

DEPARTMENT OF
ECOLOGY
State of Washington

CG2-00885
4217238

State of Washington
Report of Examination for Water Right Change

Add or Change Purpose of Use Change Place of Use Add or Change Point of Diversion/Withdrawal
Change Season of Use Add Irrigation Acres Well Consolidation

PRIORITY DATE
March 8, 1972

WATER RIGHT NUMBER
G2-00885

MAILING ADDRESS
CLARK PUBLIC UTILITIES
PO BOX 8900
VANCOUVER WA 98668-8900

SITE ADDRESS (IF DIFFERENT)

Total Quantity Authorized for Withdrawal or Diversion

| WITHDRAWAL OR DIVERSION RATE | UNITS | ANNUAL QUANTITY (AF/YR) |
|------------------------------|-------|-------------------------|
| 275 | GPM | 440 |

Purpose

| PURPOSE | WITHDRAWAL OR DIVERSION RATE | | UNITS | ANNUAL QUANTITY (AF/YR) | | PERIOD OF USE |
|-----------|------------------------------|--------------|-------|-------------------------|--------------|---------------|
| | ADDITIVE | NON-ADDITIVE | | ADDITIVE | NON-ADDITIVE | |
| Municipal | 275 | | GPM | 440 | | 01/01 - 12/31 |

| ADDITIVE | IRRIGATED ACRES | | PUBLIC WATER SYSTEM INFORMATION | |
|----------|-----------------|--|---------------------------------|-------------|
| | NON-ADDITIVE | | WATER SYSTEM ID | CONNECTIONS |
| | | | 13333 | |

Source Location

| COUNTY | WATERBODY | TRIBUTARY TO | | | | WATER RESOURCE INVENTORY AREA | | |
|------------------------|----------------------------|--------------|-----|------|-----|-------------------------------|----------|-----------|
| Clark | Sand And Gravel Aquifer | | | | | 28 Salmon-Washougal | | |
| SOURCE FACILITY/DEVICE | PARCEL | WELL TAG | TWN | RNG | SEC | QQ Q | LATITUDE | LONGITUDE |
| WELL#13.1 | 187329-000 | AKW-138 | 03N | 01 E | 28 | SW SW | | |

Datum: NAD83/WGS84

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)

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 Clark Public Utilities 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

A 16-inch well drilled to a depth of 655 feet, fitted with a pump and distribution system required to supply water to municipal water supply customers.

Development Schedule

| BEGIN PROJECT | COMPLETE PROJECT | PUT WATER TO FULL USE |
|---------------|------------------|-----------------------|
| Started | Completed | December 1, 2015 |

Measurement of Water Use

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

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 that is unusable, abandoned, permanently no longer in use, or 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.

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 the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173.

Reported water use data can be submitted via the Internet. To set up an Internet reporting account, access <https://fortress.wa.gov/ecy/wrx/wrx/Meteringx/>. If you do not have Internet access, contact the Region for forms to submit your data.

WAC 173-173 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.

Department of Health Requirements

Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of the Washington State Department of Health. Please contact the Office of Drinking Water at Southwest Drinking Water Operations, 243 Israel Road S.E., PO Box 47823, Tumwater, WA 98504-7823, (360) 236-3030.

Water Use Efficiency

Use of water under this authorization is contingent upon the water right holder's maintenance of efficient water delivery systems and use of up-to-date water conservation practices consistent with established regulation requirements and facility capabilities.

Proof of Appropriation

The water right holder must file the notice of Proof of Appropriation of water when the permanent distribution system is constructed and the quantity of water authorized has been put to full beneficial use. The certificate will reflect the extent of the water perfected, within the limits of authorization. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, must 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.

Real Estate Excise Tax

This decision may indicate a Real Estate Excise Tax liability for the seller of water rights. The Department of Revenue has requested notification of potentially taxable water right related actions, and therefore will be given notice of this decision, including document copies. Please contact the state Department of Revenue to obtain specific requirements for your project. Phone: (360) 570-3265. The mailing address is: Department of Revenue, Real Estate Excise Tax, PO Box 47477, Olympia WA 98504-7477 Internet: <http://dor.wa.gov/>. E-mail: REETSP@DOR.WA.GOV.

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 find the change of water right as recommended will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER the requested change of point of withdrawal under Change Application No. CG2-00885 subject to existing rights and the provisions specified above.

You have a right to appeal this decision. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the “date of receipt” of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within 30 days of the “date of receipt” of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). “Date of receipt” is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your *Notice of Appeal*.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals & Application for Relief Coordinator
P.O. Box 47608
Olympia WA 98504-7608

OR

Deliver your appeal in person to:

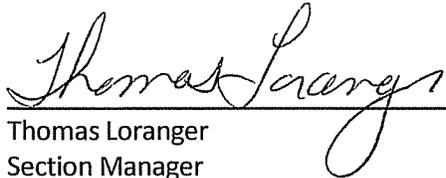
The Department of Ecology
Appeals & Application for Relief Coordinator
300 Desmond Dr SE
Lacey WA 98503

3. And send a copy of your appeal to:

Thomas Loranger
Section Manager
Water Resources Program -- Department of Ecology
Southwest Region
P.O. Box 47775
Lacey WA 98504-7775

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>.

Signed at Lacey, Washington, this 13th day of Sept, 2010.



Thomas Loranger
Section Manager
Water Resources Program
Southwest Region

INVESTIGATOR'S REPORT
 Tammy Hall, Department of Ecology
 Water Right Control Number CG2-00885

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BACKGROUND

On December 20, 2004, Steve Prather of Clark Public Utilities (CPU) filed an *Application for Change* to move the point of withdrawal of Water Right Certificate (GWC) G2-00885 from Well 12 to Well 13.1. Well 13.1 is in the SW ¼, SW ¼, Section 28, T. 3N, R. 1 E.W.M., about one mile northwest of Well 12. Both wells are in the Salmon/Washougal Water Resources Inventory Area (WRIA) 28.

See Attachment #1

Attributes of the Existing Water Right and Proposed Change

Table 1: Attributes of Existing Water Right and Proposed Change

| Attributes | Existing | Proposed |
|--------------------------------|--------------------|------------------------|
| Name | Clark County PUD 1 | Clark Public Utilities |
| Priority Date | 03/08/1972 | |
| Change Application Date | | 12/20/2004 |
| Instantaneous Quantity | 275 gpm | Same |
| Annual Quantity | 440 af/yr | Same |
| Purpose of Use | Municipal Use | Same |

| | | |
|----------------------|---|------|
| Period of Use | Continuous | Same |
| Place of Use | Area served by Clark Public Utilities as described in the most recent Water System /Small Water System Management Program approved by the Washington State Department of Health, so long as Clark Public Utilities remains in compliance with criteria in RCW 90.03.386 may have the effect of revising the Place of Use of this water right. | Same |

Proposed Source of Withdrawal

| Source Name | Parcel | WellTag | Twn | Rng | Sec | QQ Q | Latitude | Longitude |
|-------------|--------|---------|-----|-----|-----|-------|----------|-----------|
| WELL#13.1 | | | 03N | 01E | 28 | SW SW | | |

Existing Source of Withdrawal

| Source Name | Parcel | WellTag | Twn | Rng | Sec | QQ Q | Latitude | Longitude |
|-------------|--------|---------|-----|------|-----|-------|----------|-----------|
| WELL 12 | | | 03N | 01 E | 33 | SW SE | | |

Legal Requirements for Proposed Change

The following requirements must be met prior to authorizing the proposed change in G2-00885:

Public Notice

A public notice of the proposed move was published in "The Columbian", a daily newspaper in southwest Washington, on January 28 and February 4, 2005. No protests were received.

State Environmental Policy Act (SEPA)

A SEPA determination evaluates if a proposed withdrawal will cause significant adverse environmental impacts. A SEPA threshold determination is required for:

- Surface water applications for more than 1 cubic feet per second (cfs). For agricultural irrigation, the threshold increases to 50 cfs, if the project isn't receiving public subsidies.
- Groundwater applications requesting more than 2,250 gpm.
- Projects with several water right applications where the combined withdrawals meet the conditions listed above.
- Projects subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
- Applications that are part of several exempt actions that collectively trigger SEPA under WAC 197-11-305.

This application does not meet any of these conditions and is categorically exempt from SEPA. Therefore, a threshold determination is not required.

Water Resources Statutes and Case Law

RCW 90.03.380(1) states a water right put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed as long as other water rights are not impaired.

The Washington Supreme Court requires Ecology to make a tentative determination of extent and validity of a claim or right when processing an application for change. A tentative determination will establish if 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 allow the user to construct a replacement or additional well at a new location outside of the location of the original well, or to change the manner or place of use of the water, if:

- (a) For replacement wells, the user must discontinue use of the original well and properly decommission the original well.
- (b) For additional wells, use from the original well can continue, but the combined total withdrawal from all wells must not enlarge the right.
- (c) Other existing rights must not be impaired.
- (d) The wells must draw from the *same body of public groundwater*. Sources in the same *body of public groundwater* are:
 - Hydraulically connected.
 - Have a common recharge (catchment) area.
 - Share a common flow regime.

INVESTIGATION

The following information was used to evaluate this application:

- State Ground and Surface Water Codes, administrative rules, and policies.
- Water right certificates, permits, claims, and applications on record with the Department of Ecology.
- Water well reports recorded in the Department of Ecology's Well Log Image System.
- Odell Engineering Inc., *Clark Public Utilities Water System Plan*, February 2003.
- State DOH Sentry Database.
- Topographic and local area maps.
- Watershed Assessment, WRIA 28, Salmon-Washougal, Open-File Technical Report 98-02.
- Technical Memorandum dated December 20, 2005 by John Pearch, Licensed Hydrogeologist, with Ecology's Water Resources Program at Southwest Regional Office.
- Notes from a site visit on January 26, 2005 conducted by Mike Dexel (Ecology).

History of Water Use

Well 12 was drilled in 1972 and began production in 1974 when Ecology issued GWC G2-00885. The well was completed at 348 ft below ground surface (bgs) and screened across three units (USA, UTA, and LTA) Well 12 was equipped with a 40 hp, pump capable of producing between 275 and 298 gpm. In

1980, Well 12 was taken out of service because of a loss of efficiency and sand production. It was redeveloped and put back in service later in 1980.

In 1986, Well 12 was deepened to 617 ft bgs and screened in the SGA. The project restored the well's original production capacity but poor water quality limited its use. Well 12 was eventually decommissioned in 1988 due to excessively high manganese levels.

CPU holds water rights from multiple wells under an umbrella certificate capping overall production at 13,846 ac-ft per year. Several wells have only non-additive water rights, allowing CPU to shift production around their system. Because Well 12's water rights were being exercised by pumping elsewhere, this water right is considered to be in good standing.

Withdrawals from Well 13.1 are also authorized from two other certificates. Table 2 summarizes details of these certificates. Metering information from Well 13.1 shows annual production to range from 115 ac-ft in 2006 to 412 ac-ft in 2009.

Table 2 – Summary of Water Rights associated with Well 13.1

| <i>Certificate Number</i> | <i>Instantaneous Quantity (gpm)</i> | <i>Annual Quantity (af/yr)</i> |
|---------------------------|-------------------------------------|--------------------------------|
| G2-00885* | 275 | 440 |
| G2-21569 | 100 | 80 |
| G2-24409 | 750 | 1000 |
| Total | 1,125 | 1,520 |

*Applies to this proposed Water Right Change Application.

Proposed Use

This application proposes to change the point of withdrawal from Well 12 to Well 13.1, about one mile away. Well 13.1 is part of the Hazel Dell System, CPU's largest water system.

The purpose of use will remain "municipal supply."

Other Rights Appurtenant to the Place of Use

CPU is a municipal water supplier in Clark County, Washington, exercising more than 50 individual water right permits and certificates totaling more than 26,000 gallons per minute (gpm) and 13,000 acre-feet per year (af/yr). The utility began providing water service to the residents of Clark County (Hazel Dell area) in 1951. Today, CPU provides water service to over 28,000 homes and businesses and their distribution system covers approximately 200 square miles. There are approximately 30 wells supplying water to the system, most are in the Hazel Dell area (Odell, 2003).

CPU's water rights are summarized in Attachment #2

Hydrologic/Hydrogeologic Evaluation

Geologic setting

CPU's service area is in the central part of the Portland Basin. The Portland Basin is a sediment-filled basin covering about 1,300 square miles in northwestern Oregon and southwestern Washington. The basin is a structural basin underlain by basement rocks of volcanic origin (McFarland and Morgan, 1996). The basin is bounded on the west by the Tualatin Mountains and on all other sides by the Cascade Range. The basin includes the confluence of the Willamette and Columbia Rivers.

Four major stratigraphic units have been identified as aquifers in the basin.

Unconsolidated Sedimentary Aquifer (USA)

The Unconsolidated Sedimentary Aquifer (USA) is an unconfined water table aquifer composed primarily of Pleistocene alluvial deposits. This unit consists primarily of Pleistocene-age catastrophic flood deposits and Holocene-age alluvium deposited by the Columbia River. The USA aquifer is generally 50 to 100 feet thick and consists mostly of silty-sand and gravel. The water table in the USA aquifer mimics the land surface. Water levels in the USA occur at depths of about 50 feet bgs.

Upper Troutdale Aquifer (UTA)

The Upper Troutdale Formation (UTA) is a semi-confined to confined aquifer. It is thickest (200-400 feet) in southern Clark County but is less than 200 feet thick near Salmon Creek. The unit consisting of poorly to moderately cemented sandy conglomerate. This unit is an important and productive groundwater source for WRIA 28. Water levels in the UTA occur at about 150 feet bgs.

Lower Troutdale Aquifer (LTA)

The Lower Troutdale consists of bedded micaceous siltstone and sandstone with silty lenses. It is separated from the Upper Troutdale Aquifer by a fine-grained confining unit between 30 and 60 feet thick in the Salmon Creek basin. The altitude of the top of the unit ranges from more than 600 feet above sea level, near Camas, to more than 300 feet below sea level west of Interstate 205. There are several larger production water supply wells in the Lower Troutdale Aquifer in this portion of the basin.

Lower Troutdale Aquifer experienced significant water level declines (up to 30 feet) between 1985 and 1996. Since 1996, pumping rates have not increased in the lower Troutdale Aquifer because the target source of water supply is now in deeper aquifers, such as the Sand and Gravel Aquifer (SGA) (Pacific Groundwater Group, 1999).

Sand and Gravel Aquifer (SGA)

The Sand and Gravel Aquifer (SGA) is part of the Sandy River Mudstone Formation. The SGA extends from Ellsworth Springs in Southern Clark County to the East Fork of the Lewis River. The aquifer is confined above by silt and clay as thick as 300 feet and below by silt of the Sandy River Mudstone. These confining units limit hydraulic coupling and interference impacts from wells completed in other aquifers (i.e., no measurable effects during pump test). Water levels in the SGA occur at depths of about 200 feet bgs.

Groundwater Movement and Hydraulic Continuity

Static water levels in the USA, UTA, and SGA indicate groundwater moves vertically downward, showing a connection between the aquifer units. All four aquifers are considered the same body of public groundwater.

Groundwater in the upper aquifers (USA and UTA) represents the local groundwater flow system. Groundwater flows north and discharges to Salmon Creek (McFarland and Morgan, 1996).

Groundwater in the deeper aquifers (LTA and SGA) is part of a large regional flow system with the major recharge areas in the surrounding uplands and the discharge areas along surface water streams. Groundwater in the Lower Troutdale and SGA flows to the Columbia River (PGG, 2004).

Site conditions

Well 12 and Well 13.1 are about one mile apart.

Well 12 was drilled in 1972 to a total depth of 351 feet. The well was screened across three water producing zones and likely captured water from the USA, UTA, and Lower Troutdale aquifers. Well 12 was equipped with a 40 hp pump capable of producing 275-298 gpm. When the efficiency of the well declined because of sand production, it was taken out of service in 1980. Later on in 1980, it was redeveloped and put back into service.

In 1986, Well 12 was deepened to 617 feet and re-cased with 8-inch pipe, sealing off portions that previously produced water. New screened portions were installed from 533 to 554 feet and 564 to 585 feet bgs, zones in the SGA. After excessively high manganese levels caused CPU to stop use of Well 12 in 1988, it was decommissioned. Table 3 summarizes construction details of Well 12.

Well #13.1 was drilled by Holt Drilling on Felida Middle School property, pursuant to the Preliminary Permit. The well penetrates all four hydrologic units. Pacific Groundwater Group (PGG) conducted testing on Well 13.1 in June 2004. Pump test data indicated an aquifer transmissivity of 47,000 gallons per day per foot of aquifer and a storage coefficient of 0.0006, typical of a confined aquifer.

Table 4 summarizes details of Well 13.1.

Table 3. CPU 12 well construction details

| | |
|--|--------------------|
| Well Tag | N/A |
| Date Drilled | July 20, 1972 |
| Well head elevation (ft above mean sea level, msl) | 226 |
| Well diameter (inches, in) | 8-inches |
| Completed depth (ft below ground surface, bgs) | 617 |
| Screened intervals (ft bgs) | 533-554 564-585 |
| Hydrologic unit | SGA |
| Static water level (ft bgs) | 195 |
| Date measured | 8/20/1986 |
| Pumping capacity (gpm) | 310 |

Table 4. CPU 13.1 well construction details.

| | |
|--|--|
| Well Tag | AKW-138 |
| Date Drilled | April 20, 2004 |
| Well head elevation (ft above mean sea level, msl) | 205 |
| Well diameter (inches, in) | 0-454 ft bgs, 16-inches 454-655 ft bgs, 10-inches |
| Completed depth (ft below ground surface, bgs) | 665 |
| Screen size | 40-slot |
| Screened intervals (ft bgs) | 475-505 542.5-645 |
| Recommended pump setting (ft bgs) | 400 |
| Available drawdown above recommended pump setting (ft) | 207 |
| Hydrologic unit | SGA |
| Static water level (ft bgs) | 193.3 |
| Date measured | 4/20/2004 |
| Pumping capacity (gpm) | 1,010 |

Impairment Considerations

Impacts to existing water users

Water right changes have greatest potential to affect wells completed in the same aquifer near the new point of withdrawal.

WAC 173-150-060 specifies that only impacts to “qualifying withdrawal facilities” can fit the legal definition of impairment. This definition means that wells can be affected but impacts are not considered impairment. Qualifying withdrawal facilities are wells completed in the same aquifer as the new point of withdrawal. The well must span the aquifer’s entire saturated thickness and the pump elevation must allow variation in seasonal water levels.

Ecology’s databases were queried for wells surrounding Well 13.1 completed in the SGA. Water Right Certificates and Permits about nine miles from Well 13.1 are summarized in Table 4.

Table 5. Water Right Certificates and Permits with wells completed in the SGA in 9 miles of Well 13.1

| <i>Certificate/ Permit (P) #</i> | <i>Name</i> | <i>Purpose of use</i> | <i>Well #</i> | <i>gpm</i> | <i>ac-ft/yr additive(a) non-additive(na)</i> | <i>Distance from Well 13.1 (mi)</i> |
|--------------------------------------|-------------------|-----------------------|----------------------|------------|--|---|
| G2-27753 | CPU | Municipal supply | 8.2 | 450 | 304 (a) | 5.2 |
| G2-28397 | CPU | Municipal supply | 31 | 1,200 | 1,382 (na) | 7 |
| G2-29575 | CPU | Municipal supply | 33 | 1,200 | 1,290 (na) | 7 |
| G2-26574¹ | SEH America | Industrial Supply | 4, 5, & 6 | 2,000 | 3,226 (a) | 7-9 |
| G2-29391(P) | | Irrigation | | 2,000 | 3,226 (a) | |
| G2-27670 | City of Vancouver | Municipal supply | Station 7, Well 2 | 500 | 807 (na) | 7.5 |
| G2-27671 | City of Vancouver | Municipal supply | Ellsworth | 3,000 | 2,420 (na) | 7.5 |

¹ Both gpm and ac-ft for G2-26574 and G2-29391 apply to combined withdrawals from all wells. Withdrawal rates from individual wells are not specified.

| | | | | | | |
|-------------|------------------------------|------------------|-----------|-------|------------|-----|
| G2-28027 | | | Springs | 3,000 | 2,420 (na) | |
| G2-28076 | | | Wellfield | 3,000 | 2,420 (na) | |
| G2-27950(P) | DFW Vancouver Trout Hatchery | Fish Propagation | 2 & 3 | 2,000 | 3,226 (na) | 7.5 |

Interference drawdown from pumping Well 13.1 is expected. Interference drawdown occurs when drawdown cones from wells pumping groundwater from the same aquifer intersect. After six months of continuous pumping at Well 13.1, the projected interference drawdown in the SGA at Well 8.2, about 5.2 miles away, would be about 11 feet. Interference drawdown at wells further away than seven miles would be about three feet. All wells have available drawdown to compensate for the drop in water levels from pumping Well 13.1. None of these water rights will be impaired and each should be able to pump their certificated quantity of water.

Ecology's databases were also queried to determine the number of water right certificates, permits, claims, and water wells in a radius of about one to 1 ¾ miles from Well 13.1. This radius was chosen primarily to make records retrieval easier. Review of well reports, Water Right Certificates, Permits, and Claims shows all in this radius are completed in the aquifers above the SGA, except for four CPU wells. This information is summarized below:

- 31 groundwater certificates.
- 13 surface water certificates.
- 195 groundwater and surface water claims.
- 204 water supply wells.
 - 4 wells 600 feet deep or deeper, all owned by CPU.
 - All others are less than 378 feet deep.

Because Well 13.1 is much deeper than other wells in the immediate area and separated by a thick sequence of low permeability material, few effects, if any, are expected to occur. Water right holders should easily be able to continue to pump the quantities allowed under their certificates.

Impacts to surface water

Well 13.1 is about ¾ mile away from Salmon Creek (east) and Vancouver Lake (west). Salmon Creek originates on the west slopes of the Cascade Range and flows about 20 miles before discharging to lakes and ponds flowing into the Columbia River. Vancouver Lake is also part of the Columbia River hydrologic system. These water features are hydraulically connected to the Columbia River by both surface and subsurface groundwater flow.

The Water Resources Management Program for the Salmon-Washougal Basin, WRIA 28 was adopted in 2008 (Chapter 173-528 WAC). This WAC establishes instream flows for many streams and closes others to consumptive uses. Salmon Creek, Burnt Bridge Creek, Lacamas Creek, Washougal River, and Columbia River Tributaries are closed to new withdrawals of groundwater. For withdrawals that don't affect closed reaches, the rule allows Ecology to evaluate applications on a case-by-case basis.

Approving this change will not impair surface water in Salmon Creek. The original point of withdrawal, Well 12, captured water in shallower aquifers that likely contributed baseflow to Salmon Creek. Changing the point of withdrawal to a well completed in a deeper well benefit flows in Salmon Creek.

Well 13.1 draws water from the SGA, an aquifer hydraulically connected to the Columbia River, Lake River, and Vancouver Lake. Because river stage is controlled by tidal response rather than groundwater discharge; the Columbia River, Lake River, and Vancouver Lake will not be impacted by pumping from Well 13.1

Public Interest Considerations

Changing the point of withdrawal of GWC G2-00885 to Well 13.1 is not detrimental to the public interest and consistent with WAC 173-528 and RCW 90.54. Well 13.1 is operated by CPU, a water purveyor subject to metering and reporting, and water use efficiency and conservation requirements.

The change will not cause new impacts to regulated surface water or groundwater.

CPU is a designated water purveyor for this area. CPU's Water System Plan dated 2003 was approved by the State Department of Health and addresses future service to customers in their service.

Consideration of Protests and Comments

No protests were filed against this application during the public notice period.

Conclusions

In accordance with Chapters 90.03 and 90.44 RCW, I find that:

- Well 13.1 is completed in the same body of public water as Well 12.
- Well 12 has been decommissioned.
- Changing the point of withdrawal of GWC G2-00885 to Well 13.1 will not impair existing rights.
- Changing the point of withdrawal of GWC G2-00885 is not detrimental to the public welfare.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request for change to G2-00885 be approved in the amounts and within the limitations listed below and subject to the provisions beginning on Page 2.

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:

275 gpm

440 ac-ft per year

Municipal Supply

Point of Withdrawal:

A well in SW¼, SW¼, Section 28, Township 3 North, Range 1 E.W.M.

Place of Use

As described on Page 1 of this Report of Examination.

Report Writer

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.

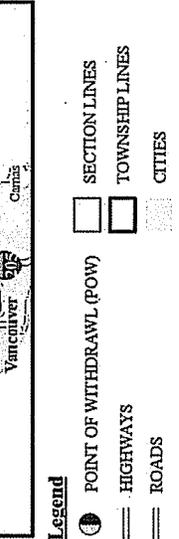
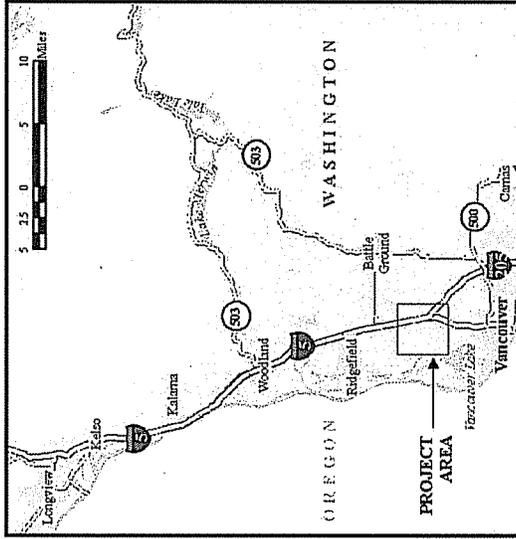
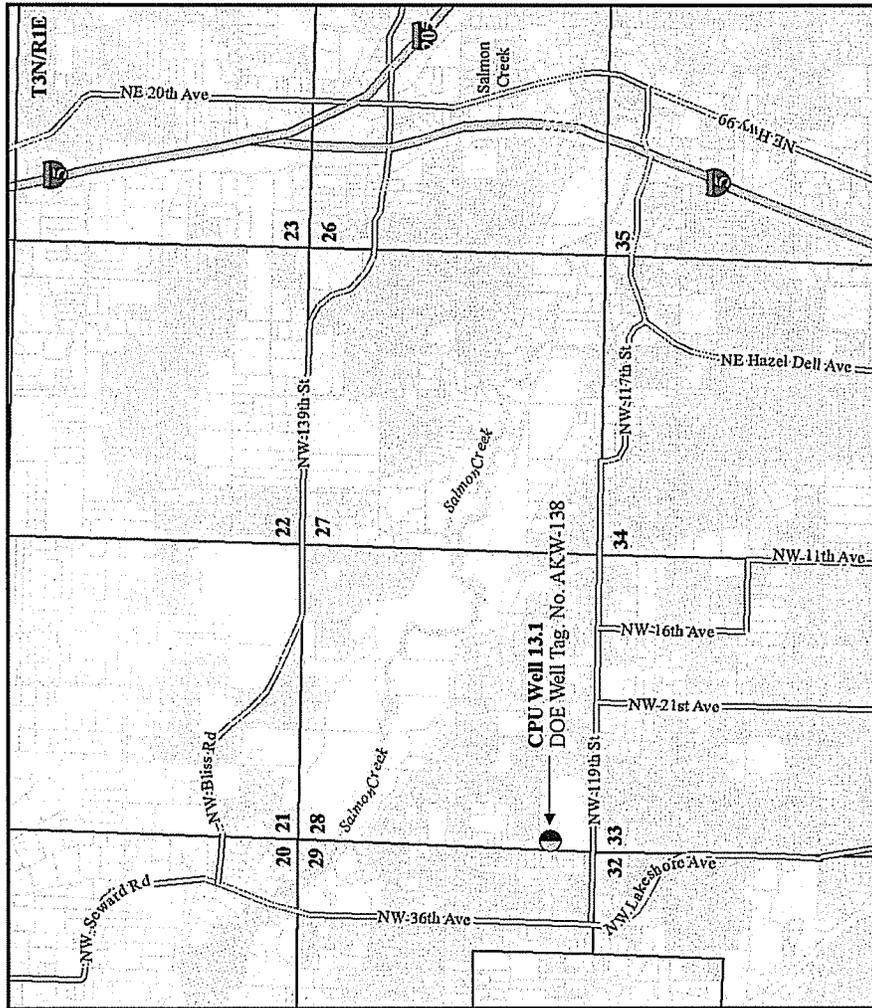
Table 2: Clark Public Utilities Water Rights Summary

| Certificate | Permit | Well | Rate (gpm) | Primary Qa | Suppl. Qa |
|--------------------|---------------|-------------|-------------|----------------|---------------|
| 0947 | | 5 | 1000 N/A | 896 | 0 |
| 02292 | | 4 | 400 | 0 | 640 |
| 02073A | | 3 | 180 | 0 | 290 |
| 02073B | | 5 | 320 | 0 | 516 |
| 02595 | | 5 | 1000 | 0 | 896 |
| 03422 | | 16 | 650 | 144 | 896 |
| 03982 | | 8.2 | 450 | 304 | 0 |
| 04098 | | 7 | 1000 | 0 | 1344 |
| 05515 | | 9 | 600 | 906 | 54 |
| 07189 | | 107 | 60 | 96 | 0 |
| 05921 | | 9 | 200 | 0 | 322 |
| G2-00026 | | 11 | 125 | 67 | 0 |
| G2-00549 | | 104 | 600 | 352 | 96 |
| G2-00884 | | 10 | 600 | 600 | 0 |
| G2-00885 | | 13.1 | 275 | 440 | 0 |
| G2-21569 | | 13.1 | 100 | 80 | 0 |
| G2-22154 | | 103 | 58 | 93 | 0 |
| G2-23887 | | 105 | 400 | 448 | 0 |
| G2-24160A | | 26 | 428 | 120 | 0 |
| G2-24408 | | 15 | 750 | 1000 | 0 |
| G2-24409 | | 13.1 | 750 | 1000 | 0 |
| G2-24906 | | 106 | 240 | 484 | 0 |
| G2-25933 | | 17 | 800 | 0 | 968 |
| G2-26130 | | 18.1 | 1000 | 968 | 0 |
| G2-26224 | | 19 | 1000 | 968 | 0 |
| G2-27979 | | 24 | 520 | 0 | 444 |
| | G2-28689 | 27 | 270 | 0 | 290 |
| G2-28350 | | 25 | 350 | 0 | 376 |
| | G2-27985 | 110 | 400 | 0 | 325 |
| | G2-27953 | 21 | 1300 | 1048 | 0 |
| | G2-27753 | 8.2 | 600 | 484 | 0 |
| | G2-27736 | 7.2 | 550 | 0 | 444 |
| | G2-27980 | 23 | 1500 | 4 | 1206 |
| G2-27152 | | 108 | 150 | 121 | 0 |
| G2-27270 | | 20 | 700 | 645 | 0 |
| G2-28719 | | 304 | 110 | 0 | 90 |
| G2-28630 | | 29 | 500 | 0 | 403 |
| G2-27715 | | 22 | 500 | 403 | 0 |
| G2-28956 | | 30 | 700 | 0 | 565 |
| | G2-29575 | 33 | 1200 | 0 | 1290 |
| | G2-28397 | 31 | 1200 | 0 | 1382 |
| | G2-27557 | 109 | 300 | 242 | 0 |
| Certificate | Permit | Well | Rate | Primary | Suppl. |

| | | | (gpm) | Qa | Qa |
|--------------------|-------------|-------|---------------|---------------|---------------|
| G2-26785 | | 1,2,3 | 200 | 146 | 78 |
| G2-26942 | | MG28 | 530 | 0 | 375 |
| G2-27075 | | MG5 | 250 | 375 | 0 |
| G2-27172 | | MG2 | 190 | 0 | 152 |
| G2-29821 | | 8.2 | 150 | 412 | |
| | G2-29477(B) | 35 | 625 | 1000 | |
| 2284-A | | 35 | 375 | | 270 |
| G2-29956 | Temporary | 34 | 1200 | 950 N/A | 0 |
| G2-29976 | Temporary | 32 | 1200 | 950 N/A | 0 |
| Totals | | | 27,556 | 13,846 | 13,712 |
| N/A = Non-additive | | | | | |

ATTACHMENT 1

Clark Public Utilities
 CG2-00885
 Sec. 28, T3N/R1E, W.M.
 WRIA 28 - Clark County



Legend

- POINT OF WITHDRAWAL (POW)
- HIGHWAYS
- ROADS
- SECTION LINES
- TOWNSHIP LINES
- CITIES

Comments:

Place of use, points of withdrawal/diversion are as defined on the cover sheet under the heading, 'LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED.'

Map Created 4/20/2010 chr

