

# FELT, MONSON & CULICHIA, LLC

Attorneys at Law

---

319 North Weber Street, Colorado Springs, CO 80903

James G. Felt  
Steven T. Monson  
James W. Culichia  
Christopher D. Cummins  
David M. Shoheit

Email: [jwc@fmcwater.com](mailto:jwc@fmcwater.com)  
Telephone: 719-471-1212  
Fax: 719-471-1234

## MEMORANDUM

To: Lane Wyatt, Park County 1041 Permit Coordinator (via email: [qqlane@colorado.net](mailto:qqlane@colorado.net))  
From: James W. Culichia, attorney for Center of Colorado Water Conservancy District  
Re: Will-O-Wisp Metro District 1041 Permit Application  
Date: August 9, 2006

Dear Lane:

On behalf of the Center of Colorado Water Conservancy District (“CCWCD”), I am providing you with the following comments regarding the Will-O-Wisp (“WOW”) 1041 Permit application submitted by WOW dated April, 2006.

As you know, CCWCD is an entity with county-wide water interests and it traditionally has commented as a reviewing agency on all 1041 permit applications that involved water matters. CCWCD was recently an applicant for a §1041 special development permit related to the development of the Randall Ditch project in South Park, thus it is very familiar with the County’s 1041 procedure. CCWCD’s primary issue in evaluating 1041 applications is to ensure that the Applicant fully complies with all of the permit requirements so that the interests of Park County’s citizens, and the 1041 permit process, are protected.

CCWCD has reviewed, among other items, the WOW application, comments to the application from Jeffrey J. Kahn, the County’s special water counsel, correspondence from Robert V. Trout, the attorney for the Woodside Homeowners’ Association, various correspondence regarding the project and the pending litigation between WOW and the Woodside Homeowners’ Association, and documents regarding the water rights of WOW and the Mountain Mutual Reservoir Company.

Based upon this review, CCWCD believes there are serious questions regarding the sufficiency, completeness and timing of the WOW application. CCWCD's recommendation is that the application, in its present form, not be considered for approval until the Applicant has fully complied with all of the requirements in the regulations, resolved all of the outstanding legal issues and pending litigation, and provided the additional hydrologic and scientific evidence required to enable the County and others to fully evaluate the impacts from the proposed project.

The following are CCWCD's specific comments regarding the application:

1. Questions regarding hydrology and adequacy of physical and legal water supply.

The WOW project involves development of a point of diversion and/or infiltration gallery within Elk Creek at the location of the Glasman Ditch #2. The application states that WOW's "existing wells will remain in service once the proposed project is completed, however, no new wells will be constructed." The primary purpose of the WOW application and the development of the new water sources from Elk Creek will be to provide service to the Tanglewood Subdivision (f/k/a Pine Ridge) with an equivalency of 570 taps. Peak demand for the Elk Creek diversions are estimated to be in the 0.5 c.f.s. range.

The evidence presented in the WOW application indicates that there are questions regarding the adequacy of the physical and legal supply of water available to WOW at the proposed Elk Creek point of diversion.

Applicants' engineers have provided the County with estimated stream flows for Elk Creek and a few years of measured stream flows from 2001-2003. The estimated flows were developed back in the early 1980's by Blatchley & Associates who attempted to create a statistical correlation between measured flows at a USGS maintained gaging station on the North Fork of the South Platte River below Geneva Creek at Grant (the "Grant Gage") and flows on Elk Creek.

Developing a statistical correlation between stream basins is a standard methodology for water engineers, however, problems can arise in the application of that methodology which significantly effect the validity of the predicted flows. This is especially true with statistical correlations using the Grant Gage. In the Park County Sportsmen's Ranch litigation, PCSR attempted to use the Grant Gage as the basis for making statistical correlations to flows on Tarryall, Michigan and Jefferson Creeks in South Park. The

Water Court ruled that the Grant Gage was poorly correlated to those South Park streams. Due to a basic lack of comparability between the Elk Creek and Geneva Creek basins, CCWCD believes that the Grant Gage will not produce valid correlations to estimate the flows on Elk Creek. That lack of comparability seems to be borne out by the actual data submitted by WOW.

Tables 2 and 4 of the WOW Application set forth Elk Creek’s projected versus measured flows. Examining the calculated values (Table 2) with the measured rates (Table 4) supports the conclusion that the estimated flows are in excess of the measured flows.

For example, 1963 was a known drought year. The following table compares the estimated flows for Elk Creek in 1963 with the measured flows during the 2001-2003 measuring period (all values in c.f.s.):

<u>Month</u>	<u>1963 projected flows</u>	<u>2001-2003 measured flows</u>
January	1.22	2.0, 2.21 (2002); 1.2, 1.08, 1.8, 2.34, 1.16, 1.8, 2.96, 1.08, 1.08, 1.08 (2003)
February	1.47	2.44 (2002); 3.65, 0.95, 2.74, 1.2, 1.2, 2.15, 3.41, 2.96, 2.96 (2004)
March	1.49	2.96, 1.8, 2.26 (2003)
April	2.47	
May	5.46	2.43 and 2.31
June	5.99	1.23
July	4.01	
August	4.22	1.2, 0.46, 0.43, 0.46, 0.73
September	5.04	0.46, 0.46, 0.39, 0.70, 0.43, 0.69, 1.2, 1.2
October	3.39	1.2, 1.2, 1.2, 1.56, 1.49, 1.8
November	2.07	2.15, 1.59, 1.64, 3.18, 3.41, 1.65, 4.71
December	1.42	1.64, 2.15, 3.65, 6.91

WOW’s actual data indicates that there will be periods of insufficient physical flows in Elk Creek flows to fulfill the project’s demand. In addition, there may be legal supply issues that preclude WOW from taking the full flows that are physically available. WOW has not adequately addressed either the physical or legal supply questions in its application.

§2-206(5)(a)(1)(a) requires daily stream flows for an average year, a one-in-ten wet year, and a one-in-ten dry year.

Figure 2 is the one-in-ten dry year, and WOW chose the estimated flows for 1960 to demonstrate adequacy of its water supply. As demonstrated above, the streamflow projections developed by WOW utilizing the statistical correlation with the North Fork gage are unreliable. Actual measurements are available from the applicants' data for 2002, thus it would be preferable to utilize the measured information for determination of the one-in-ten dry year component of the regulation.

WOW's project is not like many other water development projects (i.e., CCWCD's Randall Ditch Project) where if less water is available in the stream than projected by an applicants' engineers, then no water will be diverted. WOW is a municipal water provider and once the Tanglewood houses are built, taps will go dry if there is an inadequate physical supply of water available for diversion. CCWCD recommends that the applicant be required to provide additional measurement of stream flows and alternatives to having its water supply derive primarily from Elk Creek. Since it appears that alternative sources may be required, WOW should be required to address the environmental and other impacts from those alternative sources as part of this 1041 permit proceeding and not in a separate application.

2. Impacts to fisheries and aquatic life do not appear to have been properly assessed.

Impacts to fisheries and aquatic life are required to be evaluated by §2-206(5) of the County's regulations and WOW's application addresses these issues primarily at pages 27-28. In several respects, the application appears incomplete and based upon conclusory statements rather than science. For example, no scientific evidence was cited as support for WOW's statements that the "aquatic food web of Elk Creek is estimated to not be affected by the average daily diversion of 0.3 c.f.s." (Application at 27).

The average daily diversion is not the proper measuring standard, nor is it proper to base the impacts upon the projected vs. measured flows. Rather, one must look at peak diversions and the effects on Elk Creek based upon real stream flow data. If the daily flow in a dry year is less than 0.5 c.f.s. as it was at times during 2002 and 2003, and the average diversion is 0.3 c.f.s. and the peak diversion is 0.5 c.f.s., then WOW must be required to demonstrate how constant low flows of 0.2 c.f.s., and a periodic complete drying of the stream to meet peak demands, will impact the "aquatic food web of Elk

Creek.”

Likewise, WOW’s application states in that same paragraph: “The withdrawal from the creek will not dry the stream thereby enabling the food web to be unaffected.” First, the premise that the Elk Creek diversions will “not dry the stream” appears to be incorrect based upon WOW’s own data. Second, there is no scientific evidence offered to support this conclusory statement and WOW should be required to provide such evidence.

At page 27 of the Application, WOW states that “fish populations on Elk Creek are estimated to be primarily composed of brook trout with smaller populations of rainbow trout, longnose sucker, and white sucker in the lower elevations of the creek...”

There was no evidence submitted that fish sampling of the affected upstream reaches was conducted as was required of CCWCD in its Randall Ditch Project application. Moreover, I am advised that native cutthroat trout inhabit the upper reaches of Elk Creek in the vicinity of the Elk Creek diversion. Since no fish population studies were actually conducted, WOW should be required to perform appropriate fish surveys at appropriate times to document what types of fisheries could be impacted by its diversions from Elk Creek and the stream flows for making those impact projections should be based upon real measurements as opposed to the projected flows.

3. Need for Wetlands and USACE §404 Permits.

The Denver Regional Office of the U.S. Army Corps of Engineers has jurisdiction over construction activities within wetlands and stream channels. The WOW application includes development of a diversion point and collection gallery within Elk Creek, thus it appears that a 404 permit will be required. In addition, it appears that there will be development in jurisdictional wetlands. There have been recent changes in the USACE policy regarding wetlands development and a copy of these regulations are attached. It does not appear from the application that WOW has consulted with the USACE regarding the project nor have they adequately addressed the wetlands impacts of the project. CCWCD recommends that the wetlands and §404 permit issues be fully addressed prior to proceeding with this application.

4. Evaluation of facilities not included in the application but likely required for operation of the WOW project.

The application states at §2-207(3)(h), p. 47, that there are no plans “at this time...for any impoundments in the development. However, this subject may be revisited at later date if any surface storage structures are required in the District. An amendment to this 1041 permit application will be submitted if at a later date is required to construct an impoundment for surface raw water storage.”

Based upon the limited hydrology that does exist for Elk Creek, which demonstrates that there may be insufficient water in Elk Creek during dry years to fulfill WOW’s requirements, it appears that water storage will likely be required. Water storage is also likely to be required for the Mountain Mutual plan for augmentation to legally operate during periods of low flows in Elk Creek. WOW has a conditional water rights decree for Woodside Reservoir, however, there are covenants for the Woodside Subdivision that prohibit construction of water storage facilities within Woodside and there is pending litigation regarding this issue between WOW and Woodside. In addition, the original plat for the subdivision does not indicate that a reservoir will be constructed on certain lots within Woodside, though WOW has maintained that it has easements to construct the Reservoir as shown on the recorded plat.

Because of the pending litigation, the apparent lack of easements for the Reservoir, the impacts to the affected property owners whose lots would be impacted by the Reservoir, legal questions about WOW’s ability to condemn the parcels where the Reservoir would be located, and the apparent need for the Woodside Reservoir to make the WOW project viable, WOW should be required to include the Reservoir in its present application and fully study all of the impacts.

CCWCD does not believe that it is appropriate for WOW to “amend” the 1041 permit at a later date, as stated by WOW, when there is a substantial likelihood that water storage will be required. All of the impacts from the proposed project must be evaluated as part of the primary permit application and not as future amendments to an already permitted project for which the applicant may later claim to have vested property rights.

Other issues concerning the Application have been addressed by Jeffrey J. Kahn, Park County’s special water counsel. CCWCD agrees with Mr. Kahn’s analysis and recommendations and will not reiterate them here.

### Conclusions.

CCWCD believes that the WOW application is deficient in several critical respects and it recommends that the application not be considered for approval until the Applicant

fully addresses the concerns and issues raised in this memorandum.

If we can provide you with any additional information or analyses, or be of any further assistance, please do not hesitate to contact me.

Very Truly Yours,

*James W. Culichia*

James W. Culichia

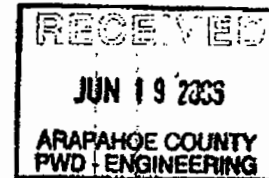
cc: Center of Colorado Water Conservancy District (U.S. Mail)  
Richard Toussaint (Via email: [rtoussaint@tnclaw.com](mailto:rtoussaint@tnclaw.com))  
Robert V. Trout (Via email: [rtrout@troutlaw.com](mailto:rtrout@troutlaw.com))  
Tom Eisenman (Via email: [TEisenman@parkco.us](mailto:TEisenman@parkco.us))  
Jeffrey J. Kahn (Via email: [jkahn@blglaw.com](mailto:jkahn@blglaw.com))  
Stephen Groome (Via email: [pcattorney@parkco.us](mailto:pcattorney@parkco.us))



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, CHAMA DISTRICT  
DENVER REGULATORY OFFICE, 9307 SOUTH WADSWORTH BOULEVARD  
LITTLETON, COLORADO 80128-6901

June 16, 2006

TO: Front Range City and County Planners  
FROM: Denver Regulatory Office, US Army Corps of Engineers  
RE: Floodplain Management and Section 404 Permitting



Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates the discharge of dredged and fill material and certain excavation activities in waters of the United States. Waters of the U.S. includes ephemeral, intermittent and perennial streams, their surface connected wetlands and adjacent wetlands and certain lakes, ponds, drainage ditches and irrigation ditches that have a nexus to interstate commerce. Residential and commercial development projects reviewed by your office, and referred to this office, often propose placement of fill in waters of the U.S., as well as development within the 100-year floodplain.

The Denver Regulatory Office (DRO), after analyzing numerous project authorizations and recent permit applications, has determined that an unacceptable cumulative degradation of floodplain functions and values is occurring along the Colorado Front Range. This cumulative degradation of floodplains is occurring due to the Front Range's rapid population growth, coupled with associated floodplain development pressures.

Our emphasis on floodplain management as part of the permit process is particularly important to those involved in subdivision plan development, review, and approval. The DRO has seen a recent increase in the number of permit applications where applicants propose maximization of developable lands. A substantial component of this maximization occurs with proposed floodplain modifications that reduce the size, functions and values of the floodplain. Project proponents should not expect to receive 404 permits for developments that significantly alter channels or floodplains, particularly for the purposes of increasing developable land.

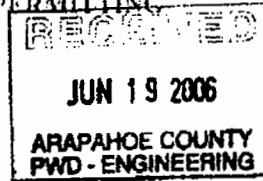
The DRO recommends that project proponents contact the Corps early in the planning process so that Corps' floodplain management concerns can be addressed and incorporated in the initial project design. If there are any questions concerning this matter, please contact me at 303-979-4120.

Sincerely,

*for J. Scott Franklin*  
Timothy T. Carey  
Chief, Denver Regulatory Office

FLOODPLAIN MANAGEMENT & SECTION 404 PERMITTING

U.S. Army Corps of Engineers  
Denver Regulatory Office



**References:**

**33 CFR Part 320.4(l)(2):** "Although a particular alteration to a floodplain may constitute a minor change, the cumulative impact of such changes may result in a significant degradation of floodplain values and functions and in increased potential for harm to upstream and downstream activities. In accordance with the requirements of Executive Order 11988, district engineers, as part of their public interest review, should avoid to the extent practicable, long and short term significant adverse impacts associated with the occupancy and modification of floodplains, as well as the direct and indirect support of floodplain development whenever there is a practicable alternative. For those activities which in the public interest must occur in or impact upon floodplains, the district engineer shall ensure, to the maximum extent practicable, that the impacts of potential flooding on human health, safety, and welfare are minimized, the risks of flood losses are minimized, and, whenever practicable the natural and beneficial values served by floodplains are restored and preserved."

**33 CFR Part 320.4(l)(3):** "In accordance with Executive Order 11988, the district engineer should avoid authorizing floodplain developments whenever practicable alternatives exist outside the floodplain. If there are no such practicable alternatives, the district engineer shall consider, as a means of mitigation, alternatives within the floodplain which will lessen any significant adverse impact to the floodplain."

**Background:**

Floodplains possess significant natural values and carry out numerous functions important to the public interest. These include water resources values (natural moderation of floods, water quality maintenance, and groundwater recharge), living resource values (fish, wildlife, and plant resources), cultural resource values (open space, natural beauty, scientific study, outdoor education, and recreation) and cultivated resource values (agriculture, aquaculture, and forestry).

The Denver Regulatory Office (DRO), after analyzing numerous project authorizations and recent permit applications, has determined that an unacceptable cumulative degradation of floodplain functions and values is occurring along the Colorado Front Range. This cumulative degradation of floodplains is occurring due to the Front Range's rapid population growth, coupled with associated floodplain development pressures.

The DRO has seen a recent increase in the number of permit applications where applicants propose maximization of developable lands. A substantial component of this maximization occurs with proposed floodplain modifications that reduce the size, functions and values of the floodplain. These applications often include a statement that a Conditional Letter of Map Revision (CLOMR) request has already been submitted to the Federal Emergency Management

Agency (FEMA), combined with a statement that the development has already been platted and approved by the county/municipality where the development is located.

**Guidance:**

In accordance with the above references, and due to unacceptable cumulative floodplain impacts, the following clarifying guidance is provided regarding Individual Permit applications where floodplain development is proposed:

1. Project proponents should contact the DRO early in the planning process so that Corps of Engineers' floodplain management concerns can be addressed and incorporated in the initial project design (prior to platting).
2. When reviewing proposed developments, the DRO will utilize the most accurate and reliable FEMA/locally-approved pre-project floodplain mapping, not post-project floodplain mapping based on a CLOMR or LOMR. However, the DRO will accept revisions to existing floodplain mapping if the revisions resolve inaccuracies in the original floodplain mapping and if the revisions accurately reflect pre-project conditions.
3. If a practicable alternative exists for construction of a project outside of the floodplain, this is the alternative for which a permit should be sought. For projects where filling of an existing 100-year floodplain is proposed in order to increase developable land, it is doubtful a permit will be issued.