



King County

Wastewater Treatment Division

Department of Natural Resources and Parks
Brightwater Project Office
22509 State Route 9 Southeast
Woodinville, WA 98072-6010

August 9, 2007

The Honorable Dave Hutchinson
Mayor, City of Lake Forest Park
17425 Ballinger Way NE
Lake Forest Park, WA 98155-5556

Dear Mayor Hutchinson:

As requested, I am providing background information regarding King County's and the Lake Forest Park Water District's efforts to implement their December 5, 2003, Brightwater Mitigation Agreement.

Agreement History

In December 2003, the Lake Forest Park Water District executed a Memorandum of Agreement with King County regarding mitigation for the Brightwater Project. This agreement focused on measures necessary to assure the protection of the Lake Forest Park Water District's water supply in light of Brightwater tunnel construction in close proximity to the district's aquifer. The county and the District have been working diligently to implement the terms of the agreement.

Sections I through 4 of the agreement set forth the hydrogeologic exploration and testing to be done during the design, construction and operations phases of the Brightwater project. Section 1 which entailed hydrogeologic exploration and testing during the tunnel design phase has been completed by the county. Section 2, which entailed tunnel bore and portal design criteria, has also been completed by the county. The county is preparing to complete sections 3 and 4 of the agreement, which require groundwater level and water quality monitoring during and after construction, respectively.

Section 5 of the agreement involves a water supply replacement plan and sets forth the possible mitigation measures which would be implemented in the unlikely event that the Brightwater project causes an adverse impact to the district's current water supply wells. This section was meant to provide for an interim water supply as a stand-by emergency measure and, if

necessary, a permanent water supply replacement if the Brightwater project were to cause a permanent adverse impact to the district's current water supply wells. As stated in a March 9, 2007, letter to the district, we believe the parties contemplated that the interim water supply would be provided by a new well located within the boundaries of the district or development of a new intertie or upgrade of the existing interties with the City of Seattle or other agencies.

The county believes that the potential for any adverse impacts to the district's current water supply wells from the Brightwater project is remote and if it were to occur it would be only temporary. A permanent water supply replacement, if needed, would be developed as set forth in the agreement.

Current Status

The 2003 Memorandum of Agreement regarding mitigation for the Brightwater Project was premised upon a number of assumptions related to the existing water right that has turned out to be erroneous.

The first and most important is the district's representation of its existing water right and the authorized withdrawal limits and locations. According to the files maintained by and provided to the county by the Department of Ecology (Ecology), the Lake Forest Park Water District has four water rights for withdrawals from two watersheds. But there appears to be serious inconsistencies with these rights. For example, according to Ecology's files, the point of withdrawal for Well No. 1 may be different from its actual well location. In 1967, Hammond Collier & Isaac were advised that a change of point withdrawal was needed for that well. Apparently the original well was abandoned and a new well installed without the required change being made.

The point of withdrawal for Well No.2 is also different from the actual well location. Correspondence from Robison, Noble, and Saltbush, hydrogeologists hired by the District indicates that the well is actually in Lot 15 of Block 10. According to the water right, Well No. 2 is supposed to be located in Lot 15, Block 13 of Lake Forest Park, First Addition. The point of withdrawal for Well No. 3 is also different from the actual well location. Correspondence from Robison, Noble, and Saltbush indicates that the well is in a parcel currently denoted as Lot 18 of Block 10. The 1912 Plat map shows Lots A and 18 as distinct parcels separated by several hundred feet. According to the water right certificate, authorized withdrawals from Well No. 3 are totally supplemental, and are non-additive to withdrawals from Wells No. 1 and 2. Robinson, Noble, and Saltbush, concur with this assessment. There are no documented water rights or claims for withdrawals from artesian wells in the east watershed. Any purported surface water rights in the west watershed have likely been relinquished from non-use. And there are no water rights authorizing Well No.4 as an alternate or backup source of supply.

Thus the district's maximum instantaneous withdrawal is limited by Ecology to 540 gpm which is the combined instantaneous quantity of Wells No. 1 and 2. Up to 225 gpm of that total

may be pumped from Well No. 3, but the total may not exceed 540 gpm.¹ This number is far lower than what the district portrays as its water rights in the district's current Comprehensive Water System Plan.

All of these problems with the district's existing water rights need to be addressed during Ecology's formal review process and would likely delay Ecology's decision on any request to change the point of withdrawal, even if the change is to a location within the district, if such a location can be found.

It should also be noted, the agreement was premised upon the ability to drill a new well within the district or to create an emergency intertie; it was never contemplated or agreed that the county would develop a new water system complete with water mains for the district.

The agreement states that as a possible mitigation measure the county would drill and develop a new deep well water source unless that mitigation measure is technically or legally infeasible in which case the County would create an intertie for the district to receive water from Seattle Public Utilities (SPU). As stated in the County's May 29, 2007, letter to the district, the county is prepared to either develop a new interim intertie or to provide funds for the district to develop such an intertie with SPU.

Interim Water Supply Development

The district and the county, with the help of a county consultant, began investigating possible well sites in 2004 for an interim standby well or interim connection to SPU. Work completed included the following:

- A **Well siting matrix** was first developed in June 28, 2005, that identified 17 initial potential well sites.; this was later narrowed down to three sites for further consideration and included a County owned site, the Onnuri Church Property and the City's Horizon View Park.
- **Project milestones and Schedules** were created and maintained by the County through February 7 & 12, 2007. These involved an iterative approach to site selection as information was collected and feasibility was determined.
- **Various intertie alternatives were developed and costed** ranging from \$23,000 to \$200,000.
- **Various well development cost estimates** were developed including some with long transmission line. The most expensive of which was estimated to cost \$1.7 million excluding required easements.
- A **City of Lake Forest Park Study Session** was held on May 20, 2006, concerning use of the city's Horizon View Park as a well site. The city strongly discouraged this site.

¹ The annual quantity is a little more complex depending upon whether or not Well No. 3 is used.

- The required **King County Public Health Department site inspection** of potential well sites was conducted and resulted in recommendations for approvals with variances for set backs.
- A **Formal Commercial Appraisal** by the County was completed on the Onnuri Church Property December 13, 2006.
- A **District and Department of Ecology meeting** on Water Rights Transfer was held at the Department's Bellevue office on February 21, 2007.
- In 2006 and 2007, both the District and the County, separately, discussed possible intertie options with **Seattle Public Utilities** with the District identifying one near their well field.
- The County discussed the condition of and interim, emergency use of the **LFPWD-NUD intertie** use with the Northshore Utility District in 2006 and 2007.

As a result of these actions, in early 2007, the county indicated that the district would need to conclude its efforts with the Department of Ecology on acquiring a formal water rights transfer of discharge points before additional time, effort and money could be expended on obtaining easements and performing any exploratory well drilling. Confirmation of a water rights transfer had been urged by the county at an early date but had not been provided by the district.

Consequently, the county sent a letter to the district on March 9, 2007, requesting a meeting to discuss alternatives that could fulfill the intent of the existing agreement and protect the interest of all parties. The district responded to the county on April 18, 2007, stating that they "do not see any need to revisit the agreement". On May 29, 2007, the county once again suggested that a meeting with the district would allow timely resolution to any issues and thereby furthering the interests of all parties. The district replied to the county on July 31, 2007, threatening legal action to enforce "its rights under the agreement."

Unresolved Issues Related to Out of District Well Siting

- The location of any "replacement well" outside of the district's existing well field will require a formal, as opposed to an administrative, change process to the existing water rights. The formal change process will take at least six months to one year according to Ecology.
- Transmission line length and constructability from possible sites north of the district's well field; construction of a lengthy transmission line is not part of mitigation agreement.
- Depending on the location, impacts to service area or NUD service area; well operation and maintenance requirements, land use variances and City of Lake Forest Park approvals.

Any possible well site would require a State Environmental Policy Act threshold determination. Depending on the location, environmental impacts from the construction on the production wells vary greatly.

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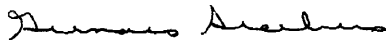
Conclusion

The county believes that an interim well cannot be constructed in a timely manner because of water rights deficiencies, siting requirements and the overall tunnel mining schedule. Emergency water supply can be obtained to address an emergency utilizing either an existing intertie with the Northshore Utility District with the development of a more permanent intertie with SPU if necessary. The County has proposed, several times, a meeting with the representatives and commissioners of the district will help to allow timely resolution to these issues and thereby furthering the interests of all parties.

King County remains committed to ensuring the Lake Forest Park Water District's water supply is protected and that interim measures are in place during Brightwater tunnel construction to assure safe and ample water to district customers.

If you have any questions please do not hesitate to contact me. I can be reached at 206-296-1474 or 206-684-2113.

Sincerely,



Gunars Sreibers,
Brightwater Project Manager, King County Wastewater Treatment Division

Enclosures

cc: Gordon Hungar, Commissioner, Lake Forest Park Water District
Christie True, Division Director, Wastewater Treatment Division (WTD)
Verna Bromley, Prosecuting Attorney, King County Prosecuting Attorney Office
Bob Peterson, Project Manager, WTD

Subject: Tranmittal of County letter, location map and Fact Sheet to Mayor Hutchinson, City of Lake Forest Park

From: "Peterson, Bob" <Bob.Peterson@METROKC.GOV>

Date: Thu, 9 Aug 2007 15:36:46 -0700

To: "Mayor Dave Hutchinson" <dhutchinson@ci.lake-forest-park.wa.us>

CC: "Jensen@ LFP, Neil" <njensen@ci.lake-forest-park.wa.us>, "Cline@LFP, Dave" <dccline@ci.lake-forest-park.wa.us>, "Zenk@ LFP, Frank" <fzenk@ci.lake-forest-park.wa.us>, "LFPWD" <office@lfpwd.org>, "Sreibers, Gunars" <Gunars.Sreibers@METROKC.GOV>, "True, Christie" <Christie.True@METROKC.GOV>

Good afternoon Mayor Hutchinson,

I am transmitting an electronic copy of a letter describing the background of the County and Lake Forest Park Water District efforts to implement the December 2003 Brightwater Mitigation Agreement between the County and the District. You requested this information in a July 26, 2007 meeting that you had with Christie True, Manager of the County's Wastewater Treatment Division.

Attached also is a location map showing two possible well sites north of the the District's well field.

I am also attaching a copy of a fact sheet on the water production well development that is the subject of our letter to you.

<<LFP_Water_Fact Sheet_Final 8 9 2007.pdf>> <<LFPWD5.pdf>> <<County letter to LFP Mayor Hutchinson 8 9 2007.pdf>>

Gunars Sreibers, Brightwater Project Manager and I will bring the original of the letter and attachments to you at the City Council meeting this evening.

Respectfully,

Bob Peterson
Sr. Project Manager
Brightwater Conveyance Team

Direct BWO (206) 296-1302
fax BWO (206) 296-1405
Cell (206) 571-1513
DC 112*342*221

LFP_Water_Fact Sheet_Final 8 9 2007.pdf

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**Protecting public water supplies
during Brightwater tunnel
construction**

Groundwater protection is a priority for King County

King County is building a new wastewater system called Brightwater to protect public health and the environment in our rapidly growing region. In addition to a treatment plant north of Woodinville, Brightwater facilities also include a 13-mile tunnel, and an outfall in Puget Sound a mile off Point Wells. A portion of the Brightwater tunnel will run hundreds of feet beneath Lake Forest Park.

As a clean-water agency, it's our mission is to protect water quality. King County's commitment extends to protecting groundwater and drinking water supplies in communities like Lake Forest Park during Brightwater construction.

The Lake Forest Park aquifer has been studied

The Lake Forest Park Water District (LFPWD) supplies water to about 700 people from an aquifer, which is above the location of where Brightwater tunnels will be built.

Over the past four years, King County has worked with the Lake Forest Park Water District to conduct detailed geologic and hydrogeologic studies to help us understand their system and protect the District's aquifers during and after Brightwater construction.

Tunnel construction is very unlikely to impact Lake Forest Park aquifer

The Brightwater environmental review process evaluated the effects of construction and ongoing operations on groundwater supply and quality, and identified procedures to protect the groundwater and aquifers.

Geotechnical engineers from Camp Dresser & McKee compiled information on the Lake Forest Park aquifer that was used by Montgomery Watson Harza and Jacobs Associates to design the Brightwater tunnel. These firms have extensive expertise on complex tunneling projects worldwide, including projects with similar aquifer protection issues.

The tunnel mining contractor, Vinci/Parsons RCI/Frontier-Kemper Joint Venture, also has worldwide experience building large diameter tunnels in soils similar to those found here.

The Brightwater tunnels will be built below the aquifer and separated by an impervious layer of soil. This impervious layer protects the aquifer preventing the flow of groundwater into the tunnel. To ensure the aquifer is being protected, King County will monitor groundwater levels and quality during and after construction.

Additional safeguards – a backup water supply

King County is committed to ensuring that Lake Forest Park Water District customers have access to a safe, clean source of drinking water at all times during Brightwater construction.

In 2003, King County and LFPWD signed a mitigation agreement in which the county agreed to provide a backup water supply if tunnel construction interrupted normal water service.

The backup water supply: safe, clean – and temporary

King County proposed installing a backup well if doing so would be technically or legally feasible, but there are many obstacles to moving forward with this plan involving water rights, Department of Ecology approval, engineering considerations and suitable locations within existing land uses.

These are complex issues we are unlikely to be able resolve before tunnel construction begins in 2009, which is when we would need a water supply replacement plan in place.

The other option both King County and LFPWD agreed to in 2003 was an interim hook up to water supply from City of Seattle. This option would allow King County to quickly implement a backup water supply plan if LFPWD customers lost water service due to Brightwater construction.

We recognize that people value the quality of water LFPWD provides, but it's also important to remember that City of Seattle's water supply is among the safest in the nation. It has passed more stringent state and federal drinking water standards than many brands of commercial bottled waters people buy in stores.

The idea of a backup water supply is to provide *temporary* service to LFPWD customers if Brightwater construction causes a service interruption. A permanent water supply replacement, if needed, would be developed as set forth in the 2003 agreement.

For more information

Additional information about Brightwater is available on the project Web site at <http://dnr.metrokc.gov/wtd/brightwater/>

For additional questions, or to be added to the Brightwater mailing list, please call the project office at 206-684-6799 or 711 TTY Relay or e-mail brightwater@kingcounty.gov

INFORMATION AVAILABLE IN ALTERNATIVE FORMATS BY CALLING
206-684-1280 or 711 TTY RELAY

