AGENDA
Infrastructure Advisory Committee Meeting
November 8, 2010; 3:00 pm to 5:30 pm
City of Bend
Eisenhower Training Room,
Boyd Acres Campus -62975 Boyd Acres Rd., Bend OR

1. Welcome and Review Handouts – 3:00 to 3:15 pm
    a. IAC Meeting Agenda
    b. IAC Final Draft Charter12.66 0 Td ( )Tj EM2j EMC /P .0176Tc 0.0. IAC Me2 Tw 9.913 0 Td1(

Davis Wright Tremaine LLP

Suite 2300
1300 SW Fifth Avenue
Portland, OR 97201-5630

Richard M. Glick
503.778.5210 tel
503.276.5710 fax

rickglick@dwt.com

M

To: Mary Alice Winters
From: Rick Glick
Date: September 22, 2010
Subject: Abandonment of City Surface W

MORANDUM

Water Rights

Introduction

You have asked for an analysis of t
ter rights in Bridge and Tumalo Creeks
groundwater. Such a shift would move
t require no further government approva
which to obtain new groundwater rights
dequate water supplies in the future, as

City Public Works staff along with
ge of water supply alternatives in the N
provements Alternatives Study ("Water
undwater as the City's sole source of w
el of service criteria, and economics. T
er supply was determined to be the mos
nomic assumptions in the Water Study
arding regulatory/legal risks of replacin
s memo supplements the Water Study a
ndoning the City's surface water supply

It is rare for cities to relinquish vali
fully vested. State law requires cities t
nprehensive plans.[2] Cities hold water ri
w water is needed, in the recognition tha
there as demand emerges. The City's c
l pumped groundwater – is designed to
ures, system failures, and natural disast

he legal implications of abandoning th
in favor of a municipal water supply c
the City from a position of holding sec
l to use, to a highly uncertain regulato
This could expose the City to signific
discussed below.

the project consultants considered the
ovember 9, 2009 Brown and Caldwell
Study").[1] The options considered incl
ater supply. Each option was screened
he report concluded that reinvestment in
t viable option to pursue. While some
may have changed and are being update
g the City's surface water with groundw
nd staff analysis regarding the legal risk

d water rights, particularly where most
consider water resources in their 20-ye
ghts and continue to pursue new rights,
t as they grow they need assurance that
rrent dual source system - gravity flow
nsure reliable water service in the face
ers.

[1] http://www.ci.bend.or.us/depts/public_wo
rks/surface_water_improvement_projec
r_improvement_alternatives_final_repo
rt.html.

[2] See ORS 197.712(2)(e), OAR 660-11 an
d OAR 660-015-0000(11).

Existing Water Rights

The City holds multiple surface water and groundwater rights, as described below.

Surface water – The City currently holds several surface water rights for the use of Bridge and Tumalo Creeks. The majority of these rights are evidenced by water right certificates. The City needs no further authorizations from the Oregon Water Resources Department ("WRD") to make use of its certificated water rights for municipal water supply. From a water rights and legal perspective, there is no risk associated with the City continuing to use these surface water authorizations.

Like other water rights in the state, the City's surface water rights are subject to curtailment according to priority date under the prior appropriation system. The City's surface water rights share priority dates with water rights held by Tumalo Irrigation District ("TID") and instream water rights on Tumalo Creek created as a result of TID water conservation projects. During times of low flow, WRD's watermaster distributes the Tumalo Creek streamflows among the City, TID and the instream water right. As a result, in a typical summer, the City may be limited during low streamflows to an instantaneous diversion rate of approximately 15.5 cubic feet per second (cfs) or approximately 10 million gallons per day (mgd). To put this in perspective, in the high-demand month of July, of the total water likely available by the City and TID, approximately 17 percent is available for the City and approximately 83 percent is available for TID.

Groundwater – The City also holds a number of groundwater rights (permits and certificates). Two of the City's most junior groundwater permits, totaling 24 cfs, require that "mitigation" be provided under the Deschutes Basin Groundwater Mitigation Program described below, before the City can appropriate water under these permits. There is some risk these water rights will not be available because of uncertainty surrounding the mitigation program. From a water rights perspective, there is no risk associated with the City continuing to use its groundwater rights that do not require mitigation.

Deschutes Basin Groundwater Mitigation Program

In 2001, the U. S. Geological Survey ("USGS") published a hydrologic study for the Deschutes Basin.[3] The study concluded that virtually all groundwater not consumptively used in the Upper Deschutes Basin discharges to surface water near Pelton Dam. Because groundwater and surface water are directly linked, groundwater withdrawals have a more immediate effect on surface flows than is the case in most river basins.

Much of the Deschutes River is protected under the Oregon Scenic Waterways Act, [4] which requires maintenance of the "free-flowing character of the scenic waterway in quantities

---

[3] Gannett, M.W., Lite, Jr., K.E., Morgan, D.S., and Collins, C.A., 2001, Ground-water hydrology of the upper Deschutes Basin, Oregon: U.S. Geological Survey Water-Resources Investigations Report 00-4162 ("USGS Study"): http://pubs.usgs.gov/wri/wri004162/.

[4] ORS 390.805 – 390.925.

necess or recreation, fish and wildlife."[5] The conclusio of the USGS study raised cor cern that ne oundwater withdrawals could "measurably redu " mandated scenic waterway lows. There WRD adopted special rules providing for mitiga n of streamflow impacts as a condit f granting new groundwater rights in the Deschu s Basin to address the scenic waterv oncerns and the potential for substantial interfer ce with other surface water ri ghts. In 200 se rules were overturned by the Oregon Court o Appeals[6] on the principal basi that the rul d not guarantee sufficient flows to protect the D chutes River's status under th Scenic erways Act. In response the Legislative Assem y enacted ORS 537.746 (Chap ter 669, C n Laws 2005), which (a) authorized the Water R sources Commission ("WRC" to promu rules providing for a mitigation program for fut e groundwater withdrawals in the Desch Basin, (b) required WRD to report to the legisla re by January 31, 2009 on impler tion and operation of the mitigation program, in onsultation with basin stakeho lders, and (c ired the WRC to repeal these rules on January 2 2014.

D administration of the mitigation program has ught to balance the need for f ture groun r appropriations against protection of scenic wa rway flows and instream wate rights. hat end, the rules limit the scope of the program

> Except for a cumulative total of 200 cubic fe per second (cfs) maximum ra te for final orders approving ground water permit a plications issued after the effe tive date of these rules, ground water in the Desc ites Ground Water Study Are is closed to further appropriation.[7]

WRD ates that all 200 cfs of the cap have been claime meaning that other than applic s already in the queue and under the 200 cfs cap. **o new groundwater permits will be issu h the Deschutes Basin Ground Water Study A ea.** This estimate includes fin l orders ni s and pending applications. Although the WR mitigation program rules pro vide for on monitoring to determine if the cap is appropriat and potentially could be raise d, recent holder processes such as HB 3494 Work Group ighlighted that there is little conser and frankly little hope, of the cap being modifie .

her, as previously noted, WRD's mitigation pro am rules are set to expire on Januar 2014. The likelihood that legislation to extend t program (and perhaps to incr ase the cap uld pass—and in what form—is difficult to pred t. Without the legislation, an without administrative program, the review of new grou water right applications (and the provis f mitigation) would be subject to review under t Scenic Waters Act and the C urt of App interpretation of the statute in *WaterWatch* v. *W* D, which appears to establish n almost hievable standard of matching mitigation with e imated impacts. Moreover, a numbe OWRD's review criteria that do not apply under e mitigation rules would appl to an app on reviewed after the rules sunset. Such an appl ation has a high likelihood of being contes y third-parties.

---

[5] ORS 835(9)(a).
[6] *Wate ch of Oregon* v. *Water Resources Commission*, 9 Or. App. 598, (2005).
[7] OAR 5505-0500(1).

C nversion from Surface to Groundwater Ri ghts

A uming that the 200 cfs cap is increased, all n ew groundwater appropriations by the City mu provide mitigation in accordance with the rul s. In theory, the City could transfer t entirety its existing surface water rights in exchange or mitigation credits. Credits likely would b nked to actual consumption patterns, as opp sed to the paper water rights, since th City's a ty to use its full water rights is limited, as de scribed in the Water Study. To receiv full cred however they are calculated, the City woul need to permanently transfer the wat rights in eam. If the City preferred a time-limited tra sfer or lease so as to maintain the abil to reclai he water rights at a later date, it would have o work through a WRD-approved mitigati bank. If the bank were the Deschutes Resou ce Conservancy, for example, then by the term f its Charter, the City would be entitled to or ly half the credits created for mitigatic Further, s probable that other water rights holders wo uld allege injury caused by converting the City urface water rights to instream rights. Protra cted litigation is a predictable outcom

W llhead Protection and Underground Injec ion Rules

I anding the City's reliance on groundwater m ay also require the City to develop a wellhea rotection program. The wellhead protection p rogram derives from the federal Safe Drinkin Water Act and is designed to protect groundw ter from contamination . Although Oregon' ogram is voluntary, the Oregon Health Auth ority ("OHA") may effectively require the City adopt a Wellhead Protection Plan ("WPP") a s a condition of approval for new groundw r infrastructure. This is because OHA must pprove significant improvements to water de ery systems and the agency identifies WPPs as a Best Available Technology for groundw r systems.[8] WPPs require a number of elem nts including delineation of groundw r source areas, an inventory of potential con aminant sources and a process for pub participa n in development of the plan.[9]

W Ps must be approved by the Oregon Departm ent of Environmental Quality ("DEQ" as well a he OHA, and are implemented chiefly throug h changes to the City land use code. OHA ru govern the delineation of groundwater sourc e areas (known "Wellhead Protection Areas") l DEQ must approve the WPP as a whole. O egon Department of Land Conservatic and Dev pment ("DLCD") rules in turn designate We llhead Protection Areas as significant natural r urces under Statewide Planning Goal 5. As G oal 5 resources, these areas must be protecte rough changes to the City's comprehensive p lan and zoning ordinance.[10] Generall this is ac mplished through adoption of an overlay zon e that restricts land uses in Wellhead Protectic Areas. Participation in the wellhead protectic n program therefore triggers complex regulato processes at both the state and local level req iring considerable time and public participa n.

E blishing a groundwater-only water supply w uld also potentially require costly permitti or decommissioning of many underground in ection wells around the city. Many

---

[8] ORS 4 131(3); OAR 333-061-0050(4)(b)(D)(v).
[9] OAR 3 040-0170.
[10] OAR) 0-023-0140.

underground disposal systems for sanitary waste, stormwater and commercial and industrial wastewater are currently authorized by rule and thus do not require a permit to operate. See OAR 340-044-0018. This authorization does not apply, however, where an underground disposal system is located within 500 feet of a drinking water source or where the waste could travel to a drinking water source within two years. See OAR 340-044-0018(3)(a). Therefore, if the city expanded its use of groundwater as a drinking water source, small businesses with underground disposal systems upgradient of aquifers would have to secure permits or be decommissioned. Permits for underground disposal systems are nearly $10,000 plus an annual fee of $2,001. Decommissioning is also expensive and could result in stormwater management problems due to the increased volume of stormwater on city streets and in the storm sewer system.

Conclusion

For the reasons described above, giving up its current secure, entitled surface water supply would subject the City to significant risk that adequate groundwater rights would not be obtainable. Such water rights would require credits under the Deschutes Basin Groundwater Mitigation Program, but that program is currently at the limits established by the WRC. WRC would have to adopt new rules to allow use of credits beyond the 200 cfs appropriations cap, but would need to show that by doing so it can fully protect scenic waterway flows and instream rights. This would require a study, and the new cap may not be established for several years; it took several years to put the existing program in place.

The Mitigation Program by statute is set to expire on January 2, 2014. If WRC did not expand the available mitigation credit capacity to accommodate the City by then, legislation would be required to keep the program alive. As noted, such legislation is not a sure thing and may end up containing unwanted provisions. Without the legislation, any new groundwater right applications would need to demonstrate that scenic waterway flows would not be measurably reduced and that instream water rights in the Deschutes River would not suffer substantial interference. Such an application would certainly be protested and the burden will be on the City to show that its proposed appropriation would not cause measurable reductions or substantial interference. Based on the success WaterWatch and its allies had in *WaterWatch* v. *WRC*, we can expect serious opposition.

In other words, securing new groundwater rights, even if the City were willing to permanently transfer all of its surface rights to instream uses, is highly speculative. By way of contrast, the surface water rights held by the City require no further WRD process and do not present ready opportunity for parties to challenge further development of the water rights.

Davis Wright Tremaine LLP

Suite 2300
1300 SW Fifth Avenue
Portland, OR 97201-5630

Richard M. Glick
503.778.5210 tel
503.276.5710 fax
rickglick@dwt.com

MEMORA)UM

To: Mary Winters
From: Rick Glick
Date: November 2, 2010
Subject: WaterWatch Letter of Oct 27, 2010

You have asked for a response t e letter addressed to the Bend C ity Council, dated October 27, 2010 from Kimberley Priestley of Wate tch (WW). The letter urges the City to convert from a dual source surface and groundwater supply s m to all groundwater, or at lea st to defer the decision to move forward with the surface water system p ct until more public discussion can be had. WW argues (1) that the City is reneging on its prior commitm to move to groundwater to m et future needs; (2) that the surface water project will not yield a mo eliable water supply than conv rting to groundwater exclusively; and (3) that the upgraded surface system l substantially "enlarge" histor cal water use from surface sources, contrary to regional efforts to re e surface flows in the Deschut s Basin. We address these in order.[1]

City Commitment to Groundw r over Surface Water

WW mischaracterizes the City's er planning. It is true that the C ity intends to make use of its existing groundwater rights and to pursu ditional groundwater rights to meet future demand. However, the City never intended and has never sa hat it would substitute groundw ater for its vested surface water rights. The City's planning has always c mplated that new groundwater rights would supplement, not replace, water rights held by the City for ich no further administrative ap proval is required.

The essence of the City's water p ning is that it would have a dua l source of water supply. The majority of the City's surface water right e certificated and require no fu ther administrative actions. The water is delivered by gravity flow, a ll that is lacking is an upgrade l pipeline and treatment plant. Groundwater is a complementary r supply that is delivered by p mping from depth, which incurs a substantial, ongoing and escalati cost of electric energy. Water p lanners throughout the western U. S. seek alternative and redun water supplies to cover contin gencies over a decades-long planning horizon.

Anyone following the City's wat lanning efforts would be awar that the City intended to upgrade the surface water system. The 2 Water Master Plan referenced he need to upgrade the surface water systems, as did the 1980 P The November 9, 2009 Brow and Caldwell

[1] WW also raises concerns about the cost lysis done by HDR, which we le ve to HDR to respond to.

Surface Water Improvements Alternatives Study ("Water Study")[2] examined a range of alternatives, including use of all-groundwater. This study and subsequent discussion have been public record. It is not common for municipal water providers to have extensive public involvement in the technical details of water supply development.[3] When the City moved the project to 30% design and hired HDR, Inc., a public outreach plan was created and meetings have been held with key local stakeholders, including a public workshop on October 12, where the City made its consulting team and representative of the U. S. Forest Service, Deschutes County and others available for questioning by the public. It is not required to provide additional opportunities for public comment.

Reliability of Surface . Groundwater Supplies

WW argues that upgrading the surface water system would not "guarantee" a more reliable surface water supply. There are no guarantees in water supplies, but improvements to the existing system are necessary to ensure it continues to be operable. The existing pipeline is in need of extensive repair and the City determined it is more cost effective to replace it. Further, the City's water treatment capacity needs modernization to meet current EPA standards. Making and sizing these basic upgrades to a water supply system supported by fully vested water rights is simply prudent.

On the other hand, WW suggests that substituting groundwater for its existing surface water rights, as well as future groundwater withdrawals, would not be difficult. In WW's view, the 200 cfs cap on the Deschutes Basin groundwater mitigation program is not a real barrier, since some of the demand on the cap is "in stated". At the moment WRD considers there to exist 200 cfs of proposed groundwater withdrawals under the mitigation program and therefore the limit has been met; there is no practical way for the City to get certainty on whether these proposals are likely to be granted. Further, there is no way of knowing whether the 200 cfs cap may be increased, as WRD would need to show the increase would not affect scenic waterway flows. WW has been a sharp critic of WRD's mitigation program and can be expected to insist on a conservative approach to increasing the cap.

WW also suggests that the 2014 legislative sunset of the mitigation program provided for in ORS 537.746 could easily be lifted, presumably with WW support. The City should not count on such support. WW points to its efforts to cooperate with the City in the development of new groundwater supplies, including settlement of its protest against the City's 1995 groundwater application, which protest was lodged because of the absence of a mitigation program at the time. However, WW challenged the WRD mitigation program when it was first adopted, despite being party to development of the program, resulting in the mitigation rules being invalidated by the Court of Appeals in *WaterWatch of Oregon* v. *Water Resources Commission*, 199 Or. App. 598, (2005). That decision led to the enactment of ORS 537.746--over WW's objection.

WW later unsuccessfully protested the City's efforts to extend the time to develop a water right. And in its October 27 letter WW makes it clear it will challenge the City's ability to develop hydropower on the new pipeline using the in-conduit hydro statute (ORS 540.760 et seq.).

---

[2] http://www.ci.bend.or.us/depts/public_works/surface_water_improvement_project/surface_water_improvement_alternatives_final_report.html.

[3] WW is a regular participant in the full range of water rights administrative procedures, yet mischaracterizes the City's partial perfection of permit 49823. WW implies that the City somehow slipped this by the public, but knows full well there is no public review process for partial perfection. The City followed the prescribed process to "perfect" the portion of the permit developed prior to the development timelines and will seek an extension for the rest.

Thus, WW's rance that it i ing to work with [the City] on obtaining future groundwater supplies" is not conv ıg. If the City ıes entirely reliant on groundwater, it will find itself in the role of supplica nt at the l ature. WW ar llies will certainly be active players in shaping the bill and it is not at all c ear what ges to the mit program will result. We can say, however, that the revised mitigation program i likely to be l ngent than the current one.

"Enlarging" Surface Wat ht System

WW correctl es that the re d surface water supply system will enhance the City's ability to capture water availab it under its v ghts. WW uses the term "enlarging" to describe the project, which in water rights ance suggests he City intends to take more than it is allowed. The City proposes only to mak neficial use o ater allowed under the certificates and consistent with the senior rights of Tum rigation Distr

The City rem an active par t in regional efforts to put more water instream and to meet all water needs on an eq le basis. The ntered into a Memorandum of Understanding with the Deschutes Water All (DWA), wh leveloping a coordinated water management plan for the basin. The City is also enga in the Deschu unty Mitigation and Enhancement Committee, supports the Upper Deschutes Re ion Plan fran , and is engaged with the Deschutes River Conservancy both in project developme d policy disc s.

Further, the C s at the table e irrigation districts to negotiate a long term coordination agreement that helps ddress many c ssues that have the potential to impact the districts operationa ly as UGE pand, and lan hanges are approved. The City is committed to working with all its wate related p rs and will cc to do so.

Conclusion

WW raises a imate policy c nce on whether to surrender the City's vested surface water rights and transition t all-groundwa tem. However, its suggestion that the City is backing away from prior commitme nisses the ma s only prudent that the city seeks a reliable dual source of water supply. Further WW letter d dispel the uncertainties attached to securing water rights for an all-groundwate stem.

---

[4] WW misch aracterize City's historic e water use when it asserts that historic use has been far less than the 18 to 21 cfs p sed under the e water project. WW uses City water use reports of monthly volume to make its ca owever, one c evaluate the City's instantaneous water use (which is what the City's water rights are d on) by looki onthly volumes and averages. For example, there have been numerous times when City has divert er at a rate of up to 18.2 cfs for beneficial municipal use. However, such use wc ot be apparer oking at monthly averages.