File NR CS1-*01894C
WR Doc ID 5281798

DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT CHANGE

Added or Changed Point of Withdrawal/Diversion

PRIORITY DATE
October 1, 1926

WATER RIGHT NUMBER
S1-*01894C (Water Right Certificate 498-A)

MAILING ADDRESS
LAKE FOREST PARK WATER DIST
4029 NE 178TH STREET
LAKE FOREST PARK 98155

SITE ADDRESS (IF DIFFERENT)

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
0.464	CFS	336

Purpose

	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		
PURPOSE	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	PERIOD OF USE (mm/dd)
Municipal Supply	0.464		CFS	336		01/01 - 12/31

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
		40950	867

Source Locations

COUNTY	WATERBODY	TRIBUTARY TO	WRIA
KING	Springs/Wells	Lake Washington	8-CEDAR-SAMMAMISH

SOURCE	PARCEL	WELL TAG(s)	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Siphon Wells 1 to 8	4022906570	AFJ005 to AFJ012	26N	4E	3	SWSE	47°45'51.15"N	122°16'45.91"W
Well 1	4022906570	AFJ001	26N	4E	3	SWSE	47°45'51.49"N	122°16'44.05"W
Well 2	4022906570	AFJ002	26N	4E	3	SWSE	47°45'51.43"N	122°16'45"W
Well 3	4022906570	AFJ003	26N	4E	3	SWSE	47°45'47.87"N	122°16'46.27"W
Well 4	4022906570	AFJ004	26N	4E	3	SWSE	47°45'46.96"N	122°16'43.68"W
Well 5	4027700071	BAM416	26N	4E	3	SWNE	47°46'20.84"N	122°16'48.72"W
Well 6	4027700071	BAM 417	26N	4E	3	SWNE	47°46'20.76"N	122°16'49.89"W

Datum: NAD83/WGS84

Place of Use (See Attached Map)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Proposed Works

Eight siphon wells (springs) plus 6 wells all of which are completed. Wells 5 and 6 require connection to water delivery system.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Begun	December 31, 2014	December 31, 2014

Measurement of Water Use

How often must water use be measured?	Weekly
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Monthly and Annual Volume
What rate should be reported?	Monthly Peak Rate of Withdrawal (gpm)

Provisions

Wells, Well Logs and Well Construction Standards

All wells constructed in the state must meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard must be decommissioned.

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

Wellfield Limitations

The six well sources and eight spring sources listed above shall be operated as a wellfield. The three groundwater rights, G1-*00835S (Certificate 767-D), G1-*05680C (Certificate 4019-A), and G1-*08167C (Certificate 5839-A) may be supplied by any one or combination of wells 1 through 6 so long as the well or wells is/are capable of sustainable operating at the rate required to provide the quantity at which it is operating. This water right, S1-*01894C (Certificate 498-A) may be utilized in whole or part through the six wells or through the eight spring sources.

The source limitation summarized below are based on the 2005 Water System Plan source capacity reporting by the districts and the 2009 well completion report on Wells 5 and 6 by Max Wells of Robinson Noble. Please note that in the case of wells 5 and 6, the maximum rates of withdrawal when both wells are operating is 250 gpm and 150 gpm for wells 5 and 6 respectively.

Wellfield Source Limitations				
SOURCE	**A|S**	**WITHDRAWAL RATE**	**ANNUAL QUANTITY (AF/YR)**	**PERIOD OF USE (mm/dd)**
Siphon Wells 1 to 8		208 (0.464 CFS)	336	01/01 -12/31
Well 1		300	484	01/01 - 12/31
Well 2		300	484	01/01 - 12/31
Well 3		350	565	01/01 - 12/31
Well 4	S	340	548	01/01 - 12/31
Well 5		300	484	01/01 - 12/31
Well 6		250	403	01/01 - 12/31

A|S: A=Alternate; S=Standby/Reserve

The total quantities produced from all sources may not exceed the total quantity of Qi or Qa authorized by the four water rights currently issued to the LFPWD, namely 973 gallons per minute and 1,202 acre-feet per year (see Table 2 in the Investigation portion of this report).

Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with WAC 173-173 "Requirements for Measuring and Reporting Water Use", which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Water use for each source shall be recorded at a minimum frequency of once per week, the maximum rate of withdrawal for each source shall also be recorded for each month, and they both shall be submitted annually to Ecology via the Internet no later than January 30th of each year. To set up an Internet reporting account, contact the Northwest Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Northwest Regional Office for forms to submit your water use data.

Proof of Appropriation

An application to change or transfer a water right may require construction or development of new infrastructure or compliance with certain provisions prior to completing the change. A development schedule is implemented in order to assure that the change and any provisions associated with the change are completed within a timeframe which is appropriate to the project, the applicant, and Ecology.

The issuance of a superseding certificate (or permit) is typically made contingent upon finalization of development schedule and compliance with all provisions. The proof of appropriation is the form used

by Ecology and the applicant to indicate that a change is completed and the applicant has complied with all provisions of the decision.

In the case of the present application, the eight siphon wells which collect spring water, the two new groundwater wells, and the six existing groundwater wells are already completed. All that will be required prior to issuance of the superseding certificate will be a showing that all sources have meters installed, that the applicant has made arrangements with Ecology to submit the metering data, and that all sources are connected to the district's water delivery system. This showing shall be submitted along with a completed Proof of Appropriation From.

Schedule and Inspections
Based on the current state of completion, it is estimated that the proposed change shall be completed by December 31, 2014.

Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Findings of Facts
Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. CS1-*01894C (for change to Water Right Certificate No. 498-A), subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel RD SW Ste 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Bellevue, Washington, this 7 day of January, 2014.

Jacqueline Klug, Section Manager
Water Resources Program, NWRO

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

INVESTIGATOR'S REPORT
Douglas H. Wood, Department of Ecology
Water Right Control Number CS1-*01894C
Lake Forest Park Water District

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number CS1-*01894C, one of four applications for change that were submitted by Lake Forest Park Water District (LFPWD) in May 2012.

The purpose of the four change applications is to provide source flexibility at the existing district sources located within what is referred to as the East Watershed, and to provide new sources as an alternative if existing sources become contaminated as a result of leakage from the Brightwater wastewater tunnel located north of the existing sources.

EXISTING Water Right Attributes

Water Right Owner:	**Lake Forest Park Water Company**
Priority Date:	10/1/1926
Place of Use	NE1/4, NW1/4, SW14/, and part of SE1/4, Section 10, T26N, R04E W.M. E1/2 of SE1/4, Section 4, T26N, R04E W.M. W1/2 of SW1/4, Section 3, T26N, R04E W.M.

County	Waterbody	Tributary To	WRIA
King	Unnamed Springs	Lake Washington	8-Cedar-Sammamish

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Domestic Supply and Sprinkling	1.0	CFS	724*	01/01	12/31

* Calculated based on 24 hours per day and 365 days production

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Siphon Wells 1 to 8	4022906570	AFJ005 to AFJ012	26N	4E	3	SWSE	47°45'51.49"N	122°16'44.05"W

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum in NAD83/WGS84.

REQUESTED Water Right Attributes

Applicant Name:	**Lake Forest Park Water Dist**
Date of Application:	5/23/2012
Place of Use	The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

County	Waterbody	Tributary To	WRIA
King	Springs and Groundwater (Puget Sound Aquifer System)	Lake Washington	8-Cedar-Sammamish

Purpose	Rate	Unit	Acre-feet/yr	Begin Season	End Season
Municipal Supply	0.464	CFS	336	01/01	12/31

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Siphon Wells 1 to 8	4022906570	AFJ005 to AFJ011	26N	4E	3	SWSE	47°45'51.49"N	122°16'44.05"W
Well 1	4022906570	AFJ001	26N	4E	3	SWSE	47°45'51.49"N	122°16'44.05"W
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Well 4	4022906570	AFJ004	26N	4E	3	SWSE	47°45'46.96"N	122°16'43.68"W
Well 5	4027700071	BAM416	26N	4E	3	SWNE	47°46'20.84"N	122°16'48.72"W
Well 6	4027700071	BAM 417	26N	4E	3	SWNE	47°46'20.76"N	122°16'49.89"W

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum in NAD83/WGS84.

Legal Requirements for Requested Change

This application seeks to move the authorized point of diversion for a surface water right and to add groundwater wells as additional authorized sources (points of withdrawal). As such both RCW 90.03.380, the surface water code change statute, and RCW 90.44.100, the groundwater code change statute, are relevant to the approval of this application.

The following is a list of requirements that must be met prior to authorizing the proposed change in approved sources.

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used.

Notice of this application was published in the Woodinville Weekly on January 7, 2013 and on January 14, 2013.

Consultation with the Department of Fish and Wildlife

Notice of this application was provided to the Department of Fish and Wildlife in June 2012 after applications for change were filed for Groundwater Certificates 767D, 4019A, and 5839A, as well as for Surface Water Right Certificate 498A. In addition, the Department of Fish and Wildlife was contacted by email on October 22, 2013.

No concerns were received from the Department of Fish and Wildlife regarding the application.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA environmental assessment (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following thresholds are exceeded.

(a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
(b) It is a groundwater right application for more than 2,250 gallons per minute;
(c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
(d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
(e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

The surface water threshold of 1 cfs is not exceeded, nor is the groundwater threshold of 2,250 gpm exceeded under (a) or (b) above. Threshold (c), which addresses the effects of multiple projects, might be viewed as being exceeded, but only if all the groundwater withdrawals were considered as the equivalent of surface water diversions. The groundwater source of the springs however more strongly suggests that the surface water quantities should be considered as part of an overall groundwater withdrawal, which at 1,101 gpm does not exceed the groundwater threshold of 2,250 gpm.

Water Resources Statutes and Case Law

RCW 90.03.380(1) states that a water right that has been put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed so long as the change will not result in impairment to other water rights.

The Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp.*

RCW 90.44.100 allows Ecology to amend a ground water permit to (1) allow the user to construct replacement or additional well(s) at a new location outside of the location of the original well, or to (2) change the manner or place of use of the water, if:

(a) The additional or replacement well taps the same body of public ground water as the original well. RCW 90.44.100(2)(a),
(b) Where a replacement well is approved, the user must discontinue use of the original well and properly decommission the original well. RCW 90.44.100(2)(b),
(c) Where an additional well is constructed, the user may continue to use the original well, but the combined total withdrawal from all wells shall not enlarge the right conveyed by the original permit or certificate. RCW 90.44.100(2)(c),
(d) Other existing rights shall not be impaired. RCW 90.44.100(2)(d).

When changing or adding points of withdrawal to groundwater rights (RCW 90.44.100), or when consolidating exempt wells with an existing permit or certificate (RCW 90.44.105), the wells must draw from the *same body of public groundwater*. Indicators that wells tap the *same body of public groundwater* include:

(a) Hydraulic connectivity.
(b) Common recharge (catchment) area.
(c) Common flow regime.
(d) Geologic materials that allow for storage and flow, with recognizable boundaries or effective barriers to flow.

The final requirement for changes involving groundwater rights is that approval of the change or transfer may not enlarge the right as expressed by the permit or certificate

INVESTIGATION

The Lake Forest Park community has been served by three related entities since it was first established in the early 20th century. These, in order, are the Lake Forest Park Water Company, King County Water District 83, and LFPWD.

History of Water Use

Water use by the Lake Forest Park community began with the development of springs in 1915 to 1916, which was prior to the enactment of the Water Code (RCW 90.03) in 1917. Ecology records show that four water rights files are associated with either Lake Forest Park Water Company or King County Water District 83, which is now named LFPWD. These are summarized in Table I below.

Table I: Water Rights Held by LFPWD

File #	Cert #	Stat	Doc	Priority	Purpose	Qi (cfs)	Qi (gpm)	Qa (afy)	Qa*
S1-*01894C	498-A	A	Cert	10/1/1926	DM	1	448		724
G1-*00835S	767-D	A	Cert	4/1/1940	DM	0.2232	100	162	
G1-*05680C	4019-A	A	Cert	7/26/1960	MU	0.9821	440	70	
G1-*08167C	5839-A	A	Cert	6/27/1966	DM	0.5022	225	360	
					Total	2.71	1,213	592	724

Qa* = Calculated potential annual quantity - assumes full use of right at issued Qi. Change is restricted under RCW 90.03.570

The original works, begun in 1916, appear to be the same works (8 shallow wells) that are currently used under S1-*01894C.

Certificate 498-A, issued with a 1926 priority, authorized the district's predecessor, Lake Forest Park Water Company, to capture up to 1 cubic foot per second (1 cfs) of water from un-named springs located in Block 32 of Lake Forest Park Third Addition.

This same location was included as one of two areas developed as flowing springs by siphon wells and pumping wells when Lake Forest Park Water Company filed a declaration of Ground Water Claim in 1948

(Cert. 767-D). The areas are referred to as the East and West Watersheds, with SWC 498-A being associated with the West Watershed, and GWC 767-D, the East Watershed.

Examination of the 1948 groundwater claim declaration shows that only those areas developed using pumping wells was accepted under the groundwater claim. The remainder (siphon wells or any other exploitation of the springs using gravity rather than pumps) are shown on the declaration form as having been stroked out using red pencil. It is apparent that only one well, located on lot 15, Block 13 of the First Addition to Lake Forest Park, was accepted under the claim. No other claims are recognized by Ecology for either the Block 1, First Addition (East Watershed) or the Block 32, Third Addition (West Watershed) springs.

The report of examination filed by Fred B. Roberts for the 1948 groundwater claim declaration acknowledges pre-code use of springs located in Section 3, but states that the 1948 claim only applies to the 172 gpm pumped well at the East Watershed site. His report also acknowledges the existence of SWC 498-A at the West Watershed. Elsewhere in the declaration documents, there is also mention of vested rights to surface water in the East Watershed.

Under Washington's Water Code only springs developed prior to 1917 could be recognized as valid claims, and then only if they had been claimed under the 1972 or later claims registries. No claims for either site are found in the claims registry.

Hand written notes in the declaration files indicate that at the time the declaration was filed production from the East Watershed totaled 250,000 gallons per day (gpd) with 144,000 gpd being pumped. The West Watershed was producing from 252,000 to 300,000 gpd. Assuming these values are typical for these sites, annual use for the West Watershed would have been 282 to 336 afy at 175 to 208 gpm.

Two groundwater rights were issued in the 1960's for wells within the East Watershed. The East Watershed appears to be the same as what the district now refers to as their wellfield. The West Watershed, including the springs covered by SWC 498-A, is not mentioned in recent water system plans. The district does however reference its title to SWC 498-A as applying to the East Watershed shallow wells.

It is apparent that LFPWD and its predecessor organizations thought they were continuing to use their water rights issued under certificate 498-A at the East Watershed, which could be viewed as a de facto change in point of diversion since both locations tap the same source (springs draining from the Qva aquifer, tributary to Lake Washington).

Based on the above analysis of the four changes filed in 2012, the quantities available for the proposed changes are presented as Table 2 below.

Table 2: Quantities Available for Change

File #	Cert #	Qi (gpm)	Qa_A	Qa_N
S1-*01894C	498-A	208	336	
G1-*00835S	767-D	100	162	
G1-*05680C	4019-A	440	704	
G1-*08167C	5839-A	225		360
Total Available		**973**	**1,202**	**360**

Proposed Use

The purpose of use of the water right will remain the same as that for which it is currently being used – Municipal Supply purposes. The existing certificate however states the use as domestic supply and irrigation. Since these are typical uses of water from municipal suppliers, there shall be no change in purpose of use when the superseding certificate is issued for municipal supply purposes.

It is noted that two of the certificates used by LFPWD (767-D and 498-A) were issued for Domestic and Irrigation purposes, while the other two (4019-A and 5839-A) were issued for Municipal Supply purposes. This likely reflects the fact that the first two were issued to a private company while the latter two were issued to a municipal entity. All four would have been issued for Municipal Supply purposes if they were to be issued today.

Other Rights Appurtenant to the Place of Use

In addition to the four water rights held by LFPWD, there are 30 certificates listed as active documents in Ecology's water rights database. It is not known if any or all of these rights issued by Ecology are currently in use. In addition to the above certificates, Ecology databases indicate 96 claims to vested rights, including 44 long form claims (quantified) and 52 short form claims (un-quantified, but typically the equivalent to exempt well use of less than 5,000 gallons per day).

Water Availability

Surface waters of the Lake Washington sub-basin of WRIA 8 are closed to new appropriation under WAC 173-508-030. New water rights cannot be issued unless they serve a non-consumptive purpose or the quantities are fully mitigated. Changes that would result in a diminishment in water availability within the Lake Washington sub-basin are also prohibited.

The current proposal seeks to add new points of withdrawal to an existing municipal supply water right in good standing. Since the proposal seeks to move the approved points of diversion of surface water right, only quantities perfected at the location of the original authorized diversion may be moved (RCW 90.03.570). This limits the change to 208 gpm and 336 afy from the original 1 cfs (448 gpm) and 724 afy.

Hydrologic/Hydrogeologic Evaluation

Groundwater and surface water resources of the north end of Lake Washington sub-basin are dominated by the presence of up to, and likely exceeding, 1000 vertical feet of unconsolidated glacial and interglacial sediment that fills a structural basin located north of the Seattle Fault zone. The basin is roughly situated along the path of Interstate 90. Groundwater within the unconsolidated material is referred to as the Puget Sound Aquifer System.

Nearly all the sedimentary material between the surface and the bottom of the basin is saturated by groundwater. Productive zones within the sediments occur where larger grain size and less dense compaction allow greater storage and flow of groundwater, such as sand and gravel and sediments not compacted by glaciers. Deeper productive zones are fed by groundwater penetrating through and below the surface and overlying materials.

All of the current points of diversion and points of withdrawal serving the district's water rights originate as groundwater from within the Vashon Advance Outwash Unit (Qva) of the Puget Sound Aquifer System. The Qva is composed of sand and gravel that was deposited along the front of the advancing glacier of the Vashon Glaciation.

The surface water right (SWC 498-A) was issued and continues to draw water from springs that originate from the Qva. All of the wells tap (either directly or indirectly) groundwater from the Qva. Thus all the district's rights are drawn from the same source.

Impairment Considerations

Impairment of Minimum Instream Flow Water Rights cannot occur since the Cedar River, the only body of water regulated through minimum flows in the basin, is located upstream of Lake Washington and thus is not affected by surface and groundwater flows at Lake Forest Park.

The Lake Washington sub-basin of WRIA 8 is closed to new appropriations of surface water or groundwater in hydraulic connection with surface water. Instream Flow Rule closures however are not an impairment issue, but are rather a water availability issue.

A review of Ecology databases reveals there are records of 34 water right certificates and 96 claims to vested rights within sections 3, 4, 9, 10, 15, and 16 of T26N, R4E - the approximate service area of LFPWD.

Two water rights, other than those held by LFPWD, were issued for multiple domestic uses. The vast majority of water right certificates listed for the area (31 of 34) were issued prior to 1970, mostly single domestic potable water and irrigation. The claims to vested rights also appear to be primarily for single domestic purposes.

Much of the growth that resulted in the current development in the Lake Forest Park community took place between 1970 and 2000. It is therefore likely that most of the water rights found in the Ecology database are no longer in use, having been either abandoned in the case of areas developed after 1970 or replaced by more reliable municipal sources for older homes.

Since the only substantial change over existing conditions represented by the four changes is to add the wells 5 and 6, and since the de facto change in the location of the spring sources took place many years ago (1940's?), the analysis of potential impairment from the present changes is limited to what might be expected from usage of wells 5 and 6.

A well construction report for wells 5 and 6 was prepared by Robinson Noble hydrogeologist Max Wills in September 2009. Mr. Wills estimates aquifer properties that would result in drawdown of the aquifer at a distance of 1 mile on the order of about 10 to 20 feet after 100 days of continuous pumping (T=8,00 to 23,000 gpd/ft; Qi=300 gpm; S=0.0001). The same aquifer properties at a distance of a half mile would give a drawdown of 10 and 25 feet after 100 days of continuous pumping at 300 gpm. In either case most wells within the radius and completed in the same aquifer would be impacted, but would only be impaired if the drawdown exceeded the free board of the well.

A search of Ecology's well database indicates there is only one other modern well (constructed after 1970) located within an approximate 1 mile radius of wells 5 and 6. This well was constructed in 1999 for irrigation of a 0.85 acre lot served by LFPWD. The family responsible for drilling the well sold the property in 2010. It is not known whether the new owner continues to irrigate using the exempt well.

The exempt well is located approximately 4,800 feet SSE of wells 5 and 6 at a depth of 210 feet. This indicates that the completion depth is some 200 feet deeper than the existing shallow wells and springs at the LFPWD East Watershed springs and shallow wells and about the same depth below the completion depth of wells 5 and 6. Given the above it is not likely that pumping from wells 5 and 6 will any negative impact on the functioning the exempt well.

Public Interest Considerations

Providing a reliable source of clean water for public supply serves the public interest. There does not appear to be any issues arising from the proposed change that would prove detrimental to the public interest.

Consideration of Protests and Comments

No protests were received regarding this application. The Muckleshoot Indian Tribe, within whose traditional areas this application is located, were informed about the four applications for change that were filed by LFPWD. The Tribe did not choose to protest the applications, nor did they provide any other feedback.

Conclusions

Based on this investigation, and on the laws and rules affecting water rights permitting, it is apparent that water is available for the proposed change, that there is no probable likelihood of impairment, that proposed new wells share the same groundwater source as the original point of withdrawal, that the proposed change will not likely prove detrimental to the public interest, and that the proposed use is beneficial. There is no potential for enlargement of the water right beyond the limitations of the existing right.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed above.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

0.464 cubic feet per second (208 gallons per minute)
336 acre-feet per year
Municipal Supply

Points of Diversion/Withdrawal

SW¼, SE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Siphon Wells 1 to 8)

SW¼, SE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Well 1)

SW¼, SE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Well 2)

SW¼, SE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Well 3)

SW¼, SE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Well 4)

SW¼, NE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Well 5)

SW¼, NE¼, Section 3, Township 26 North, Range 4 [E W].W.M. (Well 6)

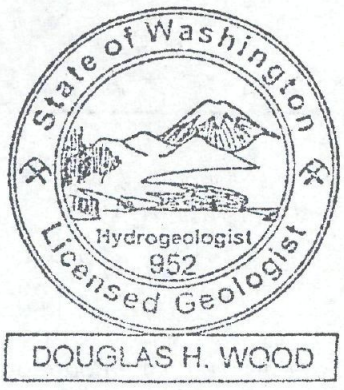
Place of Use

As described on Page 1 of this Report of Examination.

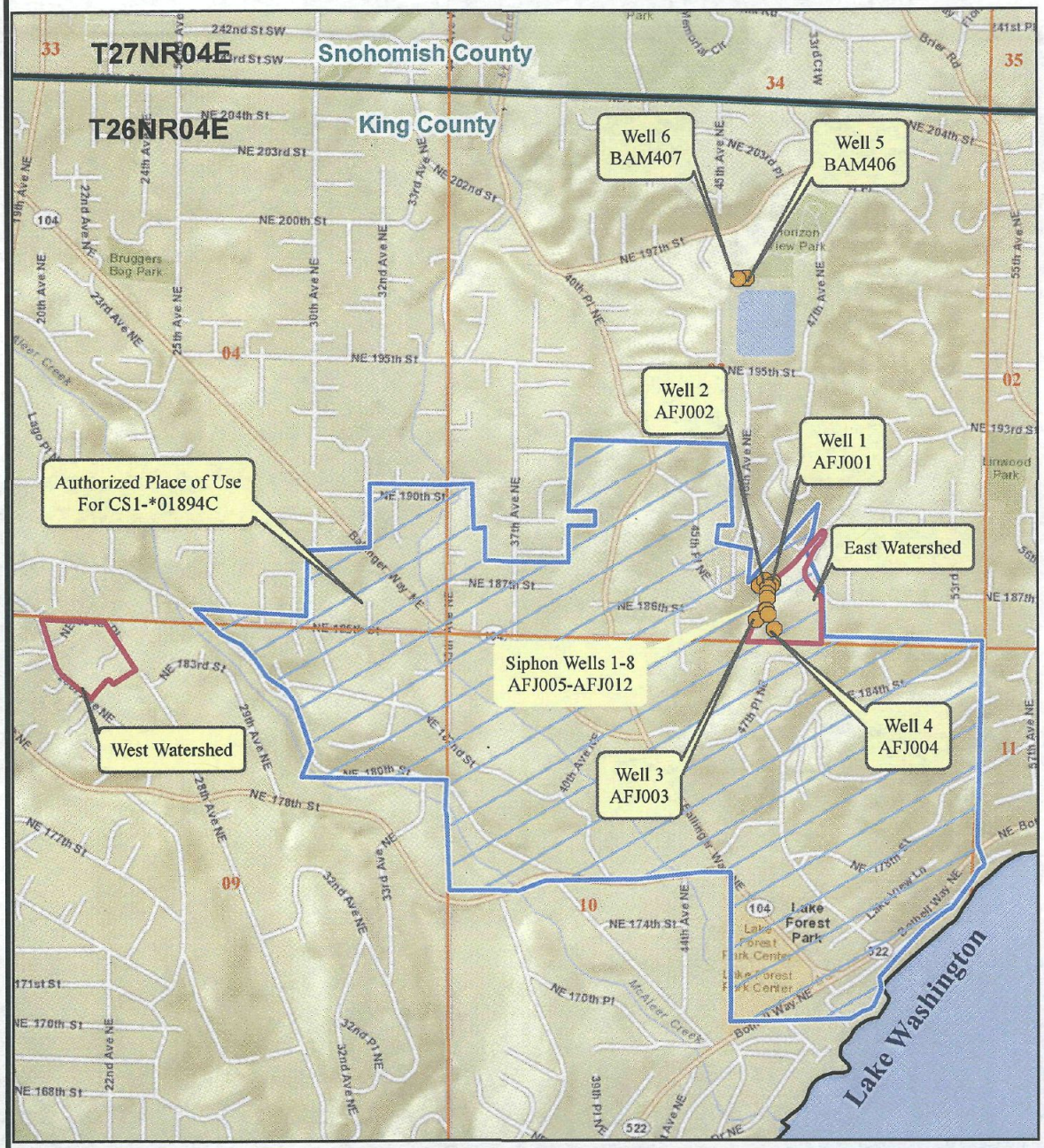
Douglas H. Wood Jan 2, 2014

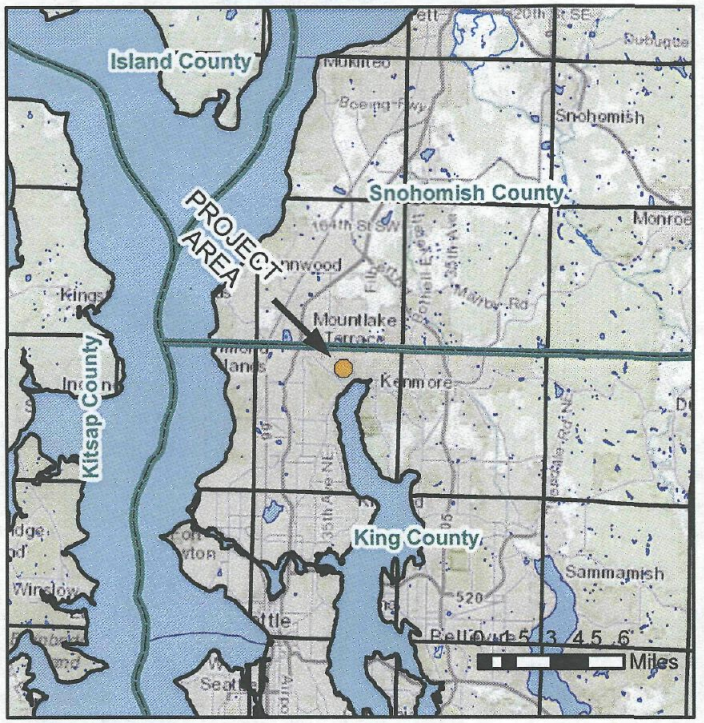
Douglas H. Wood, MS, LHG(WA #952) *Date*

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



Lake Forest Park Water District
Water Right CS1-*01894C
Section 3 T26N R04E W.M.
WRIA 8 - King County





Legend

- Authorized Place of Use
- Authorized Point of Withdrawal
- Water Body
- Lake Forest Park Water Company's East and West Watersheds (As shown in map received May 22, 1948)
- County Boundary
- Townships
- Sections

DEPARTMENT OF ECOLOGY
State of Washington

Map Date: 11/4/2013

Place of use and point(s) of diversion/withdrawal are as defined on the cover sheet under the headings,'LOCATION OF DIVERSION/WITHDRAWAL'and 'LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED.'

ATTACHMENT 1