STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Application for Change
REPORT OF EXAMINATION
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

☐ Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

☒ Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER
December 13, 1991	G3-29162	G3-29162	

NAME
Skone and Connors Produce, Inc.

ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
P. O. 339	Warden	WA	98857-0276

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
Six Wells

TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE -FEET PER YEAR
	3,000	1,120

QUANTITY, TYPE OF USE, PERIOD OF USE
3,000 gallons per minute (gpm), 1,120 acre-feet per year (afy), each year for seasonal irrigation of 320 acres

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION–WITHDRAWAL
All within Township 17 North, Range 27 East:
Well No. 1 (S&C 1): 1,530 feet South and 1,320 feet West of the N¼ corner of Section 24, within the S½ of the NW¼; Latitude 46° 57' 08", Longitude 119° 22' 54"
Well No. 2 (S&C 4): 130 feet South and 460 feet East from the N¼ corner of Section 24, within the NW¼ of the NW¼ of the NE¼; Latitude 46° 57' 21", Longitude 119° 22' 27"
Well No. 2A (S&C 5): 215 feet South and 450 feet West from the NE corner of Section 24, within the NE¼ of the NE¼; Latitude 46° 57' 20", Longitude 119° 22' 03"
Well No. 4 (S&C 3): 300 feet South and 600 feet East from the center of Section 23, within the N½ of the NW¼ of the SE¼; Latitude 46° 56' 54", Longitude 119° 23' 43"
Well No. 5 (S&C 2): 800 feet North and 25 feet East of center of Section 25, within the SW¼ of the NE¼; Latitude 46° 56' 12", Longitude 119° 22' 36"
Well No. 6 (S&C 6, AHP 786): 650 feet South and 150 feet East from the NW corner of Section 24, within the NW¼ of the NW¼; Latitude 46° 57' 16", Longitude 119° 23' 11"

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N.	RANGE, (E. OR W.) W.M.	W.R.I.A.	COUNTY
(Well 1, S&C 1) S½NW¼	24	17 N.	27 E.	41	Grant
(Well 2, S&C 4) NW¼NW¼NE¼	24	17 N.	27 E.	41	Grant
(Well 2A, S&C 5) NE¼NE¼	24	17 N.	27 E.	41	Grant
(Well 4, S&C 3) N½NW¼SE¼	23	17 N.	27 E.	41	Grant
(Well 5, S&C 2) SW¼NE¼	25	17 N.	27 E.	41	Grant
(Well 6, S&C 6) NW¼NW¼	24	17 N.	27 E.	41	Grant

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
(Well 1, S&C 1) Parcel 161270000		
(Well 2, S&C 4) Parcel 161270000		
(Well 2A, S&C 5) Parcel 161270000		
(Well 4, S&C 3) Parcel 161269000		
(Well 5, S&C 2) Parcel 161272000		
(Well 6, S&C 6) Parcel 161270000		

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED
244 acres within the S½ of Section 23; and 76 acres within the SE¼ of Section 24; all within T.17 N., R. 27 E.W.M. Grant County, Washington

DESCRIPTION OF PROPOSED WORKS

Skone and Connors Produce Inc. plans to use their existing six wells to provide irrigation supply water at a combined annual quantity of 1,120 afy and an instantaneous capacity of 3,000 gpm.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
Begun	July 1, 2010	July 1, 2011

REPORT

BACKGROUND

The examination of Change/Transfer Application CG3-29162@1 submitted by Skone and Connors Produce Inc. (Skone and Connors) on July 9, 2007 was led by consultants from GeoEngineers, Inc. contracted as part of the Washington State Department of Ecology's (Ecology's) cost-reimbursement program to facilitate the phased processing of the application. Karen Tusa of the Water Resources Program, Eastern Region of Ecology oversaw the examination and Kevin Brown of Ecology also provided review.

The original application G3-29162(A) was submitted by Skone and Connors requesting 3,000 gpm from four wells for the seasonal irrigation of 320 acres in the S½ of Section 23, Township 17 North, Range 27 East Willamette Meridian (T. 17 N., R. 27 E.W.M.), with a priority date of December 13, 1991. A Ground Water Permit G3-29162P was issued on November 10, 1994, for 3,000 gpm instantaneous quantity (Qi), and 1,120 afy annual quantity (Qa) from four wells for seasonal irrigation. Skone and Connors submitted an Application for Change (CG3-29162@1) to correct the locations of the existing wells and to add two wells. A Superseding Permit for six wells was issued on April 1, 2004. The new wells were not drilled at the authorized locations. The subject application was initiated to correct the well locations and to change a portion of the place of use.

Skone and Connors also hold groundwater permits G3-26155(A) and G3-26155(B) that have a priority date of February 9, 1979, for 4,400 gpm (Qi) and 2,240 afy (Qa) from three wells for the irrigation of 640 acres. The points of withdrawal are the same as for the subject permit. Applications for change should be filed on these permits to correct the well locations. Thus, Skone and Connors hold ground water permits totaling 7,400 gpm (Qi) and 3,360 afy (Qa) for the irrigation of 960 acres. They have also submitted a ground water right application (G3-30535) for 120 gpm (Qi) for municipal supply within Section 23.

Skone and Connors propose to transfer a portion of the place of use from 320 acres in the S½ of Section 23, to 244 acres within the S½ of Section 23 and 74 acres within the SE¼ of Section 24, all within T. 17 N., R. 27 E.W.M., south of Potholes Reservoir. A summary of the proposed changes to Water Right Permit G3-29162P is presented in Table 1.

Table 1. Summary of Existing Water Right and Proposed Changes

Attributes	Existing	Proposed
Name	Skone and Connors	Same
Priority Date/Date of Change Application	*Priority Date*: December 13, 1991	*Date of Change* Application: July 9, 2007
Instantaneous Quantity (Qi)	3,000 gpm	Same
Annual Quantity (Qa)	1,120 acre-feet per year	Same
Source	Six wells	Same
Point of Withdrawal	Well 1 (SC1): S½NW¼ Section 24; T.17 N., R.27 E.W.M. Well 2 (SC4): NW¼NE¼ Section 24; T.17 N., R.27 E.W.M. Well 2A (SC5): NE¼NE¼ Section 24; T.17 N., R.27 E.W.M. Well 4 (SC3): NW¼SE¼ Section 23; T.17 N., R.27 E.W.M. Well 5 (SC2): SE¼NW¼ Section 25; T.17 N., R.27 E.W.M. Well 6 (SC6): SW¼NW¼ Section 24; T.17 N., R.27 E.W.M.	Wells 1 through 4 Same Well 5 (SC2): SW¼NE¼ Section 25; T.17 N., R.27 E.W.M. Well 6 (SC6): NW¼NW¼ Section 24; T.17 N., R.27 E.W.M.
Purpose of Use	Irrigation supply	Same
Period of Use	Seasonal	Same
Place of Use	320 acres S½ of Section 23; T.17 N., R.27 E.W.M.	320 acres As described herein, S½ of Section 23; and the SE¼ of Section 24; all within in T.17 N., R.27 E.W.M.

INVESTIGATION

The examination team of GeoEngineers and Ecology reviewed Skone and Connors' change application and supporting documents contained in the Ecology file, communicated regularly with senior Ecology staff to discuss direction of the work and any issues that arose, met and communicated with the applicant to review the water rights examination process and obtain current information, obtained and reviewed reports and other documents relevant to the application, and conducted a field examination of the key features of the application (e.g., proposed point of withdrawal, pumping and conveyance systems, and place of use).

The investigation included, but was not limited to, the review of:

- the State Water Code, specifically WAC 173-124A, 173-134A and 508-14;
- United States Geological Survey (USGS) topographic maps;
- Ecology's water right files, water right database (WRTS), and on-line Washington State Well Log Viewer;
- Hansen, A.J., Jr., Vaccaro, J.J., and Bauer, H.H., 1994, Ground-water flow simulation of the Columbia Plateau Regional Aquifer System, Washington, Oregon, and Idaho: USGS Water-Resources Investigations (WRI) Report 91-4187;
- Bauer, H.H., and Hansen, A. J. Jr., 2000, Hydrology of the Columbia Plateau Regional Aquifer System, Washington, Oregon, and Idaho, USGS WRI 96-4106;
- information submitted by and conversations and/or meetings with Steve Connors; and
- a site visit on April 24, 2008.

SEPA

Environmental review under State Environmental Policy Act (SEPA) is required for many projects; however, some minor projects are categorically exempt from SEPA. Appropriations of one cfs or less of surface water, or of 2,250 gpm or less of ground water, for any purpose, and appropriations of 50 cfs or less for surface water used for irrigation are categorically exempt from SEPA. See WAC 197-11-305.

The Skone and Connors project exceeds the threshold for compliance with SEPA. Skone and Connors completed a SEPA checklist for the project. Ecology is the lead agency for the SEPA determination. A Determination of Nonsignificance was issued by Ecology on July 1, 2008.

A notice of application was duly published in accordance with RCW 90.03.280 in the Columbia Basin Herald on October 23 and 30, 2007 and no protests were received.

State Water Code

Chapters 90.03 and 90.44 RCW authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights including the process to amend or change existing rights. Laws specifically governing the water right permitting process are RCW 90.03.250 through 90.03.340 and RCW 90.44.060.

The proposed project lies within the boundaries of the Quincy Ground Water Management Subarea as defined in Chapter 173-124 WAC and the 508-14 Subarea. The Quincy ground water subarea management policy is provided in WAC 173-134A.

Source Area

All but one of the existing points of withdrawal are within the Quincy ground water subarea as established pursuant to RCW 90.44.130 and set forth in Chapter 173-134 WAC. Well 5 (SC2) is located within the area subject to WAC 508-14. The source aquifer is the Grande Ronde aquifer of Tertiary age within the Quincy "basalt zone" of rock units in the Quincy ground water subarea (WAC 173-124-050). The horizontal boundaries of the extent of the Quincy ground water subarea are provided in WAC 173-124-060. Ground water permit changes are permitted under WAC 173-134A-070. The Quincy ground water subarea was used to define the source of water for identifying water rights and applications that may be impacted by the requested change application.

Site Visit

Joel Purdy, a Senior Hydrogeologist with GeoEngineers, conducted a site visit on April 28, 2008. Steve Connors of Skone and Connors gave a tour of the facilities and property. The tour included the inspection of the six wells. Locations of the well sites were recorded using a hand-held GPS unit. The wells were initially numbered based on the original application and changes. Skone and Connors use a separate well-numbering scheme. Well 1 (S&C 1) has a 350-horsepower turbine pump and was observed pumping at rate of approximately 820 gpm based on the inline flow meter. Well 2 (S&C 4) has a 600-horsepower pump and was not pumping at the time of the visit. Well 2A (S&C 5) has a 600-horsepower pump and was not pumping at the time of the visit. Well 4 (S&C 3) is currently not in use and had no pump installed at the time of the visit. Well 5 (S&C 2) has a 300-horsepower pump and was pumping at a rate of approximately 700 gpm based on the inline flow meter. Well 6 (S&C 6) has a 600-horsepower pump and was not pumping at the time of the visit. Timothy grass is grown within the current place of use. In the past, the crop has been rotated between 3 years of Timothy, 1 year potato and 1 year wheat. The crop is irrigated in Section 23 by two center pivots with impact heads and end guns. Approximately 260 acres is currently developed. Skone and Connors intend to shorten the pivots to reduce the irrigated area in Section 23 from 260 to 244 acres in order not to exceed the total of 320 acres when the proposed 76 acres within Section 24 are included.

Hydrogeology in the Vicinity
The project site is in the Columbia River drainage basin within the Lower Crab Water Resource Inventory Area (WRIA) 41. The hydrogeologic setting described below is applicable to the area in the vicinity of the Skone and Connors wells.

Wells in this area rely on basalt aquifers that collectively form a large ground water reservoir occurring in a thick sequence of basalt flows known as the Columbia River Basalt (CRB) Group from the Tertiary Period. The overall thickness of these basalts varies from a few hundred feet to over 10,000 feet in eastern Washington. The basalt flows include the Saddle Mountain, Wanapum and Grande Ronde aquifers. The two main aquifers in the vicinity are the relatively shallow Wanapum and the deep Grande Ronde. The most productive zones within the CRB occur principally in tabular zones at the contact between basalt flows. These zones generally form confined aquifers that are composed of scoriaceous basalts, cinder beds, sediments, or volcanic ash. There are very few wells in the immediate vicinity of the Skone and Connors project, mostly used for domestic supply and irrigation of 80 acres or less. In the area around the Potholes Reservoir, the basalts are overlain by Quaternary deposits forming an unconsolidated near-surface zone that in places hosts an unconfined aquifer.

The Skone and Connors project is located on the eastern end of Frenchman Hills within the Yakima Fold Belt Subprovince of the Columbia Plateau. Frenchman Hills is an anticlinal ridge that trends generally east-west. The USGS (Bauer and Hansen 2000) has mapped an associated syncline to north and high-angle faults to the south. The anticline of the parallel-trending Saddle Mountains is mapped further south.

The vertical groundwater movement component is generally downward except near discharge areas. Lateral groundwater movement is generally toward surface-drainage features where groundwater discharges although the geologic structures may cause local anomalies to groundwater movement (Bauer and Hansen 2000). The lateral groundwater movement in the shallow Wanapum unit is toward Moses Lake and Potholes Reservoir, whereas the groundwater in the deeper Grande Ronde unit is to the south and west toward the Columbia River (Hansen and others 1994). Bauer and Hansen (2000) suggest that the Wanapum units of the Frenchman Hills and the anticlinal ridge to the south are hydraulically separate and groundwater flow in the Wanapum unit north of Frenchman Hills is to the east toward the Potholes Reservoir; whereas, just south of Frenchman Hills the flow is to the south.

There have been reports of water level declines in the Frenchman Hills area west of Skone and Connors. These reports have not been formally verified by Ecology (Kevin Brown 2008). To the east and northeast of Skone and Connors are several small community and transient non-community systems that generally obtain their groundwater from shallow (100 to 200 feet deep) or intermediate depth (300 to 500 feet deep) wells. These are most likely completed in the Wanapum aquifer. To provide protection to these users and to provide separation of the Skone and Connors withdrawal from the Wanapum and, potentially, the shallow "artificially stored" groundwaters allocated to the Bureau of Reclamation, casing and sealing requirements are needed to isolate the Skone and Connors wells in the deeper Grande Ronde aquifer.

Administrative Status of Water Bodies
The project lies primarily within the boundaries of the Quincy Ground Water Management Subarea as defined in Chapter 173-124 WAC. This Subarea covers the northern portion of the Columbia Basin Project (developed by the U.S. Department of Interior, Bureau of Reclamation), and lies mostly within Grant County. The Quincy Subarea is divided into two major ground water management units, deep and shallow, as defined by rule (Chapter 173-134A WAC).

The shallow management unit is defined as the ground water hydraulically continuous between land surface and a depth of 200 feet into the Quincy basalt zone and includes all of the Quincy unconsolidated zone (WAC 173-134-040[9]). This area is subject to artificial recharge of ground water. This recharge results from leakage associated with the Bureau of Reclamation's Columbia Basin Irrigation Project that is composed of a series of canals used for irrigation. Most of the canal system is unlined, and significant leakage from the canals recharges the shallow ground water table. Deep percolation of applied irrigation water (return flow) also contributes to ground water recharge in the Subarea.

The deep management unit is defined as all ground water underlying the shallow management unit (WAC 173-134A-040(4)). The deeper basalt flows include several identified geologic formations, or groups of basalt flows, know as the Saddle Mountains, Wanapum and Grande Ronde Basalt Formations. Many of these basalt flows, and the aquifers they contain, extend well beyond the administrative boundaries of the Quincy basin and are laterally continuous across much of the Columbia Basin in eastern Washington.

Proposed Points of Withdrawal
The existing points of withdrawal associated with the subject change application produce water from the deep management unit of the Quincy subarea. All the wells appear to be drilled into the Grande Ronde aquifer. However, the current construction of the several of the wells likely allows for transfer of water between the Wanapum and Grande Ronde aquifers.

Well 1, otherwise known as S&C 1, was drilled in January 1990 to a total depth of 1,350 feet below ground surface (bgs) from approximately Elevation 1,440 feet above mean sea level (MSL). The 16-inch-diameter well is apparently open to the basalt formation from 35 to 1,350 feet bgs (approximately Elevation 1,405 to 90 feet MSL). The capacity of Well 1 (S&C 1) is approximately 820 gpm. The static water level was not recorded on the original well log. Well 1 (S&C 1) is equipped with a 350-horsepower turbine pump.

No well log has been located for Well 2 (S&C 4). The well is reportedly 16-inch in diameter and of unknown depth, drilled from approximately Elevation 1,370 feet MSL. The capacity of Well 2 (S&C 4) is unknown. Well 2 (S&C 4) is equipped with a 600-horsepower turbine pump.

Well 2A (S&C 5) was drilled in October 1999 to a total depth of 1,995 feet bgs from approximately Elevation 1,420 feet MSL. The 14-inch-diameter well is apparently open to the basalt formation from 660 to 1,995 feet bgs (approximately Elevation 760 to -575 feet MSL). The static water level was recorded at a depth of 487 feet bgs on an unknown date (likely October 14, 1999, the date of completion). This non-pumping water level is approximately 933 feet MSL. The capacity of Well 2A (S&C 5) is unknown. Well 2A (S&C 5) is equipped with a 600-horsepower turbine pump.

Well 4 (S&C 3) was drilled in April 1993 to a total depth of 1,330 feet bgs from approximately Elevation 1,610 feet MSL. The 8-inch-diameter well is apparently open to the basalt formation through torch-cut slots from 815 to 845 feet bgs (approximately Elevation 795 to 765 feet MSL). The static water level was recorded at a depth of 583 feet bgs on an unknown date (likely April 11, 1993, the date of completion). This non-pumping water level is approximately 1,027 feet MSL. Well 4 (S&C 3) was air-tested at 1,200 gpm for 1 hour with the stem set at 1,300 feet. Well 4 (S&C 3) is not in use and is not equipped with a pump. Skone and Connors intend to use Well 4 (S&C 3) as a standby source.

Well 5 (S&C 2) was drilled in June 1990 to a total depth of 1,015 feet bgs from approximately Elevation 1,350 feet MSL. The 16-inch-diameter well is apparently open to the basalt formation from 60 to 1,015 feet bgs (approximately Elevation 1,290 to 335 feet MSL). The static water level was recorded at a depth of 282 feet bgs on an unknown date (likely June 17, 1990, the date of completion). This non-pumping water level is approximately 1,068 feet MSL. The capacity of Well 5 (S&C 2) is unknown. Well 5 (S&C 2) is equipped with a 300-horsepower turbine pump capable of approximately 700 gpm.

Well 6 (S&C 6) was drilled in May 2004 to a total depth of 2,160 feet bgs from approximately Elevation 1,360 feet MSL. The 14-inch-diameter well is apparently open to the basalt formation from 798 to 2,101 feet bgs (approximately Elevation 562 to -741 feet MSL). The static water level was recorded at a depth of 398 feet bgs on an unknown date (likely May 11, 2004, the date of completion). This non-pumping water level is approximately 962 feet MSL. Well 6 (S&C 6) was air-tested at 2,000 gpm for 1 hour with the stem set at 2,160 feet. Well 6 (S&C 6) is equipped with a 600-horsepower turbine pump.

Casing and sealing depths have been determined based upon the USGS maps in Water Resources Investigation Report 87-4237, USGS 7.5-minute quadrangle, wellhead elevations or proposed well location elevations and other information as needed. As such, these depths are minimum tentative depths that may be changed depending upon actual hydrogeologic and geologic information obtained at the time of construction or reconstruction.

At such time that any reconstruction occurs on the wells 1, 2, 2A, 4 and/or 5, the well owner shall contact the Department to arrange for a video scan of the well to determine the casing and sealing requirements for that well. Well videos for each well are required after pumps are pulled for reconstruction and then again after casing is sealed in place to determine if separation of aquifers was obtained. A well video is required for all new well construction prior to setting of casing and after casing and sealing has been completed. Unless otherwise stated at the time of construction/reconstruction, the Department shall provide the videos.

Because of the apparent interconnection between the Wanapum and Grande Ronde aquifers that is likely occurring within the older wells, sealing and casing requirements for replacing or repairing the existing wells are included herein as provisions.

Water Rights

A search area to identify adjacent water rights was defined using a nominal 1-mile radius to include all adjacent Sections surrounding the Skone and Connors wells. The resulting area of approximately 15 square miles was conservatively chosen because impairment of groundwater rights beyond this distance is unlikely based on aquifer characteristics and boundary conditions. There are four ground water permits and certificated rights located within the search area based on the search of Ecology's WRTS database reported on April 16, 2008.

There are 12 ground water claims that potentially could be within the search area based on the WRTS database. Only the sections are recorded for the claim locations. The claims process allowed users of water developed before 1917 for surface water and 1945 for ground water to register withdrawals. The state required users to register withdrawals during a "claims period" between 1969 and 1974, in 1985 and again in 1998. A claim is not authorization to use the water, but a statement of claim. The validity of existing claims has not been determined in most cases and can only determined by the Superior Court through adjudication.

GeoEngineers conducted a search of Ecology's well log files on May 7, 2008. There are 23 records of wells located within the search area of the six Skone and Connors irrigation supply wells. It is unknown how many of these are exempt domestic supply wells.

Evaluation of the Right and Beneficial Use Analysis

The Skone and Connors wells draw water from the deeper Columbia River Basalts, likely from both the Wanapum and Grande Ronde aquifers. Limited pumping test data for the wells and historical withdrawal rates suggest that the Grande Ronde aquifer is capable of producing water at the requested instantaneous rate of 3,000 gpm.

The Washington State Supreme Court, in Okanogan Wilderness v. Town of Twisp and Department of Ecology, 133 Wn.2d 769, 947 P.2d 732 (1997), found that applications for change may be granted only to the extent the water has been historically put to beneficial use, as beneficial use determines the measure of a water right. They also found that the

existence and quantification of a water right must be determined, including whether or not the water right has been lost for non-use before the Department can approve a change or transfer of the water right.

Ground Water Permit G3-29162 issued in 1994 authorized 320 acres of irrigation and up to 3.5 acre-feet per acre. The property has been irrigated up to 260 acres with pivot irrigation systems. There are no corner systems constructed for the remaining acreage. The remaining portion of the permit is primarily inchoate.

RCW 90.44.100 allows for amendment of a groundwater permit where water has not actually been applied to beneficial use. RCW 90.44.100 addresses amendments to both certificates of groundwater rights and to permits. The statute provides that an amendment to a certificate of groundwater right or a permit may be applied for, and, if approved, allow the holder to construct wells or other means of withdrawal at another location or to change the manner or place of use of the water without loss of priority of right. Changes in well location(s), or the manner or place of use of the water, i.e., changes permitted under RCW 90.44.100, do not alter the original project or the quantity of water needed, RCW 90.44.100 allows flexibility in the physical location and means of withdrawal so that permit holders can beneficially use the groundwater they are entitled to appropriate under their permits.

As this permit is still in the development stage, the full quantities of the permit are recognized for development.

Existing Water Right Documents
In addition to the subject change application, Skone and Connors have an existing right G3-26155(A) and G3-26155(B) for 4,400 gpm (Qi) and 2,240 afy (Qa) from three wells for the irrigation of 420 and 220 acres. In total, they hold ground water rights of 7,400 gpm (Qi) and 3,360 afy (Qa) for the irrigation of 960 acres. The six points of withdrawal are the same for all three water rights. They have also submitted a ground water right application (G3-30535) for 120 gpm for municipal supply within Section 23. Applications for change should be filed on these permits to correct the well locations.

FINDINGS:

Extent and Validity of G3-29162P
The Skone and Connors ground water right is in permit status and is within the development schedule as established by an extension granted by Ecology in a letter dated April 23, 2008. The full quantities of the permit are valid and suitable for transfer, because the permit is still within its development schedule. The change application changes the place of use but does not change the instantaneous or annual quantities for appropriation, or the irrigated area. Thus, the requested water right changes will not result in an expansion of the water appropriation quantity of the existing right.

Water Availability
The intended deep source is the Grande Ronde aquifer within the boundaries of the Quincy Ground Water Management Subarea and is in indirect hydraulic continuity with the Columbia River and leakage from the shallow water management unit. Under WAC 173-134A, water is available for appropriation in the Skone and Connors place of use. The examiner concludes that, in accordance with Chapters 90.03 and 90.44 RCW, this application to change the place of use under Ground Water Permit G3-29162P will not enlarge the quantity of water authorized, nor will it impair existing rights; provided the provisions below are followed.

Impairment to Existing Rights
WAC 173-150-060 describes how to determine whether a ground water right has been impaired. Specifically: "A ground water right which pertains to qualifying withdrawal facilities, shall be deemed to be impaired whenever: (1) there is an interruption or an interference in the availability of water to said facilities, or a contamination of such water, caused by the withdrawal of ground water by a junior water right holder or holders; and (2) significant modification is required to be made to said facilities in order to allow the senior ground water right to be exercised."

Well interference may occur when multiple wells penetrate and withdraw ground water from the same aquifer. Each pumping well creates a drawdown cone. When drawdown cones intersect other wells, interference drawdown occurs. Drawdown interference in the well(s) when pumping is likely to be less than 1 foot at 1 mile. There are four ground water rights, 12 claims and 23 wells within a 1-mile radius of the Skone and Connors water supply wells. The requested change in point of withdrawal and place of use will not result in an increase in production and therefore will not change existing interference drawdowns or their potential to impair ground water right holders.

Stream flow depletion may occur when wells pump water from aquifers in hydraulic continuity with streams. The Skone and Connors source aquifer is within the tertiary basalt deposits of the Columbia River Basalts which is recharged by precipitation, Potholes Reservoir, Crab Creek and the Columbia River. The pumping of the Skone and Connors water system wells will not change natural ground water discharge rates to local streams. A search of the WRTS database showed that there are no certificated surface water rights within 1 mile of the existing Skone and Connors wells. The points of withdrawal are within 1 mile of the area of artificially stored groundwater allocated to the Bureau of Reclamation. However, the appropriation of ground water for the subject change application will not result in an increase in production, and therefore will not change the existing potential for impairment of surface water rights.

Beneficial Use
Water used for irrigation supply is considered a beneficial use under RCW 90.54.020(1).

Public Interest
The 1971 Water Resources Act provides the most comprehensive list of legislative policies that guide the consideration of public interest in the allocation of water. These policies generally require a balancing of the state's natural resources and values with the state's economic well-being. Specifically, the policies require allocation of water in a manner that preserves instream resources, protects the quality of the water, provides adequate and safe supplies of water to serve public need, and makes water available to support the economic well-being of the state and its citizens.

The proposed irrigation use of 1,120 acre-feet per year should support the economic well-being of the state and its citizens. No other detriment to public interest could be identified during the examination of the subject application. Use of Skone and Connors' wells is not expected to impair existing senior water right holders.

CONCLUSIONS

Beneficial Use
Irrigation is considered a beneficial use under RCW 90.54.020(1).

Impairment of Existing Rights
Based on the examination described above, approval of the change in point of withdrawal and place of use would not cause impairment of existing water rights.

Body of Ground Water
The deep source is the Grande Ronde aquifer within the boundaries of the Quincy Ground Water Management Subarea (WAC 173-124) and the Columbia Basin project (WAC 508-14). Because the appropriation is being transferred from the same body of public ground water, there will be no net increase in the amount of water appropriated from the aquifer as a result of the change.

Public Welfare
The transfer of 74 acres for the permitted water right for irrigation water supply is not detrimental to public welfare.

In accordance with Chapters 90.03 and 90.44 RCW, I find there is water available for appropriation from the source in question, that the appropriation as recommended is a beneficial use, and the change should not impair existing rights or be detrimental to public welfare.

PROVISIONS:

The total amount authorized for withdrawal from six wells under Ground Water Right Permit Number G3-29162P shall be limited to 3,000 gallons per minute; 1,120 acre-feet per year for irrigation of 320 acres. The 260 acres currently irrigated in Section 23 will be reduced to 244 acres.

This authorization is subject to the following conditions:

The total withdrawal under Permit Nos. G3-29162P, G3-26155P(A) and G3-26155P(B) shall not exceed 7,400 gallons per minute, 3,360 acre-feet per year for irrigation of 960 acres.

An approved measuring device shall be installed and maintained for each of the sources identified herein in accordance with the rule "Requirements for Measuring and Reporting Water Use," Chapter 173-173 WAC. Water use data shall be recorded monthly and maintained by the property owner for a minimum of five years, and shall be promptly submitted to Ecology annually during development of the project.

The following information shall be included with each submittal of water use data: owner, contact name if different, mailing address, daytime phone number, WRIA, Permit/Certificate/Claim No., source name, annual quantity used including units, maximum rate of withdrawal including units, monthly meter readings including units, peak monthly flow including units, Source number(s), purpose of use, well tag number, and period of use. In the future, Ecology may require additional parameters to be reported or more frequent reporting. Ecology prefers web-based data entry, but does accept hard copies. Ecology will provide forms and electronic data entry information.

Chapter 173-173 WAC describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed as a document entitled "Water Measurement Device Installation and Operation Requirements."

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above conditions, and to inspect at reasonable times any measuring device used to meet the above conditions.

The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water with the specified limit that is beneficially used and required for the actual crop grown on the number of acres and the place of use specified.

This authorization shall in no way excuse the permittee from compliance with any applicable federal, state or local statutes, ordinances or regulations, including those administered by other programs of the Department of Ecology.

A certificate of water right will be issued after water has been put to full beneficial use and a final investigation has been conducted.

The water quantities and uses recommended and/or the number of acres to be irrigated may be reduced at the time of issuance of a final water right commensurate with the capacity of the installed system and the uses and/or the number of acres actually irrigated.

A portion of this authorization for the withdrawal of public ground waters within the boundaries of the Columbia Basin Project (508-14) is based on a tentative conclusion that public ground waters are available. If, however, it is subsequently determined by the Department that public ground waters are not available in the amounts authorized for withdrawal, the Department shall, by order of notification, withdraw or modify the authority granted therein as may be appropriate. In accordance with WAC 508-14-030(2)(b), no certificate of water right as provided for in RCW 90.44.080, shall be issued by the Department of Ecology until such time as a more definitive determination can be reached as to the availability of public ground waters in an area described in WAC 508-14-030(3).

This authorization to use public waters of the State is classified as a Family Farm Permit in accordance with Chapter 90.66 RCW (Initiative Measure No. 59). This means the land being irrigated under this authorization shall comply with the following definition: Family Farm- a geographic area including not more than 6,000 acres of irrigated agricultural lands, whether contiguous or noncontiguous, the controlling interest in which is held by a person having a controlling interest in no more than 6,000 acres of irrigated agricultural lands in the State of Washington which are irrigated under water rights acquired after December 8, 1977. Furthermore, the land being irrigated under this authorization must continue to conform to the definition of a family farm.

If water from facilities of any legally formed irrigation district is used on any or all of the lands described herein as the place of use, the quantities of water withdrawn under this authorization shall be proportionately reduced to correspond to the acreage for which district water is not available.

The installation of an access port, described in Ground Water Bulletin #1, shall be required prior to issuance of a final certificate of water right. In addition, an airline and pressure gauge shall be installed and maintained in operating condition. The pressure gauge shall be equipped with a standard tire valve and placed in an accessible location. The airline shall extend from land surface to the top of the pump bowls and the total airline length shall be reported to the Department of Ecology upon completion of the pump system.

A well log of the completed well shall be submitted by the driller to the Department of Ecology within thirty (30) days of completion of this well. This well log shall be complete and all information concerning the static water level in the completed well in addition to any pump test data shall be submitted as it is obtained.

All water wells constructed within the State shall meet the minimum standards for construction and maintenance as provided under RCW 18.104 (Washington Water Well Construction Act of 1971) and Chapter 173-160 WAC (Minimum Standards for Construction and Maintenance of Water Wells).

The wells shall be constructed or reconstructed to meet the following minimum casing and sealing provisions:

1. The minimum annular space for these wells shall be four (4) inches larger than the permanent casing.
2. Sealing shall be placed from the bottom of the well to the top until undiluted sealing material returns to the surface.
3. The casing requirement in these wells may be deepened if an interchange still occurs after casing and sealing is set.
4. The owner shall contact the Eastern Regional Well Construction Coordinator a minimum of 14 working days prior to any well construction or reconstruction associated with these wells.
5. Well number 1 shall be cased and sealed a minimum of 770 feet.
6. Well number 2 shall be cased and sealed a minimum of 725 feet.
7. Well number 2a shall be cased and sealed a minimum of 800 feet. (A casing and sealing determination was made previously on this well. This determination was made base upon a location given by the driller within the NW¼ NW¼ of the section. The well is actually in the NE¼ NE¼ of the section).
8. Well number 4 shall be cased and sealed a minimum of 750 feet.
9. Well number 5 shall be cased and sealed a minimum of 870 feet.
10. Well number 6 shall be cased and sealed a minimum of 760 feet.

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

REPORT BY: _____ Date: 6/8/09
Joel W. Purdy, LG, LH

State of Washington
Hydrogeologist
588
Licensed Geologist
JOEL W. PURDY

REVIEWED BY: _____ Date: 10/11/09
Kevin Brown

FINDINGS OF FACT AND DECISION

Upon reviewing the above report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I find water is available for appropriation and the appropriation as recommended is a beneficial use and will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER a change be issued under Ground Water Change/Transfer Application Number CG3-29162@1, subject to existing rights and indicated provisions, to allow appropriation of public ground water for the amount and uses specified in the foregoing report.

Signed at Spokane, Washington, this 16th day of June, 2009.

_____
Keith L. Stoffel
Water Resources Section Manager
Eastern Regional Office

Y/Final docs/ROEs/Brown 2009/G3-29162 Skone and Connors