



STATE OF WASHINGTON FINAL REPORT OF EXAMINATION FOR WATER RIGHT APPLICATION

PRIORITY DATE	WATER RIGHT APPLICATION NUMBER
August 25, 2020	G2-30790
NAME AND MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
Washington State Parks	Miller Peninsula State Park
1111 Israel Rd SW	Near Sequim in Clallam County
Olympia, WA 98504	

Total Rate and Quantity Authorized for Withdrawal					
WITHDRAWAL RATE (gpm) ANNUAL QUANTITY (ac-ft/yr)					
200	20				

gpm = Gallons per Minute; ac-ft/yr = Acre-feet per Year

Purpose(s)			
PURPOSE	WITHDRAWAL RATE (gpm)	ANNUAL QUANTITY (ac-ft/yr)	PERIOD OF USE
Multiple Domestic	200	20	Year-round as needed

IRRIGATED ACRES	PUBLIC WATER SYSTEM INFORMATIC	ON		
N/A	WATER SYSTEM NAME and ID CONNECT			
	TBD	TBD		

Source Location	1		
COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Clallam	Groundwater		17 Quilcene Snow

SOURCE NAME	PARCEL	WELL TAG	TOWNSHIP	RANGE	SECTION	QQ Q	LATITUDE	LONGITUDE
A well	023020100000		30 N	02 W	20	SE NE	48.081907	-122.956308
QQ Q = Quarter Quarter							Datu	m: NAD83/WGS84
Place of Use								
PARCEL(S)								
Place of use inclu	des the following	Clallam Co	ounty tax p	arcels	: 033024	440000	0,033024140	0000,
033024110000, 0	33013440000, 02	30183000	00, 023019	92200	00, 0230	191000	000, 0230183	40000,
023017300000, 0	23020220000, 02	30201000	00, 023029	91100	00, 0230	162300	000, 0230163	20000,
023016310000, 0	23021220000, 02	30211300	00, 023028	82000	00, 0230	281200	000, 0230222	30000.

LEGAL DESCRIPTION OF THE AUTHORIZED PLACE OF USE

The authorized place of use is the Miller Peninsula State Park, located within portions of the following: Sections 13 and 24 within Township 30N., Range 03W; Sections 16, 17, 18, 19, 20, 21, 22, 28, and 29 of Township 30N., Range 02W., all situated within Clallam County, WA and as referenced in the application.

Proposed Works

Well No. 1 (TW-1) was drilled to a depth of 562 feet below ground surface (bgs) and screen with 5 1/2-inch slotted casing between 527 feet and 562 feet bgs.

Development Schedule		
BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	PUT WATER TO FULL USE BY THIS DATE
Started	August, 2030	August, 2040

<u>Attention</u>: These dates represent deadlines that must be met or risk cancellation of this authorization. Submittal of formal documentation for each stage is required. Extensions may be requested.

Measurement of Water Use	
HOW OFTEN MUST WATER USE BE MEASURED AND RECORDED?	
HOW OFTEN MUST WATER USE DATA BE REPORTED TO ECOLOGY?	Annually by January 31
WHAT QUANTITY SHOULD BE REPORTED?	Total annual quantity in acre-feet
WHAT RATE SHOULD BE REPORTED?	Annual peak rate of withdrawal in gpm

Provisions

Well construction standards

All wells constructed in the state shall meet the "Minimum Standards for the Construction and Maintenance of Wells" (WAC 173-160) and "Water Well Construction" (RCW 18.104). In general, wells shall be located at least 100 feet from sources of contamination and at least 1,000 feet of the boundary of a solid waste landfill. Any well which is unusable, abandoned, or is an environmental, safety, or public health hazard shall be decommissioned.

Well tag

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.

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", chapter 173-173 WAC, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology (Ecology) for modifications to some of the requirements.

Recorded water use data shall be submitted electronically by January 31 each year. To set up an Internet reporting account, contact the Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Regional Office for forms to submit your water use data.

Access port

Required installation and maintenance of an access port as described in WAC 173-160-291(3).

Conservation

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Municipal place of use

If the criteria in RCW 90.03.386(2) are not met and a Water System Plan/Small Water System Management Program was approved after September 9, 2003, the place of use of this water right reverts to the service area described in that document. 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 the Department of Ecology in a water right authorization.

Health approval required

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, Post Office Box 47823, Olympia, WA 98504-7823, Main Phone: 360-236-3030, prior to beginning (or modifying) your project.

Proof of Appropriation

Consistent with the development schedule given in this report (unless extended by Ecology), the water right holder must file a Notice of Proof of Appropriation (PA) of Water with Ecology. The PA documents the project is complete and all the water needed has been put to full beneficial use (perfected). In order to verify the extent of water use under this permit, an inspection of water use is typically required, known as a "proof exam". After filing the PA, the water right holder's next step is to hire a Certified Water Rights Examiner (CWRE) to conduct this proof exam. A list of CWREs is provided to the water right holder upon filing the PA with Ecology. The final water right document, a water right certificate, then may issue based upon the findings of the CWRE. Statutory county and state filing fees may apply prior to certificate issuance.

Schedule and Inspections

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.

Findings of Fact and Order

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated.

Therefore, I ORDER **APPROVAL** of Application No. G2-30790, subject to existing rights and the provisions specified above.

Your Right To Appeal

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

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

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order to Ecology in paper form by mail or in person (see addresses below). E-mail is not accepted.

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

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

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.

Filing with the PCHB

For the most current information regarding filing with the PCHB, visit: <u>https://eluho.wa.gov/</u> or call: 360-664-9160.

Service on Ecology

Street Address:

Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503

Mailing Address:

Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **E-mail Address:** ecologyappeals@ecy.wa.gov

Authorizing Signature

Signed at Lacey, Washington, this 26th day of June_2024.

Michael J. Hallogher

Michael Gallagher, Section Manager Water Resources Program/Southwest Regional Office Department of Ecology

INVESTIGATOR'S REPORT

Applicant: Washington State Parks Water Right Application No.: G2-30790 Investigator: Jill Van Hulle, CWRE, Aspect Consulting, Reviewed by Michael Gallagher, SWRO

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G2-30790. This application was filed by Washington State Parks and Recreation Commission for the water supply needs of a new campground and day use facility to be located on Miller Peninsula State Park property, Clallam County, Washington.

Applicant Name	Washington State Park
Priority Date	August 25, 2020
County	Clallam
WRIA	17
Water Source	Groundwater
Place of Use	The Place of Use is the Miller Peninsula State Park and includes the following
	Clallam County tax parcels: 033024400000, 033024140000, 033024110000,
	033013440000, 023018300000, 023019220000, 023019100000, 023018340000,
	023017300000, 023020220000, 023020100000, 023029110000, 023016230000,
	023016320000, 023016310000, 023021220000, 023021130000, 023028200000,
	023028120000, 023022230000.
	The project site is situated within portions of the following: Sections 13 and 24
	within Township 30N., Range 03W; Sections 16, 17, 18, 19, 20, 21, 22, 28, and 29
	of Township 30N., Range 02W.

Table 1. Summary of Requested Water Right

Purpose	Instantaneous Rate (gpm)	Annual Quantity (ac-ft/yr)	Begin Season	End Season
Multiple Domestic	200	20	Continuous	

Source Name	Parcel	Well Tag	Township	Range	Section	QQQ	Latitude	Longitude
Well No. 1 (TW-1)	023020100000		30 N	2 W.W.M.	20	SE NE	48.081907	-122.956308

WRIA = Water Resource Inventory Area; gpm = Gallons per Minute; ac-ft/yr = Acre-feet per Year; QQ Q = Quarter Quarter Datum: NAD83/WGS84

Cost Reimbursement

This application is being processed under a cost reimbursement agreement between the applicant and the Department of Ecology. This report has been prepared by Aspect Consulting and reviewed by Michael Gallagher with the Department of Ecology's Water Resources Program.

This report has been posted as a draft document and has been subsequently revised to address comments that were filed by Darlene Shanfald, on behalf of the Friends of Miller Peninsula State Park. Ms. Shanfald's comment letter has been incorporated into the formal record, and her comments summarized as follows:

- The project as a whole presents a risk because there are too many unknowns and/or unproven assumptions.
- The information fails to address how climate change might affect water supply.
- It is unclear what is required to develop, maintain, and oversee the new water system.
- The Report of Examination should better address the probability of groundwater quality problems requiring treatment.
- The development of the Park could result in increased density which should be addressed in the impairment considerations of the ROE.
- Wastewater infiltration could result in groundwater contamination.
- The project could have water quantity and quality problems in the future that have not been fully addressed.
- The ROE does not address earthquake impacts.
- The ROE does not address how the Salmon Derby in Discovery Bay would be affected by toxic seepage.
- The ROE does not address how much water will be used to suppress fires.
- The ROE does not address the relationship between this filing and pending application G2-28172 which includes a significant portion of the State Park's property and has been assigned to the Jamestown S'Klallam Tribe and Pac Five, Inc.
- The project is not in the public interest

INVESTIGATION

The applicant, Washington State Parks and Recreation Commission (WSPRC), proposes to develop and operate a year-round day use and camping facility at Miller Peninsula State Park, Clallam County, Washington. In 2005, Washington State Parks began a siting effort to establish one of Washington's next destination state parks at Miller Peninsula. The Miller Peninsula State Park property is located on Miller Peninsula, a small peninsula at the junction of east Clallam and north Jefferson Counties. The peninsula is located approximately 5 miles east of the town of Sequim, bounded by Discovery Bay to the east, the Strait of Juan de Fuca to the North and Sequim Bay to the west. The 2,800 acres of park terrain includes upland conifer forest, old logging roads, stream corridors, and over three miles of shoreline on the Strait of Juan de Fuca and Discovery Bay.

The current park was built on a foundation of public participation. Past development, by Washington State Parks Foundation, engaged local governments, tribes, non-profit organizations, businesses, and local community members to jointly plan and establish a park for people across the state to enjoy. Now, when State funding becomes available, the WSPRC is planning to further expand accommodations to include a campground, a day use area, and administration and maintenance facilities. Development will include a small water system capable of serving potable water needs. Water will primarily be used for domestic supplies of guests and staff and the entire facility will be served by an onsite septic system that will enable infiltration of about 90 percent of the water use back to the groundwater. An estimated water quantity of 20-acre feet per year will be required for system operations.

In consideration of this application, Aspect Consulting reviewed available documents and public information pertaining to the applicant's site conditions, and the potential effect on existing water right holders and proposed minimum instream flows. This included review of the information submitted by the applicant and pertinent Ecology records including well logs, water rights records, and well construction and design documents. Aspect also conducted a site visit in June 2021 to video scan the

proposed well to assess casing and well screen conditions and oversaw well rehabilitation and pumping test efforts in September 2022.

Proposed Use and Basis of Water Demand

Site Description

In the early 1990's the Miller Peninsula was investigated as a location for a large, planned resort development. The site covered a geographic area that was more expansive than the park's current holdings, extending several miles to the south, as far as Highway 101. The proponents, Peninsula Partners, undertook an extensive environmental review of the site including water supply, which resulted in the construction of several test wells (See further discussion below regarding Water Right applications G2-28172 and G2-28173). The project was eventually abandoned but the wells remain, one of which is the proposed source to support the park's domestic water use needs under the subject report. The Park was visited by Aspect staff in March and June of 2021 to locate and assess the condition of the existing wells. Aspect conducted a well pumping test in September 2022 to verify the existing well capacity.

The property is primarily upland forest with over 3 miles of shoreline on the Strait of Juan de Fuca and Discovery Bay. The property was previously logged and includes an existing trail and road system. The property has spectacular views of the Protection Island Aquatic Reserve that is adjacent to the park property and to the surrounding mountains and Strait.

Water System Description

An existing well (TW-1) will be used for water supply in the early development of the park. The well is in the SE¼NE¼ of Section 20, Township 30 N., Range 2 E.W.M (see Figure 1). Based on review of the Ecology well log and confirmed during a video scan of the well in June 2021, TW-1 is 562 feet deep and interpreted to be completed in a sand and gravel aquifer described further below in the *Hydrogeologic Evaluation* section. An 8-inch-diameter steel casing extends from the surface to 400 feet below ground surface (bgs), and 6-inch casing from 400 to 527 feet bgs. Thirty-five feet of slotted screen was installed from 527 to 562 feet. The static water level was reported at 383.5 ft bgs at the time of completion in June 1991 and was measured at 382 feet bgs during the video scan in June 2021.

Several alternative concept-level development plans are being considered by the WSPRC design team and the total number, size, and location of any future facilities and connections have yet to be determined. At a minimum, the proposed water system will consist of the source well, a treatment/chlorination facility, and a distribution system. Treatment is expected to be relatively minimal, and storage may need to consider the possibility of fire flow requirements.

Water connections within the development may include, but not be limited to, a welcome center, dayuse facilities, overnight accommodations (cabins, dispersed camping sites, group and equestrian camping sites, etc.), comfort stations, maintenance facilities, and staff residences. Following design guidelines, the water system will include using efficient water fixtures.

Proposed Use

In Washington water systems that supply the public need to be designed in accordance with the rules and regulations that are promulgated by the Department of Health's Office of Drinking Water. The Office of Drinking Water focuses on oversight of public drinking water systems, including activities associated with water quality monitoring, water system planning, waterworks operator certification, and implementation of the federal Safe Drinking Water Act. State Parks operates more than 140 state parks, historic sites, trails, marine parks and properties, of which 89 provide a drinking water system for its visitors.

Design plans for the new Miller Peninsula State Park have yet to be finalized but may include the water connections described above and shown in Table 2 and will be designed and operated to meet the State's standards for the operation of drinking water systems, including designing for geologic risks and the need for fire flow.

The Washington State Department of Health's Water System Design Manual Table 3-2 provides guidance for estimating water use for various nonresidential establishments.

Connection	Water Use (Per Person)	Max Occupancy (# People)	Daily Demand (Gallons per Day)	Annual Water Use (ac-ft/yr)
Welcome Center (per person)	25	100 to 200	2,500	5.6
Overnight Accommodations	35 - 60	190	8,950	10
Maintenance Facility (per worker)	75	2 to 5	150	0.4
Staff Residence (per resident)	60	10 to 20	600	1.3
Comfort Stations	20	50 to 100	2,000	2.2
		Total	14,200	20

Table 2. Estimated Water Demand for Nonresidential Establishments

A projected demand of 20 acre-feet per year has been estimated for the main Park complex. This estimate incorporates assumptions for occupancy rates ranging from peak demand in July, August, and September to minimal demand in the winter months of December through March. The annual quantity is only projected for domestic purposes, and no irrigation has been proposed for the new state park beyond that associated with establishing limited landscaping around buildings.

The applicant is advised that the allocation of 200 gpm and 20 acre-feet will be reduced to reflect final design choices and actual water demand.

Water Treatment Permits

State parks will be required to obtain an operating permit from the Department of Health to manage wastewater generated by the campground and related facilities. This provides reasonable assurance that any discharges to groundwater will meet required treatment standards.

Other Rights Associated with Project or Place of Use

There are no additional water rights associated with this project; however, Ecology's Water Rights Application Tracking System (WRTS) database was queried to identify existing water rights (i.e., claims, permits, or certificates) with points of withdrawal or diversion within approximately one-half mile of the Park's proposed well or water rights that overlap all or a portion of the place of use requested under the subject application. The results of this water right query are presented below without any assessment of extent or validity:

- Certificate G2-26470C
- Pending Application G2-28172
- Canceled Application G2-28173

Certificate G2-26470C has a priority date of January 24, 1984. It authorizes 20 gm and 11.3 acrefeet/year to irrigate 60 acres of orchard from one well. The place of use encompasses approximately 60 acres outside the park's southern property boundary. Aerial imagery suggests beneficial use of the authorization over the last 30 years. Water use under this authorization is not associated with Park operations.

In 1991, Peninsula Partners filed two water right applications G2-28172 and G2-28173. Both were intended to provide water for a proposed development (resort, homes, and golf course) on the Miller Peninsula. Application G2-28172 was later assigned to the Jamestown S'Klallam Tribe and Pac Five, Inc. The Place of Use for G2-28172 encompasses approximately half of the area of the park, and a well located in Section 32 was drilled and tested about a mile south of State Parks' southernmost border. The well location is located on property subsequently acquired and held in Trust for the Tribe, which is continuing to evaluate options for this and other nearby Trust properties. Pac-Five, Inc. is no longer a partner applicant on G2-28172 (Personal communication between Shawn Hines, Jamestown S'Klallam Tribe and Jeff Marti, Ecology, June 3, 2024).

Companion Peninsula Partner's application G2-28173 was cancelled. However, prior to the eventual abandonment of this project three wells were drilled and tested under this application. Parks evaluated the deepest of the three wells as the source of supply under the proposed application.

These wells are located within the Park boundary in the SE ¼ SW ¼ and SE ¼ SE ½ of Section 17, the NW ¼ SE ¼ Section 20, all within Township 30 N., Range 02 E.W.M. The wells range in diameter from 6- to 8inches, and in depth from 280- to 561-feet, and are all screened within a sandy gravel interval, described further below in the *Hydrogeologic Evaluation* section.

Ecology's well log database was also queried to locate any wells within a half-mile radius from the proposed Park well. Aside from the Peninsula Partners wells associated with application G2-28173, and the well associated with application G2-28172, 3 additional wells were identified within the one-half mile search radius. These wells are detailed below in Table 3 and shown on Figure 2. The estimated well locations are based on quarter-quarter section descriptions from the driller's well log. These locations are approximate, no parcel number or street address were reported on the driller's well logs.

Name on Well Log	Well Depth (ft bgs)	Well Report ID ¹	Well Completion Date	Static Water Level ² (ft BTOC)	Proposed Use
J.F. Anderson	60	48124	11/19/1984	35	Domestic
Northwest Technical	500	50890	9/7/1985	364.1	Industrial
Port of Port Angeles	425	276701	8/1970	371.5	N/A
NOTE:		1	· · · · · ·	· · · · · ·	

¹ Ecology Well tag IDs were not available.

² Static water levels were reported upon well completion. These levels may not accurately reflect annual and seasonal water level changes.

Because these wells do not appear to be associated with any water right, they likely operate under a Permit Exempt Well use authorized through RCW 90.44.050. Withdrawals of up to 5,000 gallons per day (gpd) for domestic, 5,000 gpd industrial water use, irrigation of a lawn or garden a half-acre or less in size, and stockwatering are the allowed beneficial uses. No additional details were found regarding these wells, and it is uncertain which of these wells are actively being used.

The nearest well appears to be associated with Northwest Technical for industrial uses. The well is located approximately 2,500 feet to the southwest of TW-1. A review of aerial imagery in the vicinity of TW-1 confirms no nearby residential developments. The nearest domestic residence that may be associated with an exempt well appears to be over a mile away from TW-1. Additionally, as part of this investigation the water rights search was expanded to identify the closest known water rights outside of the proposed park. According to Ecology's Water Right Explorer, the closest water rights are associated with the Diamond Point Group A water system (Water Right Document IDs G2-25897CWRIS, G2-25283CWRIS, and G2-23909CWRIS; WDOH ID 192104). The place of use of the Diamond Point water rights is adjacent to the eastern boundary of the State Park (see Figure 2).

The source wells for the Diamond Point water system are located approximately 5,000 feet southeast of TW-1 and are completed to a depth of 393 and 392 feet below ground surface. The well construction logs indicate the wells have upwards of 90 feet of available drawdown based on the reported static water levels. A discussion on potential impairment to the Diamond Point wells is included in the *Impairment* section below.

Hydrogeologic Evaluation

Miller Peninsula State Park is geographically situated between the Olympic Mountains and Puget Lowland terrain. The Olympic Mountains were created by accretion and uplift of ocean floor resulting from subduction of the Juan de Fuca oceanic plate beneath the North American continental plate. The mountains are composed of Miocene through Eocene-aged sandstones, siltstones and conglomerates overlying Eocene-aged submarine volcanics.

The Olympics are believed to have reached their modern elevations by the early Pleistocene, at which point glacial advance and retreat cycles of northerly continental glaciers had initiated. The repeated cycling resulted in the deposition of thick sedimentary infill sequences across the lowlands. Undisturbed Vashon-aged glacial outwash deposits (sands and gravels) are found throughout Miller Peninsula (Noble, 1960). Unconsolidated glacial till overlies glacial outwash and accounts for most of the surficial geology across the park.

Site Geologic and Hydrostratigraphic Units

The site is located north of Highway 101 between Discovery and Sequim Bays. The generalized surficial geology of the site is described in the Geologic Map of part of the Gardiner Quadrangle (Othberg and Palmer, 1979). Geologic units in the Miller Peninsula area consist of Quaternary-age glacial and nonglacial deposits, and are described as follows:

 Vashon recessional outwash and ice-contract stratified drift (Qvr) – primarily coarsegrained and present at the surface along the southern margin and edges of the peninsula. This unit is the result of deposition from, on, or near stagnant ice. It's composed of stratified sand and gravel and follows drainage patterns of once-active streams.

- Vashon till (Qvt) lodgment till is compact, poorly sorted, non-stratified mix sand, gravel, pebbles, and boulders in a silty matrix. Till is present at the surface across much of the Park's property.
- Vashon advance outwash (Qva) unsorted and unconsolidated sand and gravel underling the till across the peninsula. It's composed of sandy pebble to cobble gravel and is the result of melt-water deposits from the advancing front of the glacier.
- **Pre-Vashon deposits (Qps, Qpg, Qpsc, Qdu)** consists of till sands, gravels, silts and clay of glacial and nonglacial fluvial origin.

Jones (1996) and Thomas (1999) have categorized the geology of the Dungeness River Basin and Sequim-Dungeness area, respectively, into defined hydrogeologic units consisting of 3 aquifer units and 2 semi-confining to confining units. The aquifer units consist mostly of coarse-grained sand and gravel deposits of both glacial (advance and recessional outwash deposits) and interglacial (proglacial and coarse-grained fluvial deposits) origin (Jones, 1996). From top to bottom, the aquifer units include:

- **(Unit 1) the shallow (water-table) aquifer** contains alluvium, older alluvium, Everson sand, Everson glaciomarine drift, Vashon recessional ice-contact and outwash deposits, Vashon till, Vashon reworked till, and Vashon advance outwash. The thickness of the water-table aquifer is up to 150 feet on the peninsula.
- (Unit 3) the middle (upper confined) aquifer contains pre-Vashon glacial outwash deposits of sand and gravel and interglacial coarse deposits. The thickness of the middle aquifer is estimated to range from 50 to 100 feet on the peninsula.
- **(Unit 5) the lower (confined) aquifer** contains sand with thin lenses of sand and gravel, silt, and clay. The typical thickness is about 90 feet with a range from about 10 to 180 feet. Few wells are completed in this aquifer.

The semi-confining to confining units consist mostly of fine-grained silt and clay of both glacial (till and glaciomarine) and interglacial (lacustrine and fine-grained fluvial) deposits (Jones, 1996). The confining units include:

- **(Unit 2) the upper confining bed** contains interglacial and proglacial Pre-Vashon silts and clays with discontinuous lenses of water-bearing sand and gravel. The typical thickness is about 60 feet in Miller Peninsula.
- **(Unit 4) the lower confining bed** contains till and interbedded clay, silt, and fine-grained sand. The typical thickness is about 100 feet and ranges from about 10 to 300 feet.

Thomas (1999) also describes Unit 6—undifferentiated unconsolidated deposits and Unit 7—bedrock, in the conceptual hydrogeologic model. Undifferentiated unconsolidated deposits underlie the lower aquifer unit and consist of a very thick sequences of glacial and nonglacial water-bearing sediment and confining material with potentially productive aquifers. Bedrock consists of Tertiary-age sedimentary and volcanic rocks. Due to low well yield, bedrock is an unreliable source of groundwater.

In general, hydrogeologic correlation of the unconsolidated units from areas west of Siebert Creek, across the authors' study area, and onto the Miller Peninsula is difficult. The Miller Peninsula has sparse data points, and the thickness and lithology of the depositional environments varies.

TW-1 is completed to a depth of 562 feet in (unit 5) the lower confined aquifer. This aquifer is a major aquifer system across the Peninsula with the ability to yield substantial quantities but is rarely targeted for production as the shallower aquifers provide sufficient supply for single family domestic wells.

Groundwater Occurrence and Flow Direction

Groundwater in the lower confined aquifer is bounded by the bottom of the lower confining bed (unit 4) and the top of the undifferentiated unconsolidated deposits (unit 6). Saltwater bodies—Strait of Juan de Fuca, Sequim Bay, and Discovery Bay—form lateral boundaries. The general flow of groundwater in the project area is south to north, from the mountains south of the Miller Peninsula, to the Strait of Juan de Fuca. Thomas (1999) describes the vertical movement of groundwater to be downward in the southern area (foothills) and upwards in the northern area. Groundwater recharge is chiefly sourced by precipitation and infiltration then downward percolation of the shallow and middle aquifers.

Aquifer Analysis

In its previous investigation of regional water supply options AESI conducted a pumping test in Well 32FI completed in the Lower Discovery aquifer (equivalent to the lower confining aquifer; Ecology Well Report ID No. 50523) in 1990. Well 32 is situated about a mile south of the proposed Park well. The average pumping rate over the test was approximately 520 gpm and the water level drew down a total of 4.5 feet. One foot and three inches of drawdown was recorded in an observation well located 250 feet away from the pumping well.

Peninsula Partners conducted a pumping test on TW-1 in 1991. Drawdown data was not available from the pumping test, but the following information was reported from AESI¹:

- The well was pumped at 210 gpm for 24 hours and
- No significant boundary conditions (e.g., faults, folds, or major geologic structures) were found to exist that would act to impede groundwater flow.

In June 2021, Aspect conducted a video survey of TW-1 to inspect its condition since the well has not been used in nearly three decades. TW-1 was found to be in good condition and the construction details were confirmed against the well log. Minor sediment accumulation at the bottom of the well and ironstained casing at the depth corresponding to the static water level were noted, but the well condition was otherwise good, appeared to be capable of operation with minor rehabilitation efforts. The static water level in TW-1 was approximately 382.3 feet below top of casing, about 1.3 feet higher than the static water level reported on the driller's well log after the well was drilled in 1991.

Step and constant rate tests were performed in TW-1 after minor well rehabilitation efforts in September 2022. Over the 24-hour testing period, the water level drew down a total of 4.5 feet, 3.6 feet of which occurred after the first minute of pumping due to frictional well losses. After the first minute, the rate of drawdown significantly decreased, and the water level only drew down an additional 0.9 feet over the remainder of the test. Aquifer transmissivity was estimated through analysis of pumping test data at 3,000 ft²/day, which can support pumping under the subject application. More details related to pumping tests and corresponding analyses are included in Aspect's hydrogeologic memorandum.

Occurrence of Surface Water and Groundwater/Surface Water Interactions

Surface water is dominated by small, unnamed tributaries that primarily exist on the northern and western boundaries of the peninsula before discharging to the Strait of Juan de Fuca or Sequim Bay.

¹ Personal communication between Jill van Hulle (Aspect Consulting) and Curtis Koger (AESI), September 2020.

Except for Eagle Creek, originating in the uplands south of Highway 101 and flowing north on the peninsula before turning northeast and discharging into Discovery Bay, none of the drainages were identified to be fish-bearing. Pumping is not anticipated to have any impacts on surface water as the tributaries are interpreted to be in hydraulic continuity with the shallow water-table aquifer. This aquifer is perched on several hundred feet of glacial drift material, and pumping is not anticipated to induce downward leakage from the tributaries through the confining layers. Additionally, pumping of the lower confining aquifer has shown to have limited radial impacts and given the nearly 7,500-foot distance between the proposed well and Eagle Creek, impacts related to pumping are not expected.

ANALYSIS

Under Washington State law (RCW 90.03.290), each of the following four criteria must be met for an application for a new water right permit to be approved:

- Water must be available for appropriation.
- Water withdrawal and use must not cause impairment of existing water rights.
- The proposed water use must be beneficial.
- Water use must not be detrimental to the public interest (public welfare).

Water Availability

For any new appropriation, water must be both physically and legally available.

Physical Availability

For water to be physically available for appropriation, water must be present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. An analysis of physical availability is required for both surface water and groundwater applications.

A water budget for the Sequim-Dungeness area was developed by Thomas (1999) which included the area of the Miller Peninsula. The water budget described the distribution of inflow from precipitation within the hydrologic system. Subsurface recharge to the groundwater system occurs primarily through infiltration of precipitation, generally in the Olympic foothills south of the Miller Peninsula. Thomas (1999) described the fate of precipitation, with about 31 percent of precipitation becoming groundwater recharge. The total long-term average annual recharge was estimated as 5.4 inches within the entire (Sequim-Dungeness) 74 square mile study area. Discharge of groundwater is primarily to the Strait of Juan de Fuca; withdrawal from water wells overall accounts for about 4 percent of the net groundwater discharge (Thomas, 1999). Thomas (1999) described the distribution of gross withdrawals as about 67 percent from the shallow aquifer, 13 percent from the middle aquifer, and 7 percent from the lower aquifer.

Considering the Miller Peninsula covers about 20,000 acres in area, and conservatively assuming the entire water right is recharged on the peninsula, the requested appropriation would be equivalent to about 0.01 inches of local recharge to the aquifer. Data indicate that static water level elevations in the aquifer have remained stable over the past 30-plus years. The requested annual quantity is a small fraction of water available in the aquifer and is not expected to have an impact on the hydrologic balance. Therefore, water is found to be physically available for appropriation.

Additionally, the predictive drawdown analysis shows that TW-1 could support yields up to 200 gpm (the proposed Qi under the subject application). Analysis of the constant rate test did not suggest the

presence of any major aquifer boundaries, and it is anticipated that the full requested annual quantity is available.

Based on the observed aquifer response from pumping tests completed in September 2022, historical pumping tests completed in the lower confined aquifer, and water quality testing of the proposed well in 2022, high quality groundwater is anticipated to be physically available at the rates and quantities proposed in the Water Right Application. Water quality samples collected after the 24-hour pumping test at TW-1 did not show a concern of sea water intrusion. More details supporting water availability are included in the hydrogeologic memorandum (Aspect Consulting, 2023).

Physical availability of groundwater on Miller Peninsula recharged by precipitation does not appear to be threatened by climate change. Regional climate model projections for the State of Washington indicate a state-wide increase in total precipitation, excluding portions of the northern Olympic Peninsula (to west of Miller Peninsula) and some locations in the Cascade Mountains (Raymond, 2022). Total annual precipitation on Miller Peninsula is predicted to increase by 4.3 percent over the next 25 years as modeled in a high greenhouse gas scenario (Raymond, 2022). Long term models (projected through year 2099) indicate an increase of 11.1 percent change of total on Miller Peninsula. The proposed source of groundwater for the Park is understood to be recharged directly through infiltration of local precipitation, therefore an increase in total annual precipitation should increase water availability to the aquifer. Based on the modeled increase in total annual precipitation, the fraction of water requested for withdrawal under this application to the total available supply will not appear to increase in future years.

Legal Availability

To meet the legal availability test, the proposed appropriation may not withdraw and use water that is already "spoken for", such as water from sources that are protected by administrative rule or court order.

The proposed Miller Peninsula State Park is located in the Quilcene-Snow Water Resource Inventory Area 17. Water Resource Inventory Area (WRIA) 17 is located on the northeastern Olympic Peninsula and includes portions of Jefferson and Clallam counties. An Instream Flow Rule was adopted for the Quilcene-Snow basins (Washington Administrative Code (WAC) 173-517)) in Jefferson County on December 30, 2009, however, rule-making for the Clallam County sub-basins was postponed.

The project is located within the jurisdiction of an approved Watershed Management Plan. The Dungeness-Quilcene Water Resources Management Plan (Jamestown S'Klallam Tribe, 1994)) was adopted by Clallam County Resolution No. 102-1994 on June 21, 1994.

The groundwater resources on the Miller Peninsula were reported as adequate and available in an aquifer deeper than any currently tapped. Existing sources were not at risk from depletion or sea-water intrusion. The sparse population and incorporation of much of the peninsula into a state park may alleviate risk concerns (Jamestown S'Klallam Tribe, 1994).

The requested appropriation is not inconsistent with the approved Watershed Management Plan.

Impairment

In analyzing impairment, Ecology must determine whether existing water rights, including adopted instream flows, may be impaired by the withdrawal and proposed use. The analysis will evaluate potential impacts that could occur because of authorizing the proposed water right. There are three concepts that must be considered when making this determination. These concepts are defined as follows:

- 1. <u>Impairment</u> 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).
- 2. Qualifying groundwater withdrawal facilities are defined as those wells which in the opinion of Ecology 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 levels; and (d) the withdrawal facilities including pumping facilities must be properly sized to the ability of the aquifer to produce water.
- 3. <u>Well interference</u> may occur when several wells penetrate and withdraw groundwater from the same aquifer. Each pumping well creates a drawdown cone. When several wells pump from the same aquifer, well density, aquifer characteristics, and pumping demand may result in individual drawdown cones that intersect and form a composite drawdown cone. At any point in an aquifer, the composite drawdown caused by pumping wells will be greatly influenced by the transmissivity (T) of the aquifer and the storage coefficient (s). In aquifers with high Ts, composite drawdown will generally be much less than in aquifers with similar properties, but with low Ts. Transmissivity is related to hydraulic conductivity (K) and the saturated thickness (b) of an aquifer by the relationship T=Kb.

The hydrogeologic memorandum completed by Aspect evaluated the potential for impairment associated with approval of this application, but important findings are reiterated herein.

Several wells were identified within the Miller Peninsula area, completed in various aquifers. The closest known well to TW-1 is located approximately 2,500 feet away on Clallam County parcel 0230203100000000 (Well Report ID No. 50890 owned by Northwest Technical). An available drawdown of 80 feet was assumed based on a static water level of 380 feet bgs (from the driller's well log) and a pump set depth of 470 feet (conservatively assumed based on a well depth of 500 feet), 30 feet of screen, and 10 feet of pump submergence. The closest known water rights were identified as the Diamond Point water system, whose source wells are approximately 5,000 feet from TW-1. The potential for groundwater impairment at the nearest well and water right (2,500 feet and 5,000 feet away) was evaluated by estimating impacts from pumping at TW-1. The Cooper-Jacob (1946) modified Theis (1935) solution for transient flow for a nonleaky aquifer was used to simulate interference drawdown.

Two scenarios were modeled to reflect proposed impairment resulting from: (1) the continuous average pumping rate required to produce the annual Qa over one year, and the (2) maximum Qi over 10 days.

As stated in the *Aquifer Analysis* section, TW-1 taps into the lower confining aquifer. The aquifer transmissivity of this unit is estimated to be $3,000 \text{ ft}^2/\text{d}$. The aquifer storage coefficient is assumed to be 1×10^{-3} , typical of a confined sand-and-gravel aquifer. These values are representative of conservative estimates and do not account for any recharge or leakage to the source aquifer.

The first scenario considers TW-1 is pumped continuously for 365 days at a rate of 12.4 gpm (equal to the pumping rate needed to produce the authorized annual volume of 20 ac-ft/year under the subject application). The predicted drawdown the closest well located 2,500 feet away is 0.5 feet after 365 days of pumping, which is negligible compared to available drawdown of 80 feet, assuming a static water level of 380 feet bgs (from well log) and a pump set depth of 470 feet (conservatively assumed based on a well depth of 500 feet). The wells located 5,000 feet away (distance to the Diamond Point wells), predicted drawdown is expected to be 0.4 feet, which is negligible compared to the available drawdown of over 80 feet.

The second scenario considers TW-1 is pumped continuously for 10 days at a rate of 200 gpm (the maximum Qi requested under the subject application). The predicted drawdown is 4.8 feet at the closest well located 2,500 feet away and 3.8 feet at a well located 5,000 feet away, after 10 days. It is unlikely the maximum Qi would ever be exercised for 10 continuous days, but this analysis was included to show that anticipated drawdown in the nearest well would still be insignificant compared to the assumed available drawdown of 80 feet.

Water Quality and Potential for Seawater Intrusion

A common concern along the Puget Sound coastline is intrusion of saltwater induced by pumping of nearshore wells. Saltwater intrusion occurs when the head near the submarine outcropping of an aquifer is sufficiently reduced so that it can no longer counter the opposing head of denser saline water; thus, allowing saline water to laterally migrate into the aquifer. Since Miller Peninsula is surrounded by marine waters on three sides, an evaluation of seawater intrusion potential at TW-1 was completed based on the following methods:

- Comparison of the well intake elevation to the calculated saltwater interface elevation.
- Analysis of groundwater quality from the subject well and neighboring wells.

Groundwater Elevation

The static groundwater elevation measured in the proposed well is 382 feet below the top of casing, or about 13 feet above mean seal level (MSL). Because the density is much higher in saltwater compared to freshwater, the freshwater/saltwater interface will always be below sea level. The Ghyben-Herzberg principle describes how this interface is typically found at a depth that is about 40 times the elevation of the water level above sea level (e.g., if the elevation of the freshwater aquifer is 10 feet above sea level, the freshwater interface would be found at about 400 feet below sea level). Following this principle, the saltwater interface is estimated to be at an elevation of 520 feet below MSL, or approximately 340 feet below the lowest portion of the well's screen. Additionally, because the average (and even instantaneous) pumping water levels in the aquifer near the proposed well(s) are expected to remain above sea level, upwelling of the saltwater interface toward the well is not expected to occur.

Groundwater Quality

Seawater intrusion can also be evaluated by collecting water quality data and performing measurements of chloride concentrations. Groundwater aquifers in direct hydraulic continuity to seawater will typically contain both freshwater and seawater. Freshwater, which has a lower density than seawater, will float on top of the denser seawater. Seawater contains approximately 35,000 milligrams per liter (mg/L) of dissolved solids, which include about 19,000 ml/L of chloride. In contrast, fresh groundwater in most coastal areas of Washington generally contains less than 10 mg/L of chloride (USGS, 2000).

Chloride, because of its conservative, non-reactive nature, is commonly used as an indicator of seawater intrusion. Under WAC 173-200, chloride groundwater concentrations are generally not to exceed the secondary maximum contaminant level (SMCL) of 250 mg/L. Washington State Department of Health

(WDOH; 2020) considers 100 mg/L chloride to be a threshold for seawater intrusion risk and the USGS reports that chloride concentrations in excess of 100 mg/L suggest seawater intrusion.

Field parameters and water quality samples at the proposed well from the targeted aquifer were collected at the end of a recent 24-hour constant rate pumping test. The chloride concentration was reported at 7.1 mg/L, which indicates saltwater intrusion has not occurred at the well location.

A regional study of water resources of Clallam County completed by the USGS in 1986 notes that groundwater in the Miller Peninsula area is generally of excellent quality (Drost, 1986). Of the numerous wells investigated, water quality issues resulting from excessive chloride concentrations were only identified in a few localized wells along the coastal bluffs north of the Diamond Point area. These wells were completed in close proximity to the shoreline where the freshwater-saltwater interface is significantly shallower. Both the proposed well and other nearby supply wells (such as the Diamond Point Community wells) are completed inland, where the freshwater-saltwater interface is significantly deeper than the bottom of the wells.

Inland wells of the Diamond Point Community water system (ID 192104) were further evaluated by querying the DOH's Sentry Database for long-term reported water quality exceedances. The database indicates that no chloride exceedances have been reported for the water system. Reported chloride concentrations from water quality sampling range from approximately 5.5 mg/L to 20 mg/L, dating back to 1994.

Beneficial Use

The proposed appropriation must be for a beneficial use of water.

Domestic supply is considered a beneficial use of water under RCW 90.54.020(1).

Public Interest

The withdrawal and associated use must not be detrimental to the public interest. At a minimum, the following are considered when making this assessment.

Notification to the Washington Department of Fish and Wildlife

Per RCW 90.03.280 and 77.57.020, Ecology must give notice to the Washington Department of Fish and Wildlife (WDFW) of applications to divert, withdraw, use, or store water.

WDFW was provided notice of this water right application on July 18, 2023. Steve Boessow, Water Right Biologist, responded that based on impacts to fish and/or wildlife and the habitat they rely on, and pursuant to 77.57.020 RCW, WDFW does not oppose the issuance of this application. Aside from Eagle Creek, over a mile and a half to the southeast of the well site, there are no fish bearing creeks recorded in the vicinity. The depth of the well and the presumed northward direction of flow indicate that the aquifer discharges direct to marine waters. The treated wastewater will discharge to shallow groundwater and eventually drain to the same source.

State Environmental Policy Act (SEPA)

Under chapter 197-11 WAC, a water right application is subject to a SEPA threshold determination (i.e., an evaluation of whether there will be significant adverse environmental impacts) if any of the following conditions are met:

- It is a surface water right application for more than 1 cfs, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cfs, so long as that irrigation project will not receive public subsidies;
- It is a groundwater right application for more than 2,250 gpm;
- 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.

This Water Right Application is part of a larger proposal requiring SEPA consideration. The Washington Parks and Recreation Commission is the lead agency for any SEPA determinations. However, WAC 197-11-070 provides that some permits can issue in advance of a final SEPA determination. The SEPA lead agency has determined that this Water Right permit will not limit the choice of reasonable alternatives (Email from Brian Yearout, Washington State Parks and Recreation Commission to Jeff Marti, Department of Ecology, March 11, 2024).

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted, and used. Notice of this application was published in the Peninsula Daily News on July 22 and July 29, 2023.

While no formal protests were filed in response to the public notice, Ecology did receive comments letters.

Consideration of Comments

Correspondence expressing concerns about the project were received by Ecology from Darlene Schanfald with Friends of Miller Peninsula State Park and by Sue Gilman, Debi Maloney, and Joanne LaBaw. The general content of these comments can be summarized as follows:

- The development of the State Park's water supply could induce seawater intrusion.
- The source aquifer will decline.
- Public water systems are experiencing water supply issues and cannot supply fire flow.
- The public notice did not include enough information to understand the project.
- Not enough information exists to determine what the impacts the operations of these wells will have on local hydrology.
- Development of the state park will also result in more septic systems which could impact groundwater quality.

Seawater Intrusion

An assessment of seawater intrusion risks associated with this this project have determined that based on the scale of the proposed water demand relative to the amount of recharge there is not a significant risk that seawater intrusion will occur as a result of this project. Since the average (and even instantaneous) pumping water levels in the aquifer near the proposed well(s) are expected to remain above sea level (about 8 feet MSL), upwelling of the saltwater interface toward the well is not expected to occur.

Water Level Declines

Regional groundwater declines have not been noted for this area. A review of the water budget for the Miller Peninsula, including a refinement to reflect only the property owned by the applicant indicates that project demand can be met without materially changing the amount of groundwater.

Impacts to Other Water Systems

An evaluation of wells, and presumed groundwater users in the vicinity of this project, has failed to identify anyone at risk for impairment. Using conservation assumptions² results in the finding that predicted drawdown at the closest well located 2,500 feet away is 0.5 feet after 365 days of pumping, which is negligible compared to available drawdown. The wells used by Diamond Point are located 5,000 feet away where predicted drawdown is expected to be 0.4 feet, which is negligible compared to the available drawdown in the well.

Lack of Hydrogeological Information

The Miller Peninsula has been studied and a determination made that water is available to appropriate in the amount requested.

Lack of Information regarding impacts to Hydrology (Surface water impacts)

The Miller Peninsula has been identified as being a location where direct impacts to surface water bodies via groundwater pumping is unlikely to occur.

Water Quality

Because State Parks will be required to obtain approval for the design and operation of a wastewater treatment facility(s), there is reasonable assurance that water use at campgrounds and related facilities will not lead to the degradation of groundwater. Nor is the proposed withdrawal volume sufficient to induce sea water intrusion.

Other Public Interest Concerns

Public interest considerations are discussed in multiple sections of the water code including 90.03.290 and 90.03.320.

As previously addressed, State Park's projected demands are very small relative to the size of the recharge are, and thus extremely unlikely to generate effects that will be detectable by other water users.

There are other issues (e.g., the potential for traffic and noise) beyond the scope of this water right application. However, we note that the park plan is itself the result of an extensive public planning process managed by the Washington State Parks and Recreation Commission, a creature of the Washington State Legislature (Miller Peninsula Planning Update – Report, January 27, 2022).

Specific land use decisions regarding the exact configuration of the park, or whether campers have access to water at their individual camp site or need to use centralized facilities will be determined in a larger planning process.

This water right approval does not preclude or limit the consideration of alternatives as State Parks engages in a review of alternatives and impacts pursuant to the State Environmental Policy Act.

² TW-1 is pumped continuously for 365 days at a rate of 12.4 gpm (equal to the pumping rate needed to produce the authorized annual volume of 20 ac-ft/year

Conclusions

I find that:

- Water is physically and legally available.
- The appropriation will not impair existing rights.
- The proposed multiple domestic supply is a beneficial use.
- Approval of this application will not be detrimental to the public interest.

RECOMMENDATIONS

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

Recommended Quantities, Purpose of Use, and Project Location

The rate and quantity of water recommended are maximum limits. The permit holder may only withdraw water at a rate and quantity within the specified limits that are reasonable and beneficial:

Table 4. Recommended Limits and Local	
Maximum Instantaneous Rate (gpm)	200
Maximum Annual Quantity (ac-ft/yr)	20
Purpose(s) of Use	Domestic Supply
Point of Withdrawal	SE¼, NE¼, Section 20, Township 30 North,
	Range 2 W.W.M.
Place of Use	Place of use includes the following Clallam
	County tax parcels: 033024400000,
	033024140000, 033024110000, 033013440000,
	023018300000, 023019220000, 023019100000,
	023018340000, 023017300000, 023020220000,
	023020100000, 023029110000, 023016230000,
	023016320000, 023016310000, 023021220000,
	023021130000, 023028200000, 023028120000,
	023022230000.
	The project site is situated within portions of the
	following: Sections 13 and 24 within Township
	30N., Range 03W; Sections 16, 17, 18, 19, 20, 21,
	22, 28, and 29 of Township 30N., Range 02W.

Table 4. Recommended Limits and Location

Jel E. Van Dulle

Jill Van Hulle, Report Writer

June 26, 2024 *Date* Tyson Carlson, HG Review

June 26, 2024 *Date*

Michael). Hallagher

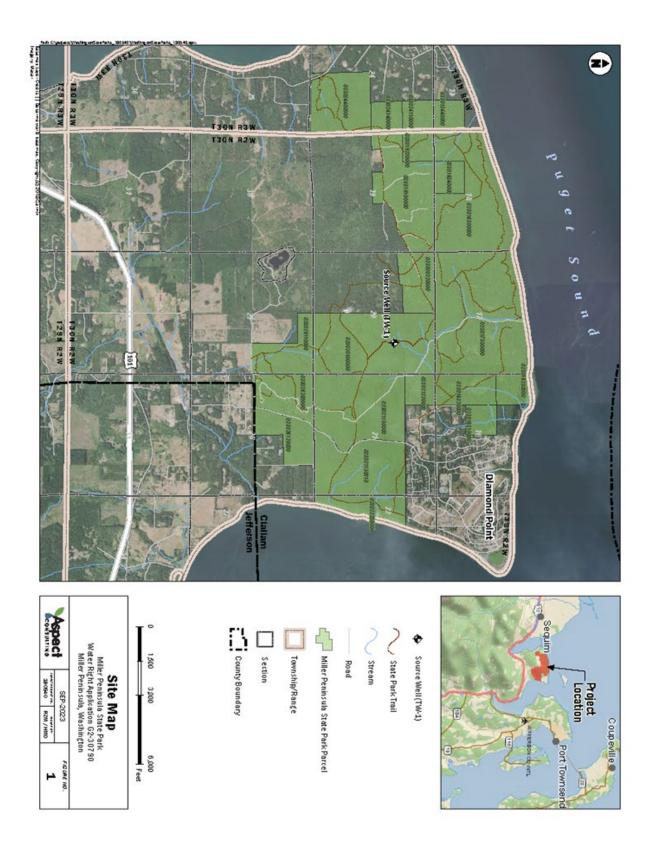
June 26, 2024

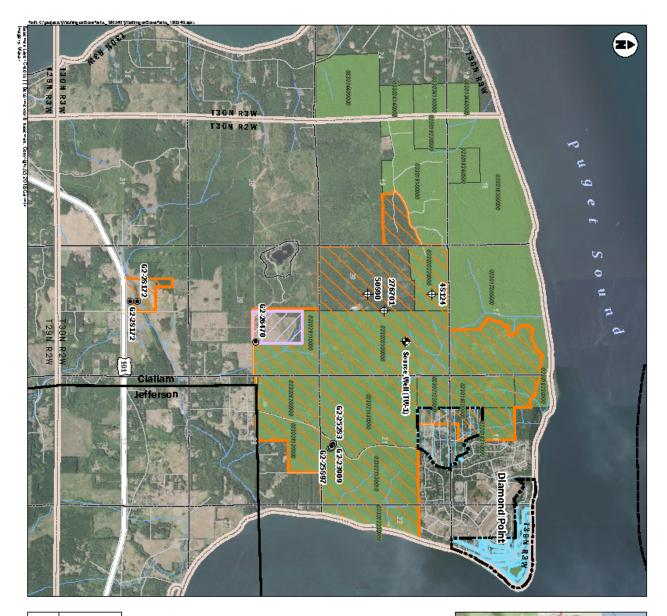
Michael J. Gallagher, Ecology Reviewer

Date

To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

- Aspect Consulting, 2023, Draft Hydrologic and Source Approval Report: Miller Peninsula State Park. Prepared for Washington State Parks.
- Batu, V., 1998. Aquifer Hydraulics: A Comprehensive Guide to Hydrogeologic Data Analysis, John Wiley & Sons, New York, 727p.
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- Othberg, K.L. and Palmer, Pamela, 1979, Preliminary surficial geologic map of part of the Gardiner quadrangle, Clallam County, Washington, Washington Division of Geology and Earth Resources, Open File Report 79-19, 1:24,000.
- Raymond, C., M. Rogers, 2022. Climate Mapping for a Resilient Washington. Prepared by the Climate Impacts Group, University of Washington, Seattle and Research Data & Computing Services, University of Idaho, Moscow.
- Thomas, B.E., Goodman, L.A., and Olsen, T.D., 1999, Hydrogeologic assessment of the Sequim-Dungeness area, Clallam County, WA. U.S. Geological Survey, Water-Resources Investigations Report 99-4048. 165 p.
- United States Geological Survey (USGS), 2000. Is Seawater Intrusion Affecting Ground Water on Lopez, Island, Washington, USGS Fact Sheet 057-00.
- Washington State Parks and Recreation Commission, Miller Peninsula Planning Update Report, January 27, 2022.







- 4 Miller Penins ula State Park Parcel
- Township/Range
- Section
- 🔾 Stream
- County Boundary

Other Water Rights - Authorized Place of Use

- G2-26470
- G2-28172

- 62-25283

6,000 Feet

1,500

3,000

Washington State Parks

Miller Peninsula State Park Water Right Application G2-30790 Miller Peninsula, Was hington

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Other Water Rights Authorized Point of Withdrawal

190540 RZM / HMD

SEP-2023

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