief  
US Army Corps of Engineers, Sacramento District  
Utah Regulatory Office  
533 West 2600 South, Suite 150  
Bountiful, Utah 84010-7744  
Email: [Amy.Defreese@usace.army.mil](mailto:Amy.Defreese@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 the Corps' project manager Amy Defreese, 801-295-8380, extension 13, [Amy.Defreese@usace.army.mil](mailto:Amy.Defreese@usace.army.mil).

Attachments:

Figures 1-1, 1-2, 1-3, 2-1, 2-2, and 2-3