



**STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY**

**REPORT OF EXAMINATION**  
*Change of:* Point of Withdrawal, Place of Use, Purpose of Use  
 WRTS File #: CG1-00387C@2

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
January 4, 1971			G1-00387C

NAME Cedar River Water and Sewer District		
ADDRESS/STREET P.O. Box 1040	CITY/STATE Maple Valley, WA	ZIP CODE 98038

**PUBLIC WATERS TO BE APPROPRIATED**

SOURCE Deep Well (Well 3) at Maplewood Estates
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND (cfs)	MAXIMUM GALLONS PER MINUTE (gpm)	MAXIMUM ACRE FEET PER YEAR (ac-ft/yr)
	0*	0.9*

QUANTITY, TYPE OF USE, PERIOD OF USE Municipal supply – Continuously
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\*Instantaneous and annual quantities represent the amounts that may be withdrawn from the Maplewood Estates Deep Well under this water right. These quantities are a portion of the total of 453 gpm and 110.8 ac-ft that may be withdrawn from the well under rights G1-00387C, G1-00387C@2, G1-23937C, G1-26357C, Ground Water Certificate 3908-B, and G1-20497C.

**LOCATION OF DIVERSION/WITHDRAWAL**

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL 1,040 feet east and 1,170 feet south from the northwest corner of Section 13, T. 22 N., R. 06 E. W.M.
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LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE	WRIA	COUNTY
NW1/4 NW1/4	13	22 N.	06 E. W.M.	8	King
PARCEL NUMBER	LATITUDE		LONGITUDE	DATUM	

**RECORDED PLATTED PROPERTY**

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)

**LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED**  
 [Attachment 1 shows location of the authorized place of use and point(s) of diversion or withdrawal]

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 Cedar River Water and Sewer District (CRWSD) 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.

**DESCRIPTION OF PROPOSED WORKS**

The Maplewood Estates system will supply less than 5 percent of CRWSD's total supply. The system consists of a 16-inch diameter (at surface), 550-foot deep well that will supply water to some central and eastern area customers through pipes ranging in size from 2 inches to 20 inches. The pipes in the area are approximately 36 percent asbestos

cement, 53 percent ductile iron, 11 percent PVC, and less than 1 percent cast iron. The area to be served by this well contains three steel storage reservoirs. One is located on Rock Mountain (18059 E. Lake Desire Rd.) and has a capacity of 0.5 million gallons. The second is located within the central portion of the central area (20015 206<sup>th</sup> Ave. SE) and has a capacity of 2 million gallons. The third, recently completed, is a 1-million-gallon reservoir located in the eastern portion of the service area near 184<sup>th</sup> St. SE.

**DEVELOPMENT SCHEDULE**

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
Begun	February 28, 2014	February 28, 2019

**PROVISIONS**

**Wells, Well logs and Well Construction Standards**

1. In accordance with WAC 173-160, wells shall not be located within certain minimum distances of potential sources of contamination. These minimum distances shall comply with local health regulations, as appropriate. In general, wells shall be located at least 100 feet from sources of contamination. Wells shall not be located within 1,000 feet of the boundary of a solid waste landfill.
2. All wells constructed in the state shall 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 shall be decommissioned.
3. All wells shall 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 shall remain attached to the well. If you are required to submit water measuring reports, reference this tag number.
4. Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

**Measurements, Monitoring, Metering and Reporting**

5. An approved measuring device shall be installed and maintained for each of the sources authorized by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173. <http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>
6. Water use data shall be recorded weekly. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to the Department of Ecology by January 31st of each calendar year.
7. The following information shall be included with each submittal of water use data:
  - a. owner,
  - b. contact name (if different from owner),
  - c. mailing address,
  - d. daytime phone number,
  - e. WRIA,
  - f. period of use,
  - g. Permit/Certificate/Claim No.,
  - h. source name,
  - i. annual quantity used including units,
  - j. maximum rate of withdrawal including units,
  - k. well tag number

In the future, the Department of Ecology may require additional parameters to be reported or more frequent reporting. The Department of Ecology prefers web based data entry, but does accept hard copies. The Department of Ecology will provide forms and electronic data entry information. <http://www.ecy.wa.gov/pubs/ecy070170.pdf>

8. 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

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some of the requirements. Installation, operation and maintenance requirements are enclosed as a document entitled “Water Measurement Device Installation and Operation Requirements”.

<http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>

9. In order to maintain a sustainable supply of water as required under RCW 90.44.070, pumping must be managed so that static water levels do not progressively decline from year to year. Water levels shall be measured and recorded monthly, using a consistent methodology. The length of the pumping period or recovery period prior to each measurement shall be constant, and shall be included in the record. Data shall be submitted annually, in the month of February, to Ecology. If static water levels show a declining trend, consultation with Ecology shall take place and the operator shall be prepared to minimize pumping effects by altering or ceasing withdrawal.

## Municipal Supply and Public Water Systems

10. If the criteria in RCW 90.03.386(2) are not met the place of use of this water right reverts to the service area described in the Water System Plan/Small Water System Management Program most recently approved after September 9, 2003. If the criteria in RCW 90.03.386(2) are not met and no Water System Plan/Small Water System Management Program has been approved after September 9, 2003, the place of use reverts to the last place of use described by Ecology in a water right authorization.
11. 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 Northwest Drinking Water Operations, 20435 72<sup>nd</sup> Avenue S, Suite 200, K17-12, Kent, WA 98032-2358, (253) 396-6750, prior to beginning (or modifying) your project.

## Schedule and Inspections

12. Department of Ecology personnel, upon presentation of proper credentials, shall 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.
13. The water right holder shall file the notice of project completion when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The superseding certificate will reflect the extent of beneficial use within the limitations of the change authorization. Elements of the project completion inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and compliance with provisions.

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### FINDINGS OF FACT AND ORDER

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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.

Therefore, I ORDER approval of the recommended change in point of withdrawal, place of use, and purpose of use under Change Application No. CG1-00387C@2, subject to existing rights and the provisions listed above.

You have a right to appeal this ORDER. 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:

Deliver your appeal in person to:

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

OR

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:

Deliver your appeal in person to:

The Department of Ecology  
Appeals Coordinator  
P.O. Box 47608  
Olympia, WA 98504-7608

OR

The Department of Ecology  
Appeals Coordinator  
300 Desmond Dr SE  
Lacey, WA 98503

**3. And send a copy of your appeal to:**

Andrew B. Dunn  
Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008

*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 Bellevue, Washington, this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Andrew B. Dunn, LG, LHG, Section Manager  
Water Resources Program  
Northwest Regional Office

**INVESTIGATOR'S REPORT**  
 Jay Cook, Department of Ecology  
 Water Right Control Number CG1-00387C@2

**BACKGROUND**

**Water System Information**

Cedar River Water and Sewer District (CRWSD) is located in the southeastern portion of King County. Its service area consists of approximately 36 square miles located south and east of the City of Renton in the vicinity of the City of Seattle's Lake Youngs watershed. The District's water service area includes portions of the City of Maple Valley and unincorporated King County (Pace, 2006).

According to their 2008 Comprehensive Plan, CRWSD currently serves 9,200 ERUs (Equivalent Residential Units) through approximately 7,400 connections. CRWSD's supply water is primarily provided by Seattle Public Utilities (SPU) through two metered connections. CRWSD also maintains 4 interties with Covington Water District.

Cedar River Water and Sewer District presently holds three ground water rights that authorize withdrawal of 320 gpm and 97 afy from their Maplewood Estates Deep Well (see Table 2).

**Description and Purpose of Proposed Change**

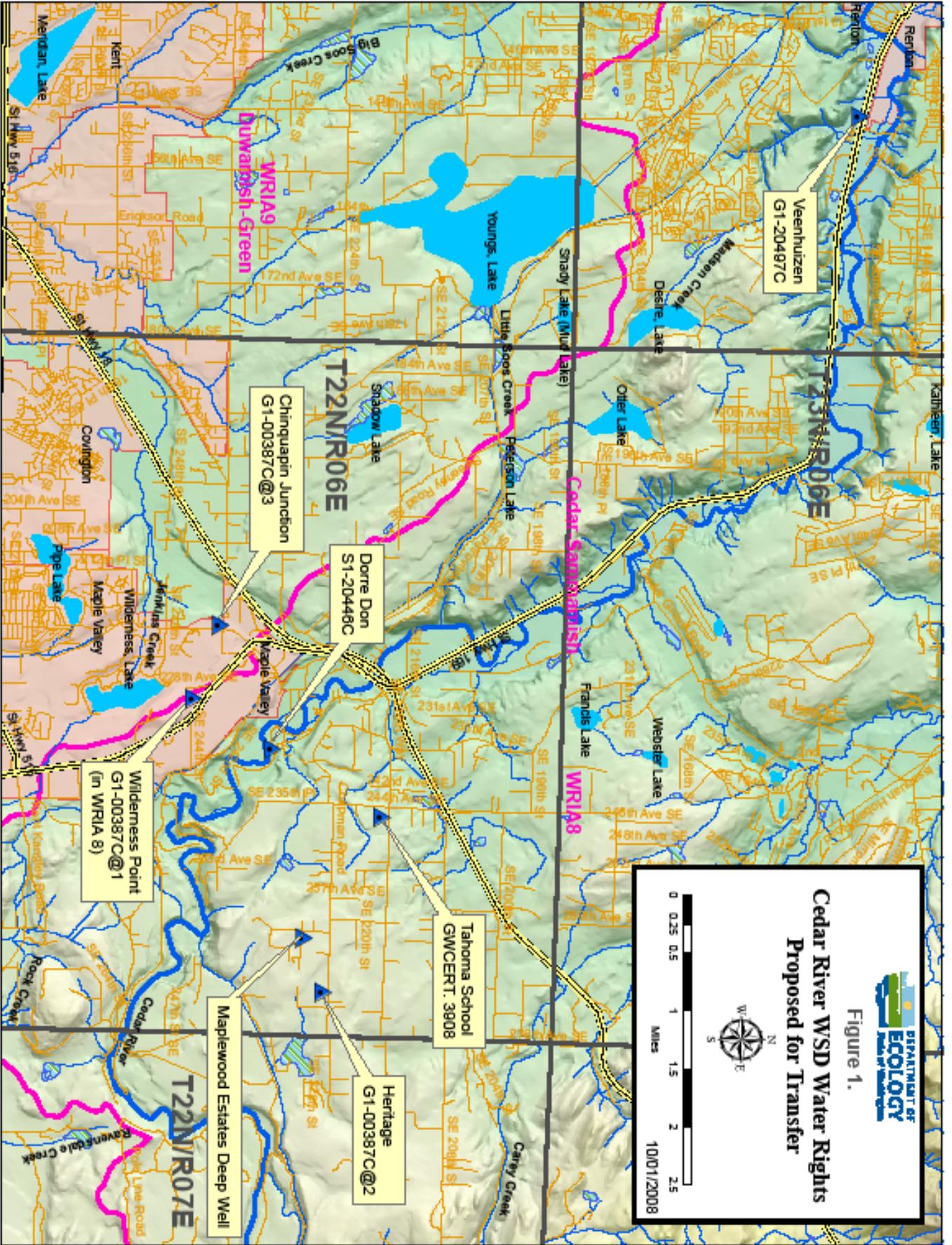
Cedar River Water and Sewer District (CRWSD) recently acquired 3 separate water rights certificates (Ground Water Certificates 3908, G1-20497C, and S1-20446C) within its service area totaling 537 gallons per minute (gpm) and 311 acre-feet per year (afy). Additionally, CRWSD acquired 3 separate exempt well uses. CRWSD submitted change applications for all 6 water rights in a batch proposing to move the point of withdrawal of all of the rights to a single, deep well located approximately 2 miles north-northwest of Landsburg. See Figure 1.

The subject change application proposes to consolidate an exempt withdrawal from the "Heritage" site with an existing right, G1-00387C, that presently authorizes withdrawal of 100 gpm and 46 afy from the Maplewood Estates Deep Well.

**Attributes of the Existing Water Right and Proposed Change**

**Table 1** Summary of Proposed Changes to Water Right No. G1-00387C@2

<i>Attributes</i>	<i>Existing</i>	<i>Proposed</i>
Name	John Day Homes	Cedar River Water and Sewer District
Priority Date   Date of Application for Change	January 4, 1971	April 5, 2006
Instantaneous Quantity	0.00 gpm	0.00 gpm
Annual Quantity	.90 acre-feet per year	.90 acre-feet per year
Source	exempt well	Deep Well (Well 3) at Maplewood Estates
Point of Diversion or Withdrawal	NW 1/4 NE 1/4 Township 22 North, Range 06 East, Section 13	NW 1/4 NW 1/4 Township 22 North, Range 06 East, Section 13
Purpose of Use	Domestic	Municipal
Period of Use	Year-round	Year-round
Place of Use	Property served by exempt well, King County parcel number 132206 9002	CRWSD service area (see Page 1)



## Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed changes in point of withdrawal, place of use, and purpose of use.

- **Public Notice**

The proposed changes were published in the King County Journal June 25 and July 2, 2006.

- **State Environmental Policy Act (SEPA)**

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

- It is a surface water right application for more than 1 cubic feet 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;
- It is a groundwater right application for more than 2,250 gallons per minute;
- It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- 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);
- 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.

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

## 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 if it would not result in harm or injury to other water rights.

Ecology cannot adjudicate a claim to a water right; only the superior courts have this authority. However, 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 90.44.105 provides that permit-exempt uses (RCW 90.44.050) may be consolidated with a valid right to withdraw ground water only if all the following conditions are met:

- (a) The exempt well taps the same body of public ground water.
- (b) The use of the exempt well is discontinued upon approval of the consolidation.
- (c) Construction of another exempt well is prohibited by legally enforceable agreements.
- (d) The exempt wells will be legally decommissioned.
- (e) Other existing water rights, including both ground water and surface water rights, and instream flows will not be impaired.

RCW 90.44.100(1) states that a ground water permit can be amended to replace or add wells.

## INVESTIGATION

### Site Visits

The Heritage site was visited twice during this investigation, on April 13, 2006 and August 29, 2007. During the 2006 visit the decommissioned well was observed along with some remains of the single-family residence formerly on the property. Also noted were several fruit trees that would have been in the yard of the previous home. During the 2007 visit, a GPS (global positioning system) reading was taken and found the decommissioned well at latitude 47.40058° north and longitude 121.98177° west.

The Maplewood Estates Deep Well site was visited on April 13, 2006. During the visit, the deep well and the nearby shallow well were observed. No distribution system appeared connected to either wellhead. A pumphouse was present on the property but was associated only with the shallow well.

### History of Water Use

The proposal is to consolidate a ground water exemption into an existing water right. Along with the change application CRWSD submitted an email from the former property owner, Jennifer Cles. The email states that an old house was on the property when she purchased the property in 2001. Ms. Cles goes on to state that one of her employees lived in the house from fall 2001 to December 2002 and that she then used the home as an office until selling the property to John Day Homes in September 2004. She concludes her email by stating that a single well supplied water to the home during her ownership.

RCW 90.44.105 states that the amount of water to be added to a permit or certificate when performing an exempt well consolidation shall be equal to the average withdrawal, in gallons per day, for the most recent 5-year period but not be less than 800 gallons per day (0.9 afy). The statute does not address assigning an instantaneous quantity when no data are available. CRWSD has no information regarding the Qi and they have offered to only have the annual quantity consolidated to their Maplewood Estates Deep Well.

Based on the site visit along with the statement by the former property owner, it was concluded that an exempt withdrawal occurred on the site within the last 5 years and is eligible for consolidation.

### Proposed Use

Cedar River Water and Sewer District proposes to consolidate this exempt withdrawal with Ground Water Certificate G1-00387C. Certificate G1-00387C, along with other rights, authorizes water to be withdrawn from the Maplewood Estates Deep well, which will serve a portion of CRWSD's service area.

### Measuring and Reporting Water Use

RCW 90.03.360 requires that the owner of any water diversion maintain substantial controlling works and a measuring device. It must be constructed and maintained to permit accurate measurement and practical regulation of the flow of water diverted. Technical requirements for the measuring and reporting of water use are described in WAC 173-173. Measuring water at the source of a surface water diversion or ground water withdrawal before the water is put to beneficial use is essential to effectively manage water supplies. Successful water supply management requires knowing how much water is actually being used and whether there is any more water in specific areas available for new uses. Accordingly, this decision contains provisions addressing the measuring and reporting of the quantities of water withdrawn or diverted.

### Other Rights Appurtenant to the Place of Use

CRWSD currently holds three water rights authorizing withdrawal of 320 gpm and 97 afy from the Maplewood Estates Deep Well. These water rights were transferred to the Deep Well in a batch of change applications approved in 2004.

**Table 2** Summary of Existing Water Rights Held by CRWSD

<i>Water Right Number</i>	<i>Priority Date</i>	<i>Instantaneous Quantity</i>	<i>Annual Quantity</i>	<i>Source Name/Number</i>	<i>Legal Description POW</i>
G1-00387C	Jan. 4, 1971	100 gpm	46 afy	Maplewood Estates Deep Well	NW¼ NW¼ Section 13 T22N, R06E
G1-23937C	Sep. 4, 1981	160 gpm	34 afy	Maplewood Estates Deep Well	NW¼ NW¼ Section 13 T22N, R06E
G1-26357C	Sep. 25, 1991	60 gpm	17 afy	Maplewood Estates Deep Well	NW¼ NW¼ Section 13 T22N, R06E
<b>Totals</b>		320 gpm	97 afy		

## Batch of Rights Proposed for Change (see Figure 1)

**Table 3** Summary of Water Rights Proposed for Change

<i>Water Right Number</i>	<i>Priority Date</i>	<i>Instantaneous Quantity</i>	<i>Annual Quantity</i>	<i>Source Name/Number</i>	<i>Legal Description POW</i>	<i>Comments</i>
G1-00387C@1	Unknown	Unknown	Not addressed	Wilderness Point Well	N½ NW¼ Section 22, T22N, R06E	Application withdrawn as mitigation; claim filed on property
G1-00387C@2	Unknown	Unknown <i>0 gpm<sup>a</sup></i>	0.9 afy <i>0.9 afy<sup>b</sup></i>	Heritage Well	NW¼ NE¼ Section 13 T22N, R06E	Exempt well consolidation
G1-00387C@3	Unknown	Not addressed	Not addressed	Chinquapin Junction Well	NE¼ NW¼ Section 21 T22N, R06E	Well found to be in different WRIA, change denied
G1-05760C (Cert. 3908-A)	Oct. 17, 1961	140 gpm <i>6 gpm<sup>a</sup></i>	224 afy <i>8.8 afy<sup>b</sup></i>	Tahoma School District Well	NW¼ NW¼ SW ¼ Section 11 T22N, R06E	43 gpm and 11.1 afy remain at Tahoma School
G1-20497C	Mar. 20, 1973	200 gpm <i>127 gpm<sup>a</sup></i>	45 afy <i>4.1 afy<sup>b</sup></i>	Veenhuizen Well	NE¼ SE¼ Section 22, T23N, R05E	Original well now serving as exempt well for home
S1-20446C	Feb. 9, 1973	0.44 cfs (=197 gpm) <i>100 gpm<sup>a,c</sup></i>	39.8 afy <i>12.8 afy<sup>b,c</sup></i>	Dorre Don Surface Diversion	NW¼ SE¼ Section 15, T22N, R06E	
<b>Totals</b>		537 gpm	310.6 afy	Maplewood Estates Deep Well	NW¼ NW¼ Section 13, T22N, R06E	
<b>Eligible for change<sup>c</sup></b>		233 gpm <sup>d</sup>	26.6 afy <sup>d</sup>			

<sup>a</sup> Instantaneous quantity found to be tentatively valid and available for change to CRWSD

<sup>b</sup> Annual quantity found to be tentatively valid and available for change to CRWSD

<sup>c</sup> Upon review of the draft report of examination, CRWSD requested to put the CS1-20446C (Dorre Don) change on hold due to the possibility of increased Qi if investigated at a later time. See “Conclusions” section of this report.

<sup>d</sup> Total instantaneous and annual quantities found tentatively valid and eligible for change in the batch of changes.

## Local Geology and Hydrogeology

The following is excerpted from the Hydrogeologic Report by Cook (2008). The report in its entirety can be found within the water right file.

During this investigation, driller’s logs from the subject wells and wells in their vicinity were examined along with publications of geologic research performed in the area.

The Maplewood Estates Deep Well (proposed point of withdrawal) is situated in the western foothills of the Cascade Range in the southeastern portion of the Puget Sound Lowland where mountain foothills and glacial drift plain merge. Although located near the Cascades and exposed bedrock, the well was drilled to a depth of 685 feet before encountering bedrock and continued to a total depth of 700 feet. Originally this well was planned to be a test well for gathering information prior to installation of a deep production well. A test well report was completed by GeoEngineers in February 1995 and submitted to Ecology. The GeoEngineers (1995) report notes that shallow aquifers (less than 80 feet depth) in the vicinity are either post-glacial fluvial deposits or Vashon recessional outwash and that the intermediate aquifers (between 100 and 300 feet depth) are Vashon advance outwash. No detailed geologic information was found for the deep aquifer at the Maplewood location during this investigation. Based on general geologic knowledge of the area, the well, which is screened between 530 and 550 feet, likely taps the Pre-Vashon lower coarse grained unit, Q(B)c, as defined by Woodward et al (1995).

The exempt well known as the Heritage Well was located approximately 2 miles northeast of the Cedar River at its nearest point. The well has been decommissioned (site verified). There was no well log for the construction of the well, but the decommissioning log for the well shows that it was 80 feet in depth. The Booth et al (2006) map of King County shows the surface geology at the well site to be Vashon till (Qvt). The ground surface elevation at the former well is about 700 feet above mean sea level (MSL), and the open bottom of the well was about 620 feet

MSL. The Heritage Well likely was completed in Vashon advance outwash (Qva) approximately 200 feet higher in elevation than the elevation of the Cedar River at its nearest point. The overlying Vashon till suggests the Heritage Well tapped a confined aquifer. It is likely that water intercepted by this well would naturally feed nearby springs and streams tributary to the Cedar River.

### **Same Source of Water**

The prior appropriation or “first in time first in right” doctrine for managing water rights has meaning only within a specific *water source*. For surface water rights, the state has historically defined the source as the stream or lake from which water is diverted. This can include one or more streams or other water bodies managed together. For groundwater, the source has been historically defined as the aquifer or aquifer system from which groundwater is withdrawn.

All the subject water withdrawals/diversions authorized for change within this batch of applications are within the Cedar River basin and beneficially use water that would eventually discharge into the Cedar River. In consideration of this, the subject wells and diversion are within the same source of water.

### **Impairment Considerations**

#### Impairment of Minimum Instream Flow Water Rights

The term "instream flow" is used to identify a specific stream flow (typically measured in cubic feet per second, or cfs) at a specific location for a defined time, and typically following seasonal variations. Instream flows are usually defined as the stream flows needed to protect and preserve instream resources and values, such as fish, wildlife and recreation. Instream flows are most often described and established in a formal legal document, typically an adopted state rule.

Once established, a minimum flow constitutes an appropriation with a priority date as of the effective date of the rule establishing the minimum flow (RCW 90.03.345). Thus, a minimum flow set by rule is an existing right which may not be impaired (RCW 90.03.345; RCW 90.44.030). The Cedar River, about 1 mile from the proposed well, has instream flows measured at a compliance point (USGS Gage 12119000) located in Renton, WA.

To evaluate potential impairment to the Cedar River Instream Flow, a determination must be made of the new versus the original impact and whether the change will reduce flows as measured at the Renton compliance point, assuming the transferable quantity has been/will be withdrawn from each. Both points of withdrawal, existing and proposed, are well upstream of the Renton gage and withdrawal from either will have the same impact at the gage.

This application is one of four applications that have been investigated concurrently and are being approved for change<sup>1</sup>. All water rights in this batch have been intercepting surface and ground water that is destined for the Cedar River and all are located upstream of the gauging station in Renton. The withdrawal from the proposed Maplewood Estates Deep Well should have no greater effect at the Renton gage than the original points of withdrawal/diversion and will not impair Cedar River instream flows.

#### Impairment, Qualifying Ground Water Withdrawal Facilities, and Well Interference

There are three concepts that are important when considering whether a withdrawal of water from a well would impair another existing water right. The concepts are defined as follows:

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection i.e. water rights that are both senior and junior in priority to the right the applicant seeks to change.

Qualifying ground water withdrawal facilities are defined as those wells which in the opinion of the Department are adequately constructed. An adequately constructed well is one that (a) is constructed in compliance with well construction requirements; (b) fully penetrates the saturated thickness of an aquifer or withdraws water from a reasonable and feasible pumping lift (WAC 173-150); (c) the withdrawal facilities must be able to accommodate a reasonable variation in seasonal pumping water levels; and (d) the withdrawal facilities including pumping facilities must be properly sized to the ability of the aquifer to produce water.

Well interference may occur when wells penetrate and withdraw ground water from the same aquifer. Each pumping well creates a drawdown cone that may interfere with another well.

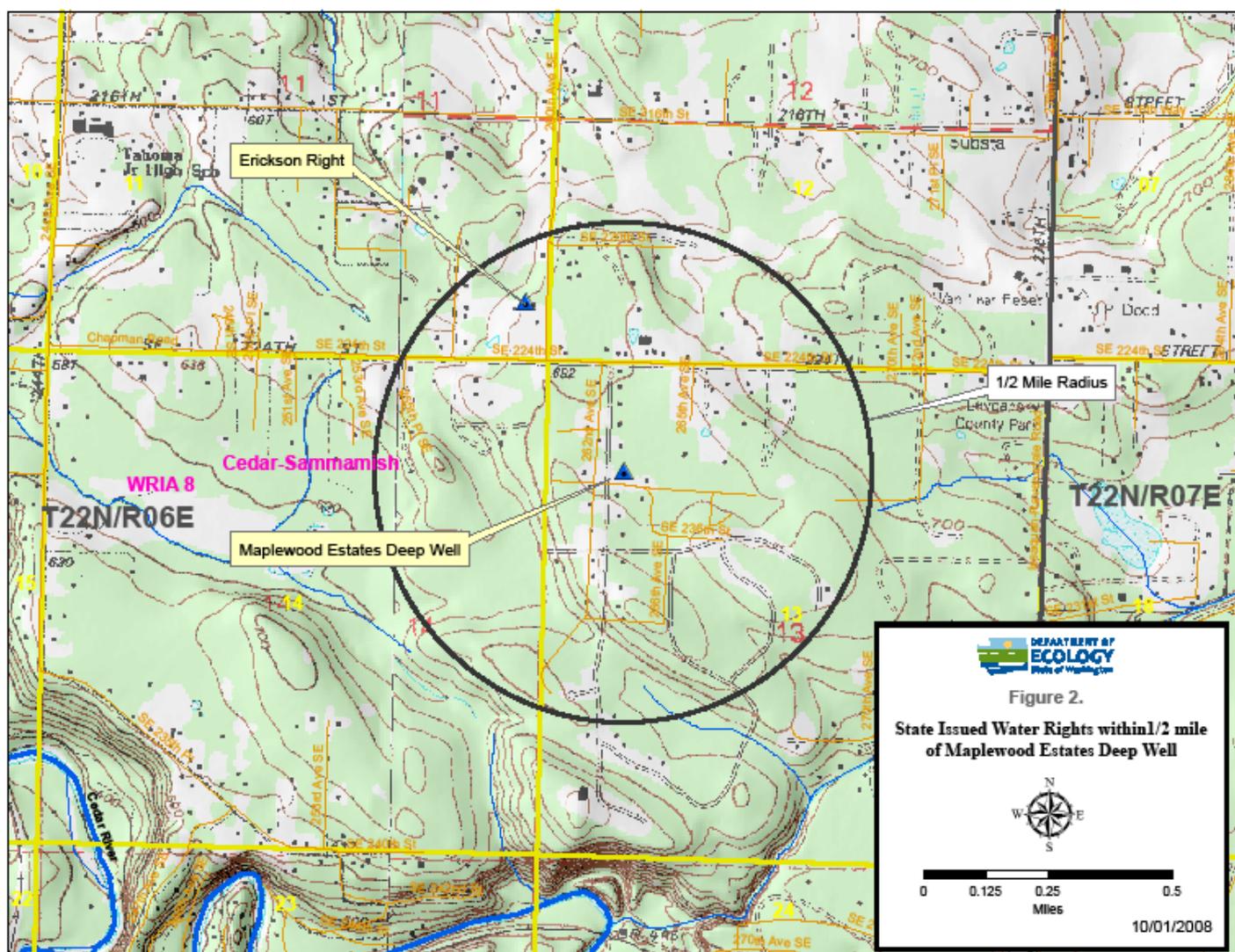
There are a total of 160 water rights (not including Cedar River Water and Sewer District) in the four sections nearest Maplewood Estates Deep Well (sections 11, 12, 13, and 14). Of these, 145 are claims and 15 are permits and certificates.

Of the 145 claims, it is known that 127 are for ground water withdrawals and the remaining 18 are for surface diversions. Validity of claims in King County can only be evaluated in an adjudication by King County Superior Court.

<sup>1</sup> Four changes were approved in draft Reports of Examination. Upon review of the drafts, CRWSD requested that one change proposal, the Dorre Don application, be put on hold. See "Conclusions" section of this report.

Of the 15 permitted/certificated water rights in this four-section area, 13 are for ground water withdrawals and 2 authorize surface water diversions. One of the permits or certificates is within 1/2-mile of the proposed deep well.

It was issued to R. L. Erickson for 20 gpm and 11.5 afy for single domestic supply and irrigation purposes. The Erickson Well is located approximately 1,500 feet north-northwest of the Maplewood Estates Deep Well and is 40 feet in depth. See map below.



Research indicates 42 wells within 1/2-mile of the Maplewood Estates Deep Well (not including the Maplewood Shallow Well). Most (34) of these wells do not have a corresponding water right. It is likely that these wells are exempt from the permitting process pursuant to RCW 90.44.050 and are authorized to each withdraw a maximum of 5,000 gallons of ground water per day. The remaining 8 wells are associated with ground water claims. All 42 wells are shallower than 300 feet deep.

The Maplewood Estates Shallow Well is present at the Maplewood site and is located approximately 100 feet from the Maplewood Estates Deep Well. The well is 80 feet deep and is completed in a shallower, likely confined aquifer that is separated from the deep aquifer by a silt/clay aquitard. It was monitored during the pumping tests and showed no response to pumping.

Considering the lack of interference drawdown in the shallow aquifer during pumping of the Maplewood Estates Deep Well as evidenced by no drawdown measured in the Maplewood Shallow Well, and considering that all

nearby wells appear to tap the shallower aquifer, it is unlikely that any wells will be impaired by the total potential withdrawal of 553 gpm<sup>2</sup> and 123.6 afy<sup>2</sup> from the Maplewood Estates Deep Well.

### **Decommissioning of Well and Discontinuation of Use at Original Well Site**

During the April 13, 2006 site visit, remnant evidence of the well's December 2005 decommissioning was observed. Along with the change application, CRWSD submitted a copy of a notarized agreement between CRWSD and John Day Homes stating that well at the Heritage site would be decommissioned, that future exempt wells on the site are prohibited, and that the water rights would be transferred to CRWSD.

Considering the above, this exempt well consolidation meets the statutory requirements regarding discontinuation of use of exempt wells on the subject property.

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<sup>2</sup>Cedar River Water and Sewer District has requested the Dorre Don change application be put on hold considering the possibility that the instantaneous quantity found tentatively valid and eligible for change may be increased if processed at a later time. See "Conclusions" section of this report. Without the Dorre Don change, total quantities of 453 gpm and 110.8 afy should also not impair nearby wells.

### **Consideration of Protests and Comments**

No protests or letters of concern were received during this investigation.

### **CONCLUSIONS**

CRWSD originally submitted a batch of 6 water right change applications for concurrent processing. One of those change applications, the Chinquapin Junction exempt well consolidation, is being denied due to the original and proposed wells being in different Water Resource Inventory Areas. A second exempt well consolidation proposal was voluntarily withdrawn as mitigation for potential impacts to an impaired reach of the Cedar River. The remaining 4 applications, as a package, satisfy the considerations listed above.

After review of the four draft Reports of Examination and consideration of the King County Superior Court decision in the Municipal Water Law Case (*Lummi Nation, et al. v. State of Washington*), Cedar River Water and Sewer District requested to have the Dorre Don change application (CS1-20446C) put on hold until the Supreme Court decision is rendered in the appeal. CRWSD has chosen to do so with the belief that the King County Superior Court ruling may be overturned by the Washington Supreme Court, returning the Dorre Don water right to municipal status and exempting the water right from relinquishment. If not subject to relinquishment, the instantaneous quantity of the right could be found to be 197 gpm, which is 97 gpm more than was found tentatively valid in the draft Report of Examination. The possible change in status of the water right will not affect the annual quantity found to be valid and eligible for change. An unaltered version of the Dorre Don draft Report of Examination is available upon request.

A new tentative determination of extent and validity will be performed for the Dorre Don certificate soon after the Supreme Court ruling. If the Superior Court ruling is upheld, the instantaneous quantity found tentatively valid and eligible for change will likely remain 100 gpm. If the Superior Court ruling is overturned, it is possible the instantaneous quantity will increase. The quantities found tentatively valid and eligible for change will, at the time of consideration, be evaluated as part of this batch and part of new totals proposed to be withdrawn from the Maplewood Estates Deep Well.

Until the Dorre Don surface water right is changed, the totals to be withdrawn from the Maplewood Estates Deep Well are 453 gpm and 110.8 afy. If the Superior Court decision in the Municipal Water Law case is upheld by the Supreme Court (Municipal Water Law found unconstitutional), then the total quantities authorized from the Maplewood Estates Deep Well will likely be 553 gpm and 123.6 afy. If the Superior Court decision is overturned, the instantaneous quantity could be increased to 650 gpm.

### **RECOMMENDATIONS**

Based on the above investigation and conclusions, I recommend that the request for change to G1-00387C@2 be approved in the amounts and within the limitations listed below and subject to the provisions beginning on Page 2, et seq.

**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 gpm
- 0.9 acre-feet per year
- Municipal purposes

**Point of [Diversion Withdrawal]**

NW¼, NW¼, Section 13, Township 22 North, Range 06 East, W.M.

**Place of Use**

As described on Page 1 of this Report of Examination.

Report by: \_\_\_\_\_ Date \_\_\_\_\_  
 Jay Cook  
 Water Resources Program

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**REFERENCES**

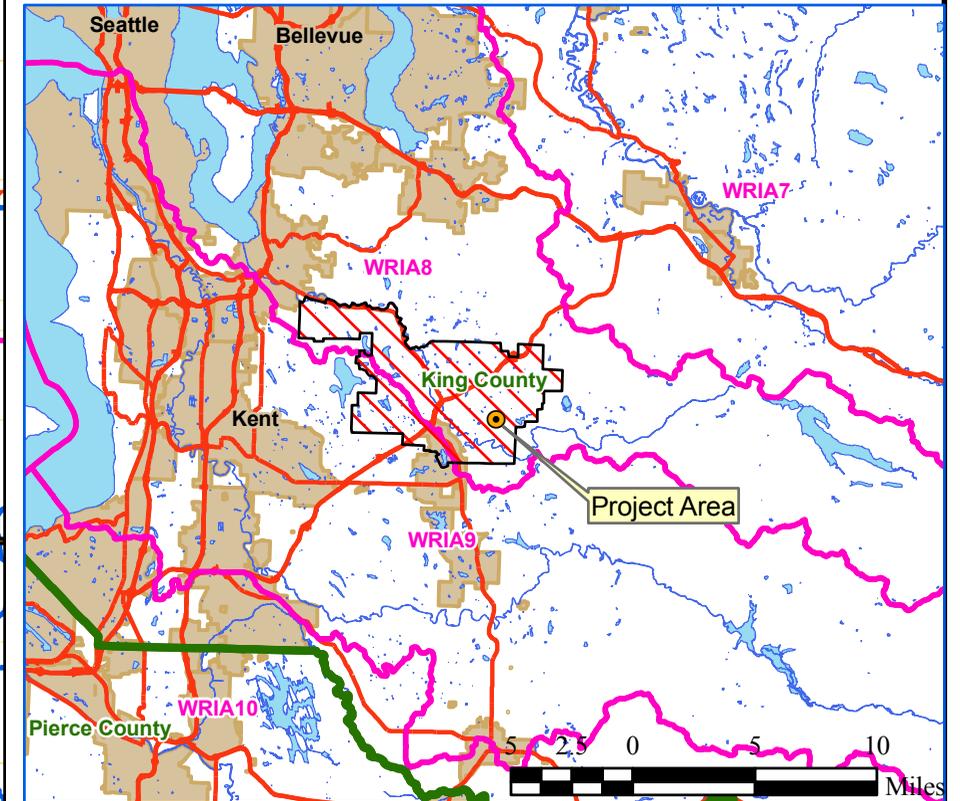
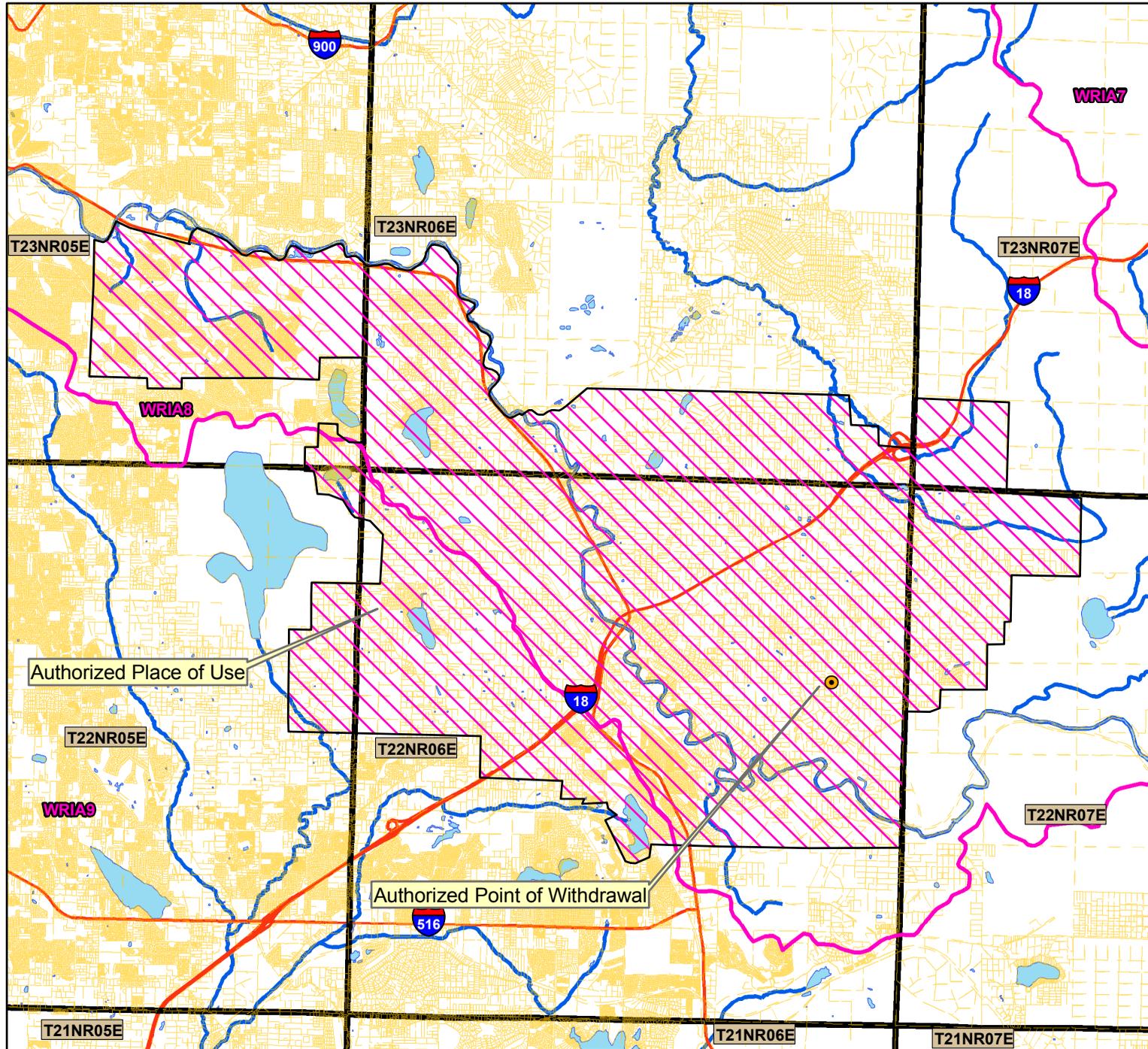
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**Legend**

- County
- WRIA
- cities
- Highways
- Local Roads
- Townships
- Sections
- Authorized Point of Withdrawal
- Authorized Place of Use

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.'