# STATE OF COLORADO

# **Colorado Water Conservation Board Department of Natural Resources**

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TO: Colorado Water Conservation Board Members

FROM: Linda J. Bassi, Chief

Stream & Lake Protection Section

DATE: January 13, 2011

SUBJECT: Agenda Item 30, January 24-26, 2011 Board Meeting

> Stream and Lake Protection Section — City of Aspen Draft Federal Energy Regulatory Commission Application for Castle Creek Hydroelectric Project

John W. Hickenlooper

Governor

Mike King

**DNR Executive Director** 

Jennifer L. Gimbel CWCB Director

#### **Staff Recommendation**

Staff seeks the Board's input on comments, if any, to the City on its draft FERC application.

# **Background**

On October 18, 2010, the City of Aspen filed a draft application with the Federal Energy Regulatory Commission ("FERC") for a hydroelectric facility on Castle Creek ("the Castle Creek Hydroelectric Project"). The City is applying for a "conduit exemption" for the facility. A conduit exemption is available to a hydroelectric project that uses a multipurpose conduit and discharges the return flows from the hydroelectric plant to a "point of municipal consumption." The return flows from the City's hydroelectric plant will discharge into Castle Creek at a point approximately 3,500 feet upstream of its confluence with the Roaring Fork River.

The CWCB holds a 12 cfs instream flow ("ISF") water right on this reach of Castle Creek down to the Roaring Fork River, and also holds an ISF water right on the Roaring Fork River below Castle Creek. The City will not operate the proposed hydroelectric plant in a manner that will reduce flows in Castle Creek below the decreed ISF amount of 12 cfs. The CWCB and the City are parties to an intergovernmental agreement, dated March 10, 1998, under which the City agreed to operate certain of its senior water rights on Castle Creek to assure that 12 cfs is maintained in Castle Creek. The City agreed to bypass portions of its water rights to maintain flows of 12 cfs in the Creek, reserving the right to divert those water rights for municipal purposes under circumstances, such as extraordinary drought or emergency conditions related to its water supply. The agreement still is in effect and will not be changed by the City's proposed hydroelectric plant. As part of the City's FERC application process, the Colorado Division of Wildlife ("CDOW") requested Aspen to conduct certain studies and data collection efforts to evaluate needed instream flows for Castle Creek, and to better describe the stream habitat. The City has agreed to develop and implement, under the direction of CDOW, a stream monitoring program to monitor possible impacts of the Castle Creek hydroelectric project operations on Maroon Creek and Castle Creek fisheries and stream habitat.

# The City's FERC Analysis

In its draft application, the City states that it qualifies for a conduit exemption because ISF water rights qualify as points of municipal consumption under FERC law. The City's attorneys met with staff and the Attorney General's Office to discuss this characterization of ISF water rights, and explained that FERC regulations use different terminology and definitions than used in Colorado water law. After the meeting, Karl Kumli, the City's attorney on FERC matters, sent staff a letter, dated January 12, 2011, clarifying its analysis, which is attached to this memo. At the request of Staff, Mr. Kumli explained in the January 12 letter the differences between FERC and Colorado water law terminology and acknowledged that ISF water rights are not consumptive. Also attached to this memo are: (1) a June 23, 2009 letter from Mr. Kumli to FERC staff explaining and asking for guidance on its request for a conduit exemption; and (2) a memo to the CWCB from Paul Noto and Danielle Luber of Patrick, Miller and Kropf, an Aspen law firm, dated January 14, 2011. Comments to the City on the draft application are due on January 18, 2011. The City's attorneys have informed staff that the City will accept comments from the CWCB by February 4, 2011. The question at issue is whether the CWCB should submit comments on the draft application to address the characterization of ISF water rights as "points of municipal consumption."

#### **Discussion**

Staff is bringing this matter to the Board to ensure that there is a public record providing that while the characterization of ISF water rights in the City's application may be accurate under FERC's terminology, under Colorado law, the CWCB is not a municipality and ISF water rights are non-consumptive. The sole issue that staff is bringing to the Board is the City's analysis in its draft FERC application stating that ISF water rights are points of municipal consumption. The merits of the City's FERC application and the question of injury to the Board's Castle Creek ISF water right are not the focus of this agenda item.

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January 12, 2011

Linda Bassi, Esq.
Section Chief
Stream & Lake Protection Section
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

Re: City of Aspen, Castle Creek Hydroelectric Project

Dear Linda:

This letter follows our meeting yesterday with Mark Uppendahl from Colorado Division of Wildlife, CWCB's counsel Susan Schneider, and Cynthia Covell, who represents the City of Aspen for water rights matters. I attended the meeting in my capacity as City of Aspen's counsel for matters before the Federal Energy Regulatory Commission ("FERC").

We again reviewed Aspen's plan to apply to FERC for a conduit exemption for the planned Castle Creek hydroelectric project. As explained in my letter to you of November 18, 2010, a conduit exemption is available for a hydroelectric project that makes use of a multipurpose conduit and discharges the return flows from the hydroelectric plant to a point of municipal consumption, as that term exists under FERC law.

In Aspen's case, the conduit is a pipeline that will be used to evacuate safely the City's operating reservoir, Thomas Reservoir, if necessary. The City's major municipal diversion structures on Castle Creek and Maroon Creek both deliver water to Thomas Reservoir, and from there, the water is taken to the water treatment plant, and distributed to the City's customers. The conduit is being constructed to provide a safe way to empty the reservoir quickly in the event of an emergency, so the reservoir will not overtop and flood downhill homes, businesses and other buildings, including Aspen Valley Hospital.

The conduit will also be used to deliver water to the planned Castle Creek hydroelectric plant. From the hydroelectric plant the water will be discharged to Castle Creek. CWCB holds an instream flow on Castle Creek in the amount of 12 cfs. In FERC's terminology, that instream

Letter to Linda Bassi, Esq. January 12, 2011 Page 2

flow is a "point of municipal consumption." As we discussed, this may seem to be counterintuitive, since we Coloradoans consider an instream flow right to be non-consumptive. However, "consumption" in FERC's terminology has a meaning that is essentially comparable to "beneficial use" in Colorado water law. That is why the instream flow can be considered a "point of municipal consumption." This is discussed in more detail in my November 18 letter to you. We are pleased to provide here some further clarification as you and Susan requested.

My letter stated that the concept of "consumption," as used by FERC, is more akin to our Colorado concept of "beneficial use" than to the Colorado notion that "consumption" involves removing water from a river or stream and using it to extinction. "Consumption" or "consumptive use" in Colorado does not, of course, require use to extinction. A Colorado Instream Flow (ISF) right, like every other water right, precludes other inconsistent water uses in its reach. In that sense, an instream flow (in FERC's terminology) can be thought of as equivalent to a consumptive use. Clearly, a Colorado ISF water right is not "consumptive" in terms of removing water from the surface stream. Finally, I do want to reiterate that it is only under FERC parlance, as opposed to Colorado water law, that a stream reach subject to a Colorado ISF would be considered to be a "point of consumption."

As always, please don't hesitate to contact me with any questions. We look forward to continuing to work with the Board in this process.

Sincerely,

DIETZE AND DAVIS, P.C.

Karl F. Kumli, III

Special Counsel for City of Aspen, Colorado

c: David Hornbacher, City of Aspen Phil Overeynder, City of Aspen Cynthia Covell, Esq. Peter C. Dietze Joel C. Davis Robyn W. Kube Karl F. Kumli, III\* David J. Thrower Joel C. Maguire Renée Ezer\* Stephen A. Closky Siena Square Building 2060 Broadway, Suite 400 Boulder, Colorado 80302 Telephone (303) 447-1375 Fax (303) 440-9036 www.dietzedavis.com

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June 23, 2009

Robert W. Bell, Jr. Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Robert.Bell@ferc.gov

Re:

City of Aspen

Castle Creek Hydroelectric FERC Project (P-13254)

Dear Mr. Bell:

As you know, the City of Aspen ("Aspen" or "City"), Colorado holds a preliminary permit for the Castle Creek Hydroelectric Project (P-13254). The City is seeking guidance from Federal Energy Regulatory Commission (Commission) Staff concerning the most appropriate form of project authorization for its proposed Castle Creek Hydroelectric Project (P-13254). This project is part of the Aspen municipal water supply system. The City believes that the project meets the criteria for a small conduit exemption from provisions of Part I of the Federal Power Act and wishes to confirm with Commission Staff its belief that this type of project authorization is appropriate prior to filing a development application for the project. The information presented here is intended to facilitate a clear understanding of the project's proposed physical configuration, proposed operation and place within the Aspen municipal water supply system. An important aspect of this letter is to review the water right paradigm and water use environment in which the project would operate. The City invites dialog with Staff to promote mutual understanding of this project. The City understands that the opinions of Commission Staff do not bind the Commission.

# I. BACKGROUND

The Aspen municipal water system is complex. It contains over 75 miles of water distribution lines, 1,100 water valves, 14 water storage tanks containing a total treated storage of 9.66 million

City of Aspen believes that this letter does not constitute a prohibited communication under Commission Rule 2201, as docket P-13254 is not a contested on-the-record proceeding. There is no right to intervene in this proceeding at this point in time, and there is no intervenor which disputes a material issue in this docket. Moreover, this type of communication is contemplated as part of the pre-filing consultation process, and by Section 5 of the Federal Power Act. 16 USC §798.

gallons, 565 fire hydrants, 15 pump stations containing a total of 60 pumps, 3 municipal wells, 2 water treatment plants, and 16 separate pressure zones. The system serves over 3,500 customers in both Aspen and surrounding Pitkin County. The treated municipal water system also provides water for snowmaking on Aspen Mountain. In addition to operating the potable municipal water supply system, the City operates a pressurized untreated water system that serves the school campus, two parks, and provides water for snowmaking at Aspen Highlands. The City is also the co-licensee for the Ruedi hydroelectric project (P-3623) and licensee for the Maroon Creek (P-10441) hydroelectric project.

The Castle Creek Project originally began operation in 1893. Those generating facilities were decommissioned in 1958. The original run-of-the-river project utilized water diverted from Maroon and Castle Creeks. Water was diverted upstream of the City and was conveyed to a common collection area. Two wooden collection/storage tanks comprised the forebay for the hydroelectric plant, and two 18-inch penstocks delivered water from the forebay to the original powerhouse, located about 4,000 feet downstream. Original plant capacity was 2.4 MW. The original generating equipment was dismantled and removed following decommissioning of the facility, but the original powerhouse structure is still owned and maintained by the City.

In conjunction with water treatment plant construction in 1966, the City replaced the original wooden storage tanks with a small off-channel holding pond, known locally as Thomas Reservoir. This pond is created by earth embankment approximately 13 feet high at the upstream heel of the dam and 30 feet high at the downstream toe. The dam crest is approximately 100 feet long. The short-term holding capacity of Thomas Reservoir is approximately 15 acre-feet. It acts as an off-channel, flow-regulating reservoir for the water treatment plant. Water flows through Thomas Reservoir, but is not stored for any significant period of time. Water is delivered to the pond and the water treatment plant from the City's existing diversions on Castle and Maroon Creeks in existing pipelines (Figure 1). The City diverts water from Castle and Maroon Creeks under senior direct flow water rights and has no storage reservoirs in this part of the water system.

There are two instream flow (ISF) water rights which are germane to this project. These rights are water rights held by the Colorado Water Conservation Board ("CWCB"). The powers of the CWCB and the nature of an ISF water right under Colorado law are set forth in detail in Section V. of this letter. For purposes of understanding the hydrology of the project, water from two streams, Castle Creek and Maroon Creek are diverted to Thomas Reservoir where water from the two streams is comingled. Both Castle Creek and Maroon Creek are tributaries of the Roaring Fork River. The confluence of Castle Creek with the Roaring Fork is upstream of the confluence of Maroon Creek with the Roaring Fork.

The two ISF water rights of concern to the project are on Castle Creek and on the Roaring Fork River. The decreed rate of flow for the Castle Creek ISF water right is 12 c.f.s. The decreed rate of flow for the Roaring Fork River ISF water right is 32 c.f.s. on the relevant reach of stream.

The Castle Creek ISF water right decree is set forth as Exhibit 1. The Roaring Fork ISF water right decree is set forth as Exhibit 2.

In addition, though not directly relevant to the matters at issue in this letter, there is also an intergovernmental agreement (IGA) between City of Aspen and the CWCB which relates to the operation of the ISF water right on Castle Creek. The terms of the IGA provide that Aspen will operate its Castle Creek water rights to assure that the Castle Creek ISF right is not invaded. The Castle Creek ISF right is a junior water right, and, without Aspen's agreement to operate its own senior water rights in a way that will not invade this instream flow, the 12 c.f.s. instream flow could be injured, to the detriment of the natural environment it was appropriated to protect to a reasonable degree. The IGA is set forth as Exhibit 3.

As shown at Section V, below, the ISF decrees are important because the discharge from the Castle Creek Hydroelectric Project will make water from Maroon Creek, as well as Castle Creek, available to preserve the 12 c.f.s. ISF in Castle Creek. More importantly, the discharge from the Castle Creek Hydroelectric Project will assure that water from the project will be available to meet the requirements of the 32 c.f.s. ISF on the Roaring Fork River. As shown in Section V, below, these ISF decrees are points of municipal water consumption within the meaning of 18 CFR §4.30(b)(28)(v)(B).

# II. PURPOSE OF AND NEED FOR THE PROJECT

The existing Thomas Reservoir discharge is problematic from several water management points of view. The current reservoir overflow runs overland and is not adequately sized to safely evacuate the reservoir contents in a timely fashion without damage to downstream public and private property. Downstream properties below the existing outfall include a hospital campus, private residences and a major county thoroughfare (Castle Creek Road). The City intends to install a pipeline to allow for evacuation of the contents of the reservoir in the event that there is a breach in the earth embankment or other structural problem. Evacuation of the water in Thomas Reservoir could also be required in the event that a major maintenance event arises, including unscheduled maintenance.

A reservoir discharge pipeline will follow the alignment of the historic Castle Creek penstock because the City still holds the easement in this location which allows for its construction. This historic easement was established with the original hydroelectric project many years prior to the development of Aspen Ski Corporation and the development and improvement of private property north and east of Thomas Reservoir. There is increased cost associated with constructing the longer pipe in the historic easement than would be the case using a shorter return flow corridor to Castle Creek. However, the historic alignment will ultimately be more cost effective (and more accepted by the community) than condemnation of very high-priced land.

The discharge pipeline will be approximately 4,000 feet in length, terminating within 100 feet of the original power plant building. The difference in elevation between the water treatment plant and the discharge site at Castle Creek is approximately 310 feet. Locating the discharge line in the historic easement creates the opportunity to realize again the hydroelectric potential of the original Castle Creek Project. Water could be discharged to Castle Creek through a pressure reducing valve, but that would waste a source of clean, renewable energy. Aspen citizens strongly support City development of renewable energy resources.

Aspen is also installing other "green" energy infrastructure including cable telecommunications and a closed-loop geothermal system in the historic penstock alignment. Since a trench will be opened in the historic alignment anyway, it is also more cost effective to co-locate all facilities in that same trench, rather than to seek a separate discharge pipeline alignment.

# III. THE PROPOSED PROJECT

The proposed Castle Creek Hydroelectric Project will include:

- A single, 36-inch diameter, 4,000-foot-long pipeline/penstock from Thomas Reservoir to the proposed plant site. The pipeline/penstock will replace the deteriorated original penstocks (portions of which remain in situ) and will follow the original penstock alignment. Aspen recognizes that this penstock would not be included in the project boundary under a small conduit hydroelectric project exemption;
- A new powerhouse at the terminus of the pipeline containing two Pelton turbines each coupled to a synchronous generator, with a total capacity of 1.05 MW. The new powerhouse will be located adjacent to the original powerhouse structure. The new powerhouse was determined to be necessary due to concerns with the ability of the original structure to withstand the loads and stresses of resuming power production. Because of its associations with early electrification of the region, the original powerhouse building is eligible, but not included on the National Register of Historic Places. It is on the City of Aspen's list of historic places. It is planned to be used as a renewable energy museum.
- Appurtenant facilities.

The Castle Creek Project will operate as a run-of-the-river facility utilizing existing and proposed municipal water supply infrastructure. The City presently owns all water rights necessary for operation of the project.

The City owns all property used and useful in developing the project. There are no federal lands or reservations in the immediate area of the existing or proposed facilities.

The estimated annual production from the Castle Creek plant is approximately 7.7 GWH, which will supply approximately 12 percent of the City's annual energy use. Discharge from the powerhouse will be located on the downstream side of an existing bridge abutment where the channel has already been subject to major modifications. The discharge point can be easily armored and, for the most part, already is.

# IV. PROJECT AUTHORIZATION

On December 29, 2007, the City filed with the Commission a Declaration of Intent to resume operation of the Castle Creek Project. The City asserted that pursuant to 16 USC § 817, resumption of power production at the Castle Creek Plant is not subject to Commission jurisdiction. On March 25, 2008, the Commission issued an order ruling on the declaration of intention and finding that licensing is required for this project (122 FERC ¶ 62, 246) because the project will have post-1935 construction, will be located on a Commerce Clause waterway, and will affect interstate commerce through its selling of power through an interstate grid.

The City has examined the eligibility criteria for exemption of small conduit hydroelectric facilities from provisions of Part I of the Federal Power Act (18 CFR 4.30(b)(28)) and believes the Castle Creek Project qualifies for this type of exemption. These criteria<sup>2</sup> are:

Regulation: <u>Small conduit hydroelectric facility</u> means an existing or proposed hydroelectric facility that is constructed, operated, or maintained for the generation of hydroelectric power, and includes all structures, fixtures, equipments and lands used and useful in the operation or maintenance of the hydroelectric facility, but excludes the conduit on which the hydroelectric facility is located or the transmission lines associated with the hydroelectric facility and which:

(i) Utilizes for electric power generation the hydroelectric potential of a conduit;

Discussion: The Castle Creek Hydroelectric Project will utilize the hydroelectric potential of the discharge pipeline from Thomas Reservoir. This potential is developed by the loss in elevation of approximately 310 feet over an approximate distance of 4,000 feet between the water treatment plant site and the power plant site. The conduit would exist as a component of the municipal water system even in the absence of power generation for the purposes of safely and efficiently draining Thomas Reservoir, and for regulating the amount of water diverted into the City of Aspen water supply system. There is no significant hydroelectric potential developed by the 30-foot high earthen berm (dam height at the downstream toe) which forms the forebay reservoir.

Regulation: (ii) Is located entirely on non-Federal lands, as defined in paragraph (b)(20)(i) of this section;

For ease of interpretation, the language of the regulation is set out in italics as a prompt. A discussion of how the project meets each regulatory requirement then follows.

Discussion: The City owns all lands used and useful in the operation or maintenance of the Castle Creek Hydroelectric Project as a small conduit hydroelectric facility. The City also owns the right-of-way for the pipeline/penstock, understanding that this conduit will not be within the project boundary.

Regulation: (iii) Has an installed generating capacity of 15 MW or less (40 MW in the case of a municipal water supply project);

Discussion: The nameplate capacity of the Castle Creek Hydroelectric Project will be 1.05 MW.

Regulation: (iv) Is not an integral part of a dam:

Discussion: Neither the conduit nor this project are integral parts of a dam.

Regulation: (v) Discharges the water it uses for power generation either:

- (A) Into a conduit;
- (B) Directly to a point of agricultural, municipal or industrial consumption; or
- (C) Into a natural water body if a quantity of water equal to or greater than the quantity discharged from the hydroelectric facility is withdrawn from that water body downstream into a conduit that is part of the same water supply system as the conduit on which the hydroelectric facility is located;

Discussion: (A) The Castle Creek Hydroelectric Project will not discharge water into a conduit.

(B) Instead, the project discharges water into Castle Creek at a point approximately 3,500 feet above the confluence of Castle Creek and the Roaring Fork River. Between the point of discharge and the confluence of Castle Creek and the Roaring Fork River there is only one, small (3 c.f.s.), privately owned water right, the Tagert Ditch, which is the only intervening water right other than the instream flow (ISF) decree held by the Colorado Water Conservation Board (CWCB) on Castle Creek. Below the confluence of Castle Creek and the Roaring Fork River there is another, larger ISF decree, also held by CWCB. As set out in the remainder of this document, these ISF decrees are points of municipal consumption within the meaning of the Commission's organic law and implementing regulations. These discharges from the Castle Creek Hydroelectric Project to points of municipal consumption will comply with the discharge requirements under this section.

(C) The discharge into Castle Creek and the Roaring Fork River would also meet the requirements of discharge into a natural water body, with subsequent withdrawal, but for the fact that the regulations require that the subsequent withdrawal be into a physical conduit. However, the absence of a physical conduit here merely reinforces the propriety of a finding that the discharge here meets the requirements under Section (5)(B).

The term "municipal consumption" is not defined in the Code of Federal Regulations. In the present case, water from the proposed facility will be discharged into a natural body of water which is not consumed by a municipality in the traditional sense of the water being removed from a stream or river and used for human consumption, or removed by evaporation or transpiration. However, as discussed below, Commission case law makes clear that "municipal consumption" properly includes uses of water which do not result in removal of the water from the stream or river, and the physical consumption of water to extinction. These uses of water which are not "consumption to extinction" have repeatedly been held by the Commission to be appropriate to bring projects, like the Castle Creek Hydroelectric Project, within the ambit of 18 CFR Section 4.30(b)(28)(v).

# V. THE NATURE OF THE COLORADO WATER CONSERVATION BOARD AND AN ISF DECREE:

A. The Colorado Water Conservation Board is a Municipality within the meaning of the Federal Power Act.

While the term municipal consumption is not defined under the Commission's regulations, the term 'municipality' is given a very specific meaning under the Federal Power Act (FPA). Section 3(7) of the FPA (16 USC § 796(7)) provides that:

"municipality" means a city, county, irrigation district, drainage district or other political subdivision or agency of a State competent under the laws thereof to carry on the business of developing, transmitting, utilizing or distributing power. [emphasis supplied]

The Colorado Water Conservation Board meets the FPA definition of a municipality precisely.

Colo. Rev. Stat. Section 37-60-102, which authorizes the CWCB, provides:

For the purpose of aiding in the protection and development of the waters of the state, for the benefit of the present and future inhabitants of the state there is created a Colorado water conservation board with the powers and duties set out in this article. Said board is declared to be an agency of the state, and the functions it is to perform as set out in this article, are declared to be governmental functions for the welfare and benefit of the state and its inhabitants. [emphasis supplied]

Thus, CWCB is an agency of the State of Colorado.

Colo. Rev. Stat. Section 37-60-119 provides:

Construction of water and power facilities — contracts with and charges against users. (1)(a) In order to promote the general welfare and safety of the citizens of this state and to protect the allocation of interstate waters to the state, the [Colorado Water Conservation Bloard may, subject to the provisions in section 37-60-122, construct, rehabilitate, enlarge, or improve, or loan moneys to enable the construction, rehabilitation, enlargement, or improvement of, such flood control, water supply, and hydroelectric energy facilities, excluding domestic water treatment and distribution systems, together with related recreational facilities, in whole or in part, as will, in the opinion of the board, abate floods or conserve, effect more efficient use of, develop, or protect the water and hydroelectric energy resources and supplies of the state of Colorado.

Thus, the CWCB is competent under the laws of the State of Colorado to carry on the business of developing, transmitting, utilizing, or distributing power.

Since CWCB is a municipality under the definition in the FPA, the next question becomes whether an instream flow water right held by the CWCB is a "point of municipal consumption" under the Commission's regulations. Both under Commission decisions and under Colorado water law, it is clear that a Colorado instream flow water right does constitute a point of municipal consumption.

# B. Nature of an ISF Decree Under Colorado Law

The State of Colorado operates a system of instream flow rights as part and parcel of its very comprehensive system of adjudicated water rights. Under the Colorado Water Rights Determination and Administration Act (Colo. Rev. Stat. §37-92-101 et seq.), the CWCB is granted the exclusive authority to appropriate an instream flow water right. Colo. Rev. Stat. §37-92-102(3). In order to obtain a new appropriation for an instream flow decree, the CWCB must make application to the Colorado Water Court, just as is required of any other water user. Colo. Rev. Stat. §37-92-102(3)(c).

The nature of an instream flow right, and its ability to preclude other, inconsistent uses of water, renders the instream flow right the equivalent in every respect of a water right which provides for "consumption to extinction." In confirming the preclusive, and therefore legally consumptive, nature of an instream flow right, the Colorado Supreme Court has recently held:

[A] junior instream flow right may resist all proposed changes in time, place, or use of water from a source which in any way materially injures or adversely

affects the decreed minimum flow in the absence of adequate protective conditions in the change of water right or augmentation decree. . . . We likewise hold that an adjudicated instream flow right entitles its holder to maintain the stream conditions existing at the time of its appropriation and to resist proposed developments through changes of water rights or augmentation plans, regardless of the means, that in any way materially injure instream flow rights. . . . We recognize that instream flows thus potentially complicate development... by "tying up" a stream. Yet all water rights complicate the efforts of new or existing users to develop sources of supply. This result is endemic to the priority system and property rights generally. [Citations omitted]

Colorado Water Conservation Board v. City of Central, 125 P.3d 424, 440 (Colo. 2005).

In fact, the instream flow right is more consistently consumptive than an ordinary right under Colorado law. Where the holder of an ordinary water right may elect not to use his rights, the CWCB is not allowed to take and use less than the decreed amount, when available, for instream flow purposes. Aspen Wilderness Workshop v. Colo. Water Conservation Board, 901 P.2d 1251, 1259 (Colo. 1995).

# VI. RELEVANT FERC CASE LAW SHOWS THAT ASPEN'S PROJECT MEETS THE DISCHARGE REQUIREMENT AND ALSO QUALIFIES FOR A DISCHARGE WAIVER.

While the term "municipal consumption" is not defined in the Code of Federal Regulations, FERC case law has consistently taken a broad approach in defining uses which qualify as "municipal consumption" for the purpose of small conduit hydroelectric exemptions. *Marin Municipal Water District*, 25 FERC P 62359; *Tuolumne County Water District No. 1*, 27 FERC P 62038. Notably, FERC has held that direct consumption of the water to extinction is not a prerequisite to the use being considered "municipal consumption." *HY Power Energy Company*, 79 FERC P 61060.

In HY Power Energy Company, 79 FERC P 61060, the Commission considered a conduit exemption application for a project in which the discharged water would flow into a bypass channel. This water was not consumed by a municipality, but was <u>used</u> to prevent saltwater intrusion and to protect the supply of fresh water to communities downstream. Id. at 61275. The Commission determined that the use satisfied the "municipal consumption" requirement, despite the fact that the water was merely used to accomplish a non-consumptive purpose, was not consumed to extinction and was not consumed by the project proponent. Id.

Similarly, water discharged from Aspen's proposed project will not be immediately consumed to extinction. Instead it will be used by Aspen to meet its responsibility to maintain a minimum instream flow, under rights owned by another municipality, the CWCB. This use is made all the more important given the fact that the CWCB has an absolute duty to maintain minimum

instream flows, and cannot unilaterally elect to use a lesser amount. Aspen Wilderness Workshop v. Colo. Water, 901 P.2d 1251, 1259 (Colo. 1995). As discussed above, the CWCB qualifies as a municipality under Section 3(7) of the FPA. This use of the discharged water to meet the CWCB's minimum instream flows should be found to be "municipal consumption" pursuant to HY Power Energy Company.

A second consistent theme in FERC case law is when the rigorous text of the discharge requirement is not met, the applicant may be entitled to a waiver of the discharge requirement. However, in order to qualify for a waiver, the project still must meet the statutory requirement under Section 30 of the Federal Power Act that the conduit is "operated for the distribution of water for...municipal...consumption." Here, the Commission has taken a broad view, looking at the overall use of the entire water system of which the conduit is a part. Where, as here, the conduit is part of a complex municipal water supply system, the proposed facilities will be found to meet the statutory test of using the hydroelectric potential of a conduit primarily used for municipal consumption purposes. Marin Municipal Water District, 25 FERC P 62359; Tuolumne County Water District No. 1, 27 FERC P 62038.

In Marin Municipal Water District, 25 FERC P 62359, the Commission considered Marin Municipal Water District's ("MMWD") four separate exemption applications for proposed projects. MMWD's applications were accompanied by petitions for waiver of the water discharge requirement. In all four of the proposed projects, the water was to be discharged into natural bodies of water with no subsequent withdrawal. The Commission considered MMWD's petitions for waiver of the discharge requirement and determined that the subject impoundments and conduits formed part of a complex raw water system which served water treatment plants. Therefore, the Commission found that the proposed facilities met the statutory test of using the hydroelectric potential of a conduit for primarily municipal consumption purposes, and specifically found that the proposed facilities were in the public's interest. The Commission granted the petitions for waiver. Id.

The use of impoundments and conduits in a complex raw water supply system for the public benefit was also found to qualify as "municipal consumption" in *Tuolumne County Water District No. 1, 27 FERC P 62038*. Water stored in that project was either withdrawn and pumped to the water treatment plant or released periodically to a natural water body, with no subsequent withdrawal. *Id.* Again, the Commission noted that the proposed facilities would serve the public interest, and found that the facilities met the statutory test of using the discharged water for municipal consumption. *Id.* 

The Aspen proposed project is similarly situated. The project's discharged water will flow directly to a point of municipal consumption (the instream flow water rights of CWCB). In addition, the conduit is part of Aspen's complex raw water system and serves the public interest. Under the Marin Municipal Water District and Tuolumne County Water District No. 1 decisions, this use is both municipal consumption which satisfies the discharge requirement of § 4.30(b)(28)(v), and also entitles Aspen to a discharge waiver as a matter of public policy.

The proposed Castle Creek Hydroelectric Project should be found to discharge water used in the generation of power directly to a point of municipal consumption for the purpose of a small conduit exemption pursuant to 18 CFR 4.30(b)(28). The discharged water will be used to satisfy CWCB's minimum instream flows, will be used as part of a complex raw water supply system, and will benefit the public interest.

### VII. DISCHARGE WAIVER

As noted above, under 18 CFR § 4.92(a)(1) it is also possible for an applicant to petition for a waiver of the discharge requirement under 18 CFR § 385.207(a)(5). Aspen plans, in the alternative, to petition for a waiver of the discharge requirement, under the standards articulated in the *Marin, Tuolumne* and related cases.

## VIII. CONCLUSION

In light of all of the foregoing, the City of Aspen believes that Commission approval of the Castle Creek Hydroelectric Project is best obtained through the use of the small conduit hydroelectric project exemption set forth at 18 CFR § 4.90 et seq.

Aspen seeks concurrence of Commission Staff in this approach. We look forward to discussing this matter with you further, and moving forward expeditiously to file a conduit exemption application.

Sincerely,

DIETZE AND DAVIS, P.C.

Karl F. Kumli, III

KFK/dbr

Attachments: Exhibit 1, Ruling of Referee in Application No. W-2947, filed March 21, 1980
Exhibit 2, Ruling of the Referee in Application No. W-2948, filed March 21, 1980
Exhibit 3, Intergovernmental Agreement dated January 28, 1998 between the
Colorado Water Conservation Board and the City of Aspen

Paul L. Noto\* shareholder noto@waterlaw.com reply to Aspen office

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# **MEMO**

TO: Colorado Water Conservation Board

FROM: Paul L. Noto, Esq. & Danielle M. Luber, Esq.

CC: Clients

**DATE:** January 14, 2011

# **Introductory Statement:**

We understand that the City of Aspen intends to make a presentation at the Colorado Water Conservation Board's ("CWCB's") January 26<sup>th</sup> – 27<sup>th</sup>, 2011 Board Meeting to argue that instream flow water rights ("ISFs") are "points of municipal consumption" under Federal Energy Regulatory Commission ("FERC") organic law and implementing regulations. We summit this memorandum in support our view that ISFs are not "points of municipal consumption" under either Colorado or FERC law. We also contend that the characterization of ISFs as both municipal and consumptive water rights sets a potentially dangerous precedent for the CWCB.

### **Argument:**

The City of Aspen's proposed Castle Creek Hydroelectric Project plans to discharge water into Castle Creek directly above two separate ISF decrees. Aspen argues that the discharges of water to the Castle Creek are "points of municipal consumption" by the CWCB's Castle Creek ISF in order to qualify for an exemption from FERC licensing (and an exemption from full-scale environmental review under NEPA). These ISFs are not "points of municipal consumption" under either Colorado or FERC law, and thus do not qualify the Project for an exemption from the licensing requirements of Part I of the Federal Power Act ("FPA") for small conduit hydroelectric facilities that discharge the water they use for power generation "directly into a point of agricultural, municipal or industrial consumption." 18 CFR § 4.30(b)(28)(v).

# I. ISFs are inherently non-consumptive:

CWCB defines ISFs as "noncomsumptive, in-channel or in-lake uses of water made exclusively by the CWCB for minimum flows between specific points on a stream or levels in natural lakes." See <a href="http://cwcb.state.co.us/environment/instream-flow-program/Pages/main.aspx">http://cwcb.state.co.us/environment/instream-flow-program/Pages/main.aspx</a>



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(emphasis added). The Colorado legislature vested CWCB with exclusive authority to appropriate ISFs in order to "correlate the actives of mankind with some reasonable preservation of the natural environment," and to "mitigat[e] the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities." C.R.S. § 37-92-103(3); 122.2(5). Therefore, by their very definition, ISFs are *non-consumptive* appropriations of water to streams and lakes for the protection of natural riparian habitats from the effects of human consumptive uses. Their purpose is to *mitigate and prevent* consumption; they are not consumptive themselves. They are inherently non-consumptive in that they cannot be removed by junior water rights from their natural channel or lake for agricultural, municipal, industrial or human uses of any kind.

Colorado case law also regards ISFs as non-consumptive. The Colorado Supreme Court has declared outright that a "water right to preserve minimum instream water flows" is "nonconsumptive." U.S. v. Jesse, 744 P.2d 491, 500 (Colo. 1997). It has also on several occasions treated ISFs as distinct from or in juxtaposition to consumptive uses. For example, in Pagosa Area Water & Sanitation Dist. v. Trout Unlimited, 219 P.3d 774 (Colo. 2009) the Court assessed the sufficiency of evidence presented by municipality in support of its proposed municipal appropriation, in order to accommodate a CWCB ISF decree. The case describes how the Colorado General Assembly carefully crafted statutory provisions to integrate ISFs into the state's prior appropriation system that formally only recognized "development of consumptive use for agricultural, municipal, commercial, and manufacturing water rights." *Id.* at 782. In *U.S.* v. City & County of Denver, By and Through the Bd. of Water Comm'rs, 656 P.2d 1, 23-24 (Colo. 1982), the Court reasoned that Congress's purpose in establishing instream flows within the national forest system was to prevent enlargement of the consumptive use of water arising on national forest lands. The case describes the national forest's in-stream flows for fish culture, conservation, habitat protection, and management as "essentially non-consumptive" and contrasts them with diversions for "domestic and commercial purposes." Id. See also U.S. v. New Mexico, 438 U.S. 696, 698 (1978) (Powell, J., dissenting in part) ("the reservation of an instream flow is not a consumptive use"); Tarlock, Appropriation for Instream Flow Maintenance: A Progress Report on "New" Public Western Water Rights, UTAH L. REV. 211, 211-12 (1978) ("until recently, the non-consumptive water right to preserve minimum instream water flows was unknown in Western water law"). Thus, Aspen's argument that an ISF is a "consumptive use" is clearly contrary to Colorado precedent and statutory law.

Furthermore, if the CWCB accepts Aspen's argument, which it does if it does not file a comment letter with FERC to set the record straight, this characterization of its water rights as consumptive sets a precedent wrought with peril in future legal contexts. Traditional consumptive appropriators – such as municipalities – may point to this example to support an argument that ISFs consume water within their stream reach when ISFs are rather the basis of a new application or a statement of opposition by the CWCB. The possible negative outcomes are legion. For example, there is a longstanding argument that the CWCB must account for and possibly augment consumptive evaporation of ISF stream reaches. Lawyers making this argument will point to Aspen's FERC submission documents, and the fact that the CWCB took no position against it, as precedent that ISFs consume water. The CWCB will then be placed in the position of having to explain itself that this characterization of ISFs is limited to federal



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FERC law. This is not a good position to be placed in, for the CWCB will have to explain that ISFs are one thing under federal law, but quite the opposite under state law. This does not make logical sense.

# II. The FERC cases cited by Aspen are distinguishable and do not apply:

The FPA does not define "municipal consumption" and FERC has never considered the issue of whether an ISF is consumptive. However, the City of Aspen cites *HY Power Energy Co.*, 79 FERC P 61060 (1997) in support of its claim that Castle Creek Hydroelectric Project's planned discharge into the Castle Creek ISF decrees qualifies it for the "municipal consumption" conduit exemption under 18 CFR § 4.30(b)(28)(v). *Id.* at 3. *HY Power Energy* is fully distinguishable and does not apply to Aspen's case because the discharge from project in question was in fact directly used to facilitate the provision of raw water supply to local communities. *Id.* The project discharged water through a barge canal bypass channel to prevent saltwater from contaminating downstream Yankeetown's and the Town of Inglis's fresh water supplies. *Id.* Aspen, in contrast, is not proposing to discharge the water it uses for power generation to facilitate raw water supply to City or County residents, or for any other municipal consumptive use. Rather, it is alleging the water will be used to "meet its responsibility to maintain a minimum instream flow, under rights owned by... the CWCB." This reveals the argument's absurdity. Maintenance of a non-consumptive ISF water right cannot be and should not be considered a consumptive use of water.

A more appropriate case to look to for FERC's view on what constitutes "municipal consumption" is *Duke Energy Carolinas, LLC*, 130 FERC P 62126 (2010). There, FERC uses the term "consumptive use" to describe a town's physical withdrawal of water from a lake, into a storage structure, through an iron pipe water line via pumping plant. *Id.* The town's active water intake facility is quite distinguishable as a "point of municipal consumption" from Aspen's proposed passive in-channel use. In fact, the most recent FERC opinions to grant small conduit hydroelectric facility exemptions all involve projects that discharge water directly into points of traditional, active municipal consumption. *See e.g. San Jose Water Co.*, 133 FERC P 62296 (2010) (project located within applicant's municipal water system serving Santa Clara County, CA); *Ute Water Conservancy Dist.*, 133 FERC P 62114 (2010) (project located at existing flow control vault of Rapid Creek Water Treatment Plant serving Mesa County, CO); *City of Keen, N.H.*, 131 FERC P 62182 (2010) (project located at Keene, New Hampshire Water Treatment Facility serving Cheshire County, N.H.).

Aspen also points to *Marin Mun. Water Dist.*, 25 FERC P 62359 (1983) and *Tuolumne County Water Dist. No. 1*, 27 FERC P 62038 (1984) to support its contention that the Castle Creek Hydroelectric Project should be entitled to a waiver of 18 CFR § 4.30(b)(28)(v)'s rigorous discharge requirement. In each of those cases, FERC granted the small conduit hydroelectric facilities in question waivers because their conduits were "primarily used for municipal consumption purposes." *Id.* at 1. Again, however, these cases are distinguishable and do not apply to Aspen's case. In both *Marin Mun. Water Dist.* and *Tuolumne County Water Dist.* the discharged power generation water was used to facilitate raw water supply to local populations. In *Marin Mun. Water Dist.*, 25 FERC P at 2 the subject impoundments and conduits formed part



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of complex raw water supply system that served the Marin Municipal Water District's San Geromino and Bon Tempe water treatment plants. The facility in *Tuolumne County Water Dist.*, 27 FERC P at 1, similarly served the Tuolumne County Water District's Twain Harte water treatment plant. As discussed above, Aspen is not proposing to discharge the water it uses for power generation into a raw water supply system that serves the local population or into any other municipal consumption purpose. To the contrary, it plans to discharge the water directly into the CWCB's ISF decrees. The CWCB should clarify that its water rights are not consumptive under state law – exactly the argument that Aspen is making.

# **Conclusion:**

In sum, Aspen's proposed Castle Creek Hydroelectric Project does not qualify for an exemption from the FPA's licensing requirements as small conduit hydroelectric facility that discharges its power generation water "directly into a point of agricultural, municipal or industrial consumption." The Project intends to discharge into Castle Creek's ISF decrees – uses that are inherently non-consumptive under Colorado case law precedent and statutory law. Furthermore, the FERC case law cited by Aspen in support of its assertions of entitlement to a conduit exemption and waiver of the discharge requirement do not apply because the projects in question in each of the cases discharged the water they used for power generation to facilitate raw water supply to local populations and thus further "municipal consumption purposes." Rather, the most recent FERC opinions to grant small conduit hydroelectric facility exemptions all involve projects that discharge water directly into points of traditional, active municipal consumption. A hard look at Aspen's argument shows that it is in fact positing that ISFs are consumptive under state law. The CWCB should respond to this potentially risky precedent.