General Manager's Report

Report on Water System Operations For The Month Of: September, 2015

The Meter Period for this report is:	07/06/2015	through	08/07/2015
The Billing Period for this Report is:	08/18/2014	through	09/15/2015
The Activity Period for this Report is:	08/01/2015	through	08/31/2015

1	Total Water Pumped (TWP) from all Wells in Metering Period	12.5946	mg[1]
2	Total Water Used for Unidirectional Flushing in Metering Period	0.0000	mg
3	Total Water Used for Reactionary Flushing in Metering Period	0.0450	mg
4	Total Water Used for Backwashing Filters in Metering Period	0.0520	mg
5	Total Water Lost and Used Repairing Leaks in Metering Period	0.0000	mg
6	Total Other Known Water Used in Metering Period	0.0000	mg
7	Total Water Sold in Metering Period	14.7079	mg
8	Total Authorized Water Use in Metering Period (sum of 2 through 7)	14.8049	mg
9	Total Distribution System Leakage (DSL) in Metering Period (difr. between 1 and 8)	-2.2103	mg
10	Percentage of TWP that is DSL	-17.5%	pct
11	Total Water Pumped (TWP)from all Wells in 2015 to date	62.0477	mg
12	Total Authorized Water Use in 2015 to date	61.2041	mg
13	Total Distribution System Leakage (DSL) in 2015 to date	0.8436	mg
14	Percentage of TWP that is DSL in 2015 to date	1.4%	pct

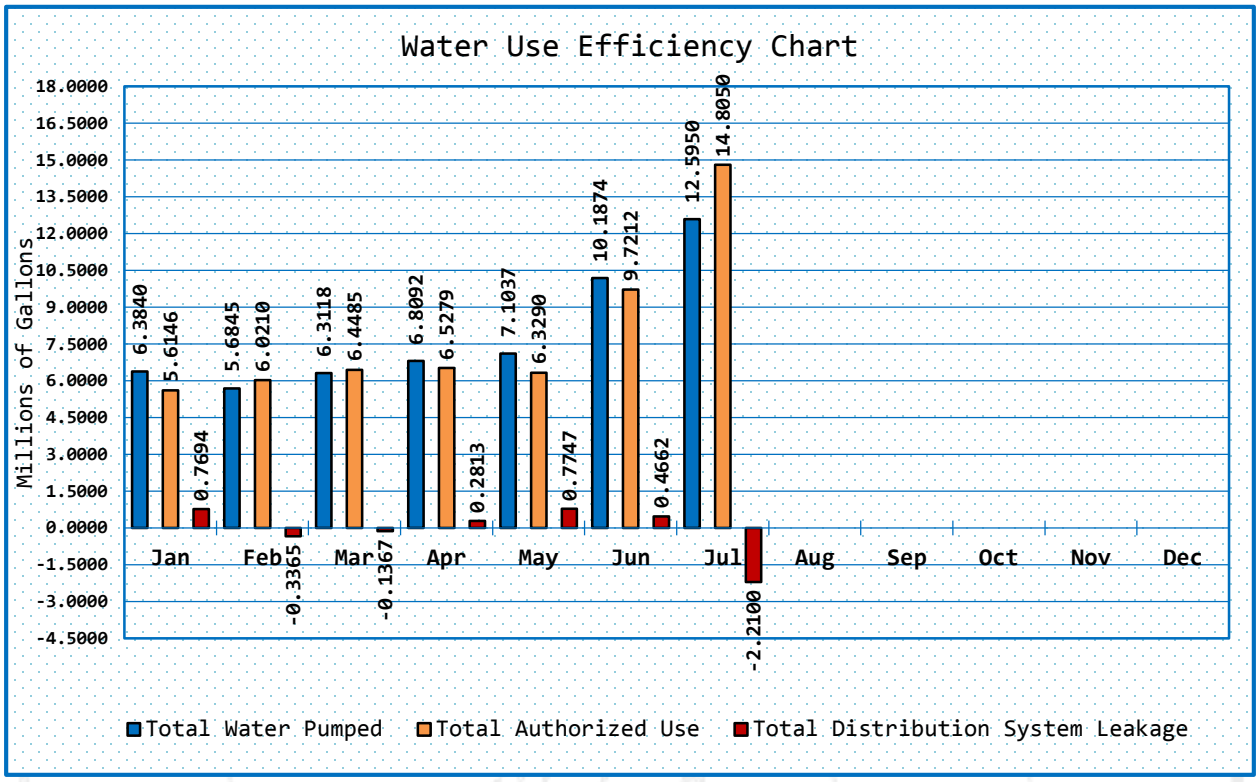
15	Residential Accounts in Billing Period	TS[2]:	2,754	TBR[3]:	$ 102,421.74	TMR[4]:	$ 37,995.54	
16	Commercial Accounts in Billing Period	TS:	107	TBR:	$ 7,751.98	TMR:	$ 11,746.79	
17	Fire Flow Accounts in Billing Period	TS:	4	TBR:	$ 477.58	TMR:	$ 0.00	
18	Surfside Management in Billing Period	Contract:	$ 10,000.00	REIMB[5]:	$ 373.75			
19	Other / Total Income in Billing Period	Other:	$ 3,182.85	TI[6]:	$ 173,950.23			

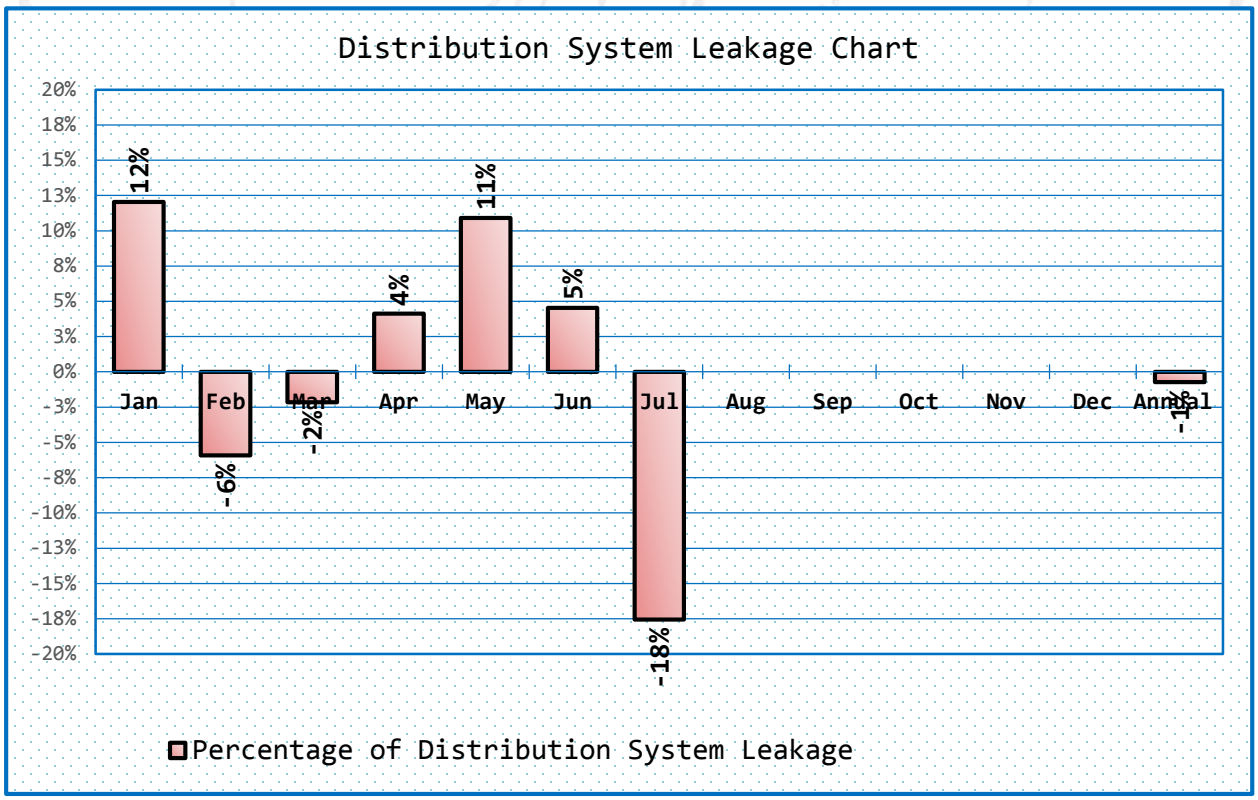
20	Past Due Accounts	30 days:	288	≥60 days:	86	Locked/Off:	8	Liened Prop.:	30

21	**Activity Period**	Water Main Locates:	29	Customer Valves Installed:	5

22	Water Quality Complaints:	0	Customer Service Calls:	0	Other:	0	175

[1] Million Gallons
[2] Total Services
[3] Total Base Rate
[4] Total Metered Rate
[5] Reimbursement
[6] Total Income


Water Use Efficiency Chart
Millions of Gallons
18.0000
16.5000
15.0000
13.5000
12.0000
10.5000
9.0000
7.5000
6.0000
4.5000
3.0000
1.5000
0.0000
-1.5000
-3.0000
-4.5000
6.3840
5.6146
0.7694
5.6845
6.0210
-0.3365
6.3118
6.4485
-0.1367
6.8092
6.5279
0.2813
7.1037
6.3290
0.7747
10.1874
9.7212
0.4662
12.5950
14.8050
-2.2100
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total Water Pumped
Total Authorized Use
Total Distribution System Leakage


Distribution System Leakage Chart
20%
18%
15%
13%
10%
8%
5%
3%
0%
-3%
-5%
-8%
-10%
-13%
-15%
-18%
-20%
12%
-6%
-2%
4%
11%
5%
-18%
-1%
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Annual
Percentage of Distribution System Leakage

Operations Report:

Water System Plan:

The Department of Health issued comments on the District's Water System Plan. There were a total of 25 comments. Most of the comments were for clarifications and to make revisions requesting more current nomenclature. Overall, the plan held up very well to scrutiny. The Department also sent a bill for reviewing the plan, $3,705. Karl Johnson has prepared a response to the comments. Both documents are attached for your review. The District will need to send our Well Head Protection Notices sooner than I had expected but other than that there were no surprises.

Assisted Surfside Homeowners Association:

Surfside Homeowners Association suffered a water main break on Saturday September 5, 2015. Labor Day weekend. Due to the Holiday, they were extremely short-handed. Two Operators, Dennis Schweitzer and Jon Fleming, agreed to assist Surfside with the repair at the General Manager's request. Surfside will be billed for the actual cost of their labor.

227th Place Culvert Replacement Project:

The 227 Place Culvert Replacement Project did not go as anticipated. As reported on previously Pacific County Public Works Department planned to replace the culvert under 227 Place requiring the District to modify our water main in the vicinity of the culvert. Our Franchise agreement with Pacific County requires us to relocate our water mains when Pacific County makes improvements to the public right-of-way.

As reported last month, the District installed two new valves so that only four of our ratepayers would be affected by water service interruption during the culvert replacement project.

Pacific County contracted with Hill & Sons for the culvert replacement. The project did not go as planned by Pacific County. The County planned to replace the large round culvert with a smaller diameter and oval shaped culvert. The design called for the District's water main to be laid flat and level and the fabricated arch to be removed.

Field conditions made that design unfeasible. As a consequence, the District switched into emergency mode to find parts to make modifications for a much more complicated field engineered change. The decision was made to provide the three occupied homes with extra bottled water for an extended water service interruption and travel to suppliers to get required parts. By the time the parts were procured and the work completed water service had been interrupted for 32 hours. Our three customer were very patient and understanding during the ordeal. Our Crew performed with professionalism and diligence. The District's Field Superintendent was on vacation during a portion of repair. The District solicited assistance from Surfside Homeowners Association water Operator's during a portion of the project to

keep water service interruption to a minimum. The District will pay Surfside the actual cost of their labor for their assistance.

RFP for Birch Place Booster Stations.

The Project has not started.

North Wellfield Well #4:

Well #4 at the North Wellfield failed on the week just before Labor Day. We attempted to use the pump recovered from Well #2 but it only lasted three days before it too failed. At that point we only had two days before the Labor Day weekend. I ordered a new pump and motor from Western Hydro on an emergency basis. The cost of the new equipment was $1,821.63. We also needed some emergency work on the magnetic starter for the pump. That expense is to Ford Electric for $1,911.08.

Treatment Plant Report:

No failures or maintenance issues in the Treatment Plants in August.

Drinking Water State Revolving Fund Project:

The Wiegardt Wellfield Treatment Pilot test has been revised and resubmitted to DOH. A copy of the revisions is attached to this report. We have not received Approval for the Treatment Pilot Test yet.

The Department of Ecology has advertised a DRAFT Report of Examination (ROE). The DRAFT ROE has all of the expected and acceptable provisions. A copy of the DRAFT ROE is attached to this report.

AMR Meter Installation Project Report:

The crew installed 175 AMR meters in August, 2015. There are a total of 2,176 AMR meters installed as of August 31, 2015. There are 510 meters left to install. We will have to average 128 meters a month to complete the metering project on time.

Office and Equipment Building Report:

After meeting with John Farlow and discussion the heat pump project onsite we have received a new bid of $25,900. Ryan Helligso and David Jensen are working on a Change Order to present to the Board in early October.

The perimeter foundation is poured and some of the mechanicals have been installed for under the slab.

The Board will need a Special Meeting in early October to consider the Change Order.

Water Quality Reports:

I have attached copies of the water samples the District submitted for analysis in August, 2015. They were:

Routine ----- 8/3/2015 --------- Coliform Bacteria ---------- Satisfactory

Routine	8/3/2015	Coliform Bacteria	Satisfactory
Routine	8/3/2015	Coliform Bacteria	Satisfactory
Routine	**8/10/2015**	**Coliform Bacteria**	**Unsatisfactory**
Routine	8/10/2015	Coliform Bacteria	Satisfactory
Routine	8/10/2015	Coliform Bacteria	Satisfactory
Repeat	8/13/2015	GWR Well #1	Satisfactory
Repeat	8/13/2015	GWR Well #4	Satisfactory
Repeat	8/13/2015	GWR Well #5	Satisfactory
Repeat	8/13/2015	GWR Well #6	Satisfactory
Repeat	8/13/2015	GWR Well #8	Satisfactory
Repeat	8/13/2015	Distribution	Satisfactory
Repeat	8/13/2015	Distribution	Satisfactory
Repeat	8/13/2015	Distribution	Satisfactory
Routine	8/17/2015	Coliform Bacteria	Satisfactory
Routine	8/17/2015	Coliform Bacteria	Satisfactory
Routine	8/17/2015	Coliform Bacteria	Satisfactory
Routine	8/10/2015	Arsenic	Satisfactory

End of Report

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
SOUTHWEST DRINKING WATER REGIONAL OPERATIONS
PO Box 47823, Olympia, Washington 98504-7823
TDD Relay 1-800-833-6388

August 19, 2015

Bill M. Neal, III
Post Office Box 618
Ocean Park, Washington 98640

Subject: North Beach Water, ID #63000C, Pacific County; Water System Plan, ODW Project #15-0505

Dear Mr. Neal:

Thank you for submitting the Water System Plan (WSP) for the above water system, received by the Office of Drinking Water (ODW) on May 15, 2015. We have reviewed the WSP in accordance with the pre-plan checklist, developed on March 27, 2014, and have the following comments that need to be addressed before ODW can approve the WSP update:

Chapter 1 – Water System Description

1. Page 1-2, Water Facilities Inventory (WFI) Form. **The WFI should be updated and signed.**
2. Page 1-21, Analysis of Compatibility with Existing Plans. **The Local Government Consistency (LGC) form should be referenced in this section and attached here or in the Appendix.**
3. Page 1-22, Existing Service Area Characteristics. **The Service Area Map needs to show Existing Service Area, Retail Service Area, and Futures Service Area. In addition, this map or another map needs to show the boundary of the water rights place of use.** These may all be represented by the same polygon on the same map. However, existing, retail, future service areas, and water rights place of use need to be clearly labeled. See the enclosed fact sheet "Municipal Water suppliers Service Areas in Planning Documents" (DOH Publication #331-432). In addition, the North Beach Water District's (NBWD) water district boundary needs to be included in the WSP. The County's GIS map shows the NBWD's boundary to be the same as the Existing Service Area as shown on Figure 1-12. The last sentence on page 1-22 states: "Since NBWD does not wholesale water to any other water purveyor, the existing retail service area is the same as the existing service area and the future retail water service area is the same as the future service area." The term "existing retail service area" and "future retail water service area" are not standard terms. These same terms are also used to label areas on Figure 1-12. **Please use the standard terms of "retail service area", "future service area," and "existing service area."**
4. Page 1-25, Formation of Local Improvement Districts Outside Legal Boundaries. The WSP states, "The NBWD corporate boundaries encompass the entire NBWD future service area." According to the County's GIS map, the NBWD boundary only includes the Existing Service Area as shown on Figure 1-12. **Please modify this sentence according to the County's GIS map or provide an alternative source of information.**
5. Page 1-27, Duty to Serve. The WSP states: "The North Beach Water District recognizes its duty to provide water service within its designated service area in a timely and reasonable manner, as required by the Municipal Water Law." This sentence should read, "The North Beach Water District recognizes its duty to provide water service within its designated **retail** service area in a timely and reasonable manner, as required by the Municipal Water Law." **Please add the word "retail" to this sentence.**

6. Page 1-27, Conditions of Service. It is our **recommendation** that NBWD pass a staged conservation ordinance, which gives the WD the authority to issue mandatory conservation measures in the event of a drought.

Chapter 2 – Basic Planning Data

7. Page 2-4, Table 2-2. **Please explain why the backwash declined in 2013. Please explain any changes to treatment that may have led to this decline in backwash.**
8. Page 2-12, Water Use Per Residential Connection. The number of active connections appears to be artificially high, as it is defined in this analysis. The resultant average day demand (ADD) of 114 gallons per day per Equivalent Residential Units (gpd/ERU) is much lower than other Long Beach communities. Please reevaluate the number of part-time residences using a more conservative approach, for example those residences using less than 80 gpd/ERU. If the minimum maximum day demand (MDD) of 350 gpd/ERU is used, based upon Section 5.3 of the Water System Design Manual, the ADD and Chapter 2 accordingly, along with a 2.44 peaking factor, the calculated ADD would be 143 gpd/ERU. This value is more representative of the Long Beach peninsula. **Please reevaluate.**

Chapter 3 – System Analysis

9. Page 3-6, Fire Suppression Storage. The WSP states: "WAC 246-293-601, et seq., sets state minimum fire flow standards for water systems with 1,000 or more service connections, or located within a critical water supply service area." While the standards set out in WAC 246-293-601 are good design standards, they are not required in Pacific County, as the County did not designate a critical water supply service area.
10. Page 3-12, Coliform Bacteria Monitoring. The system did have one *E.coli* positive in May 2015. **Please include recent coliform sampling results in this description.** The number of recent total coliform positive samples, including several non-acute violations is reason to recommend system disinfection through chlorination. The new Revised Total Coliform Rule, (RTCR) which will be promulgated in 2016, will give additional incentive to install chlorination. **Please include this ODW recommendation and comment on possible actions required by the new RTCR.**
11. Page 3-13, Bromate Monitoring Results. **Please include a description of ozone being discontinued so the bromate results are no longer applicable.**
12. Page 3-16, System Description and Analysis. The WSP states: "The north wellfield and south wellfield both have filtration systems for iron and manganese, using ozone as an oxidant and polymer as a flocculate and filter aid." Yet on Page 1-12, the WSP states: "Based on the results of the pilot test, NBWD has discontinued using ozone as an oxidant at the NWF Treatment Plant." **Please clarify this discrepancy.**
13. Page 3-17, Figure 3-2. The schematic diagram shows processes that have been discontinued. In addition, it is likely that this plan will be approved near the time when proposed treatment modifications will be installed. **Please update this figure with the current and proposed treatment processes and add any distribution pressure regulators or reducers.**
14. Page 3-17, Water Rights. The WSP states: "If growth and water usage develop as predicted, NBWD will have 439 gpm and 357 acre feet per year of surplus water right available by the year 2035." **However, Table 3 of the Water Rights Self-Assessment – 20-Year Forecast (Appendix B) does not include these same figures. In addition, numbers listed in Tables 1 and 2 of the Water Rights Self-Assessment (Appendix B) do not match the numbers in Table 3-8 in the WSP. Please clarify these discrepancies.**
15. Page 3-27, Distribution System. Under the third paragraph in Water Main Replacement Program the WSP states: "It is recommended that NBWD institute a progressive facilities replacement program." This is the Water District's Plan. The WSP should not be recommending to institute a progressive facilities replacement program, but stating that NBWD will institute a progressive facilities replacement program.

16. Page 3-37, Fire Flow Modeling Results. The WSP states: "An available fire flow map is not provided for the 2035 maximum day demand scenario since maximum day demand is projected to be less in 2035 than in 2021." However, Table 2-10 shows the MDD is projected to be **larger** in 2035 than in 2021. **Please clarify this sentence and explanation.**
17. Page 3-37, Water System Capacity Limits. **Please evaluate treatment capacity for both wellfields for the proposed improvements and flow rates in terms of ERUs.**

Chapter 4 – Water Use Efficiency Program

18. Page 4-3, Section 4.4, Water Supply Characteristics. The WSP states: "Distribution System Leakage (DSL) for NBWD, as shown in Table 2-6, has ranged from 14.9 percent in 2010 to 19.4 percent in 2013." Actually, Table 2-6 shows 10.2 percent in 2013. Furthermore, the Water Use Efficiency (WUE) Annual Performance Report for 2013 reports 5.6 percent DSL with a three-year average of 8.8 percent. In addition, the WUE Annual Performance Reports for 2010, 2011, and 2012 do not match the numbers in the WSP. **Please explain these discrepancies and work on getting the WUE Annual Performance Report numbers to reflect the numbers used in the WSP.**
19. Page 4-7, Goal Setting and Performance Reporting. The WSP states: "Annual reports must be available to the public and submitted to customers and ODW by July 1 each year." **Please include copies of these annual reports to the customers in the WSP.**

Section 5 – Wellhead Protection Program

20. Page 5-5, Potential Contaminant Sources. Table 5-2 lists the potential sources of contaminants. **Please include a copy of the letter notifying these businesses that they are in the Wellhead Protection Area (WHPA) and confirm that the letters were sent to these businesses.**
21. Page 5-10, Septic Systems. The WSP identifies Septic Systems as a potential contaminant source. **Please provide a list of the names and addresses of all property owners with septic systems within the WHPA, the sample letter sent to them, and confirm that these letters have been mailed out to these property owners.**
22. Page 5-14, Spill/Incident Response Program. The WSP lists several agencies that need to be provided with a copy of the WHPA and advised of its significance. In addition to this list of agencies, State Patrol and local first responders should be provided with a copy of the WHPA. **Please provide the list of agencies, the sample letter sent to them, and confirm that these letters have been mailed out to those agencies.**

Section 6 – Operation & Maintenance Program

23. Page 6-14, Table 6-7. **Please include the measures the water district took in 2012 to reduce service line losses in empty homes when freezing conditions are present.**
24. Page 6-19. We **recommend** installing transducers in the wells to monitor static water levels in the Operations and Maintenance (O & M) Improvements.

Chapter 8 – Improvement Program

25. Page 8-9, Table 8-1, Project #P-01, New booster pumping system at Birch Place and 227th Ave. It is our **recommendation** that this project be moved up from 2017 to a 2016 project due to customer complaints.

Chapter 9 – Financial Plan

26. Page 9-1, Introduction. Appendix K is a very good source of financial information but it is very difficult to read. **Please provide Appendix K on 11-inch by 17-inch paper printed in landscape mode.**

Miscellaneous

27. **Please provide correspondence with adjacent utilities and each local government with jurisdiction in order to assess consistency with ongoing and adopted planning efforts. WAC 246-290-100(7).**

DEPARTMENT OF ECOLOGY

On May 18, 2015, a copy of this WSP was sent to the Department of Ecology (Ecology). Ecology has not issued comments on this WSP.

The Department's review of your WSP and design does not confer or guarantee any right to a specific quantity of water. Our review is based on your representation of available water quantity. If the Washington Department of Ecology, a local planning agency, or other authority responsible for determining water rights and water system adequacy determines that you have use of less water than you represent, the number of approved connections may be reduced commensurate with the actual amount of water and your legal right to use it.

We ask that you submit three copies of the revised pages of the WSP. Please respond to all comments in the plan. To expedite the review of the revised WSP, please summarize the response to the comments and where each response is located (for example, page numbers, appendices, and so on).

Regulations establishing a schedule of fees for review of planning, engineering, and construction documents were adopted April 30, 2012 (WAC 246-290-990). An invoice for $3,705 is enclosed.

If you have any questions, please contact Mark Mazeski at (360) 236-3038 or Teresa Walker (360) 236-3032.

Sincerely,

Mark J. Mazeski
Office of Drinking Water, Regional Planner

Teresa Walker, P.E.
Office of Drinking Water, Regional Engineer

Enclosures

cc: Karl Johnson, Gray and Osborne
Mike Johnson, Gray and Osborne
Pacific County Planning Division
Pacific County Public Health Division
Tammy Hall, Department of Ecology

DOH Document Review Fee Invoice Worksheet

DOH Staff Name: Mark J. Mazeski **System Name:** North Beach Water District

Sublog Number: 15-0505 **County:** Pacific

Water System ID: 63000

Fixed Fee for Service

WATER SYSTEM PLANS

Project Type	Fee 1st Review	Fee 2nd Review	Approved? Number Hr 1st Review	Number Hr 2nd Review
(a)(1) Water system plan (new and updated plans) 1,000 to 9,999 Sevices	$3,705			
Total Water system plans	$3,705	$0	0	0

SATELLITE MANAGEMENT AGENCY (SMA) PLANS

Project Type	Fee 1st Review	Fee 2nd Review	Approved? Number Hr 1st Review	Number Hr 2nd Review
Total SMA	$0	$0	0	0

PROJECT REPORTS

Project Type	Fee 1st Review	Fee 2nd Review	Approved? Number Hr 1st Review	Number Hr 2nd Review
Total Project Reports	$0	$0	0	0

CONSTRUCTION DOCUMENTS

Project Type	Fee 1st Review	Fee 2nd Review	Approved? Number Hr 1st Review	Number Hr 2nd Review
Total Construction documents	$0	$0	0	0

EXISTING SYSTEM APPROVAL

Project Type	Fee 1st Review	Fee 2nd Review	Approved? Number Hr 1st Review	Number Hr 2nd Review
Total of Existing System approval	$0	$0	0	0

GROUP B AND OTHER EVALUATIONS AND APPROVALS

Project Type	Fee 1st Review	Fee 2nd Review	Approved? Number Hr 1st Review	No Number Hr 2nd Review
Total of Other evaluations and approvals	$0	$0	0	0
Total Fixed Fee for Service	**$3,705**	**$0**	**0**	**0**

Hourly fee for service	Fee	# Hr	System Size
Total Invoice amount	**$3,705**	**$0**	**0** **0**

	Total Invoices	Total Hours
Summary	$3,705	0

September 2, 2015

Mark J. Mazeski, Regional Planner
Teresa Walker, P.E., Regional Engineer
Southwest Drinking Water Regional Operations
PO Box 47323
Olympia, Washington 98504-7823

SUBJECT: RESPONSE TO COMMENT LETTER, NORTH BEACH WATER DISTRICT WATER SYSTEM PLAN, WSDOH ID NO. 63000C, WSDOH PROJECT NO. 15-0505, NORTH BEACH WATER DISTRICT, PACIFIC COUNTY, WASHINGTON, G&O #14222

Dear Mr. Mazeski and Ms. Walker:

Thank you for your review and comment letter dated August 19, 2015, regarding the North Beach Water District (NBWD), WSDOH ID NO. 63000C, Water System Plan (WSP), WSDOH Project No. 15-0505. It is the intent of this letter, together with enclosed materials, to address all questions, requirements and issues raised in your letter. Toward that end, and to assure clarity of responses, this letter will repeat the questions and requirements from your review letter in *italics*, followed by our response.

Chapter 1 — Water System Description

l. Page l-2, Water Facilities Inventory (WFI) Form. ***The WFI should be updated and signed.***

The WFI was updated on July 10, 2015. A signed copy of the updated WFI is enclosed. Please insert this document in Appendix A.

2. Page 1-21, Analysis of Compatibility with Existing Plans. ***The Local Government Consistency (LGC) form should be referenced in this section and attached here or in the Appendix.***

Wording has been added referencing the LGC form as requested.

3. Page 1-22, Existing Service Area Characteristics. ***The Service Area Map needs to show Existing Service Area, Retail Service Area, and Futures Service Area. In addition, this map or another map needs to show the boundary of the water rights place of use.*** *These may all be represented by the same polygon on the same map. However, existing, retail, future service areas, and water rights place of use need to be clearly labeled. See the enclosed fact sheet "Municipal Water suppliers Service Areas in Planning Documents" (DOH Publication #331-432). In addition, the North Beach Water District's (NBWD) water district boundary needs to be included in the WSP. The County's GIS map shows the NBWD's boundary to be the same as the Existing Service Area as shown on Figure l-l2. The last sentence on page 1-22 states: "Since NBWD does not wholesale water to any other water purveyor, the existing retail service area is*

the same as the existing service area and the future retail water service area is the same as the future service area." The term "existing retail service area" and "future retail water service area" are not standard terms. These same terms are also used to label areas on Figure l-12. ***Please use the standard terms of "retail service area", "future service area," and "existing service area."***

We have revised the terminology on page 1-22 and in Figures 1-3 and 1-12 to correspond to service areas as defined in WAC 246-290-010.

4. Page 1-25, Formation of Local Improvement Districts Outside Legal Boundaries. The WSP states, "The NBWD corporate boundaries encompass the entire NBWD future service area." According to the County's GIS map, the NBWD boundary only includes the Existing Service Area as shown on Figure l-I2. ***Please modify this sentence according to the County's GIS map or provide an alternative source of information.***

You are correct. Wording has been revised accordingly.

5. Page 1-27, Duty to Serve. The WSP states: "The North Beach Water District recognizes its duty to provide water service within its designated service area in a timely and reasonable manner, as required by the Municipal Water Law." This sentence should read, "The North Beach Water District recognizes its duty to provide water service within its designated ***retail*** *service area in a timely and reasonable manner, as required by the Municipal Water Law."* ***Please add the word "retail" to this sentence.***

The word "retail" has been added to this sentence.

6. Page 1-27, Conditions of Service. It is our ***recommendation*** *that NBWD pass a staged conservation ordinance, which gives the WD the authority to issue mandatory conservation measures in the event of a drought.*

NBWD will take this recommendation into consideration.

Chapter 2 — Basic Planning Data

7. Page 2-4, Table 2-2. ***Please explain why the backwash declined in 2013. Please explain any changes to treatment that may have led to this decline in backwash.***

Backwash water volume declined in 2013 because, in an effort to improve Water Use Efficiency (WUE), NBWD has made a concerted effort to reduce the amount of backwash water used.

8. Page 2-12, Water Use Per Residential Connection. The number of active connections appears to be artificially high, as it is defined in this analysis. The resultant average day demand (ADD) of 114 gallons per day per Equivalent Residential Units (gpd/ERU) is much lower than other Long Beach communities. Please reevaluate the number of part-time residences using a more conservative approach, for example those residences using less than 80 gpd/ERU. If the

minimum maximum day demand (MDD) of 350 gpd/ERU is used, based upon Section 5.3 of the Water System Design Manual, the ADD and Chapter 2 accordingly, along with a 2.44 peaking factor, the calculated ADD would be 143 gpd/ERU. This value is more representative of the Long Beach peninsula. ***Please reevaluate.***

We see no justification for separating out services that use less than 80 gpd per ERU for any given billing period. As stated on page 2-6 of the water system plan, we have defined any service that has NO water demand during any given billing period as being inactive for that billing period. Figure 2-3 shows the seasonal variation of active and inactive services. It can be seen that this is a fairly consistent pattern of seasonal use. If we separate out full time and part time use by an estimated part time usage rate such as 80 gpd per ERU, then it is true that we could then project future use based on projected changes in occupancy. However, since we have no information on projected future occupancy rates for North Beach Water District service area, we see no advantage in separating out full time and part time occupancies based on a part time occupancy usage rate. If by the next water system plan the occupancy rate changes significantly, then the ERU value will reflect that, and that updated ERU value will be used for the next planning period.

Chapter 3 —- System Analysis

9. Page 3-6, Fire 'Suppression Storage. The WSP states: "WAC 246-293-601, et seq., sets state minimum fire flow standards for water systems with 1,000 or more service connections, or located within a critical water supply service area." While the standards set out in WAC 246-293-601 are good design standards, they are not required in Pacific County, as the County did not designate a critical water supply service area.

WAC 246-293-602 states:

> "These standards and regulations shall apply to the following new and expanding public water systems:
>
> (1) Those systems having more than 1,000 services.
>
> (2) Those with less than 1,000 services located within the boundaries of a critical water supply service area and subject to the requirement for a coordinated water system plan."

Since NBWD has more than 1,000 services it appears that these regulations do apply to NBWD.

10. Page 3-12, Coliform Bacteria Monitoring. The system did have one E. coli positive in May 2015. ***Please include recent coliform sampling results in this description.*** *The number of recent total coliform positive samples, including several non-acute violations is reason to recommend system disinfection through chlorination. The new Revised Total Coliform Rule, (RTCR) which will be promulgated in 2016, will give additional incentive to install chlorination.*

Please include this ODW recommendation and comment on possible actions required by the new RTCR.

The water system plan was completed in March 2015 and submitted to DOH in May 2015. Therefore these coliform positive samples occurred after the water system plan was complete. These more recent coliform test results have been added to the list (Note, due to some reformatting this list is now on Page 3-11.), and wording has been added advising that intermittent positive coliform test results may lead to a requirement for routine system disinfection. The coliform monitoring plan has also been revised to respond to this concern.

11. Page 3-13, Bromate Monitoring Results. ***Please include a description of ozone being discontinued so the bromate results are no longer applicable.***

The description of the discontinuance of use of ozone is included on page 1-12.

12. Page 3-16, System Description and Analysis. The WSP states: "The north wellfield and south wellfield both have filtration systems for iron and manganese, using ozone as an oxidant and polymer as a flocculate and filter aid." Yet on Page 1-12, the WSP states: "Based on the results of the pilot test, NBWD has discontinued using ozone as an oxidant at the NWF Treatment Plant." ***Please clarify this discrepancy.***

Wording has been modified on page 3-16 to indicate that ozone is no longer used.

13. Page 3-17, Figure 3-2. The schematic diagram shows processes that have been discontinued. In addition, it is likely that this plan will be approved near the time when proposed treatment modifications will be installed. ***Please update this figure with the current and proposed treatment processes and add any distribution pressure regulators or reducers.***

The figure has been modified to reflect the change in operation of the filtration system. There are no existing distribution system pressure regulators, or reducers, other than those that are part of the booster pump system.

14. Page 3-17, Water Rights. The WSP states: "If growth and water usage develop as predicted, NBWD will have 439 gpm and 357 acre feet per year of surplus water right available by the year 2035." ***However, Table 3 of the Water Rights Self-Assessment - 20-Year Forecast (Appendix B) does not include these same figures. In addition, numbers listed in Tables 1 and 2 of the Water Rights Self-Assessment (Appendix B) do not match the numbers in Table 3-8 in the WSP. Please clarify these discrepancies.***

The values in Table 3-8 are correct. The values on page 3-17 and in the Water Rights Self Assessment form have been revised to match the values in Table 3-8.

15. Page 3-27, Distribution System. Under the third paragraph in Water Main Replacement Program the WSP states: "It is recommended that NBWD institute a progressive facilities replacement program." This is the Water District's Plan. The WSP should not be

recommending to institute a progressive facilities replacement program, but stating that NBWD will institute a progressive facilities replacement program.

Chapter 3 is a section evaluating system needs. At this point in the discussion this is a recommendation, to be weighed later in Chapter 8 against other various system needs. Table 8-1 lists a capital improvement schedule agreed to by NBWD. Table 8-1 includes numerous water system improvements that are consistent with the recommendation for phased water facilities replacement.

16. Page 3-37, Fire Flow Modeling Results. The WSP states: "An available fire flow map is not provided for the 2035 maximum day demand scenario since maximum day demand is projected to be less in 2035 than in 2021." However, Table 2-10 shows the MDD is projected to be ***larger*** *in 2035 than in 2021.* ***Please clarify this sentence and explanation.***

This has been corrected and included in the revised materials.

17. Page 3-37, Water System Capacity Limits. ***Please evaluate treatment capacity for both wellfields for the proposed improvements and flow rates in terms of ERUs.***

A discussion of treatment capacity limits has been added to this section.

Chapter 4 — Water Use Efficiency Program

18. Page 4-3, Section 4.4, Water Supply Characteristics. The WSP states: "Distribution System Leakage (DSL) for NBWD, as shown in Table 2-6, has ranged from 14.9 percent in 2010 to 19.4 percent in 2013." Actually, Table 2-6 shows 10.2 percent in 2013. Furthermore, the Water Use Efficiency (WUE) Annual Performance Report for 2013 reports 5.6 percent DSL with a three-year average of 8.8 percent. In addition, the WUE Annual Performance Reports for 2010, 2011, and 2012 do not match the numbers in the WSP. ***Please explain these discrepancies and work on getting the WUE Annual Performance Report numbers to reflect the numbers used in the WSP.***

We have corrected the wording on Page 4-3. It was necessary to make numerous corrections to the water billing data to arrive at the water use volumes shown in Table Figure 2-4 and Table 2-5. These corrections probably account for the difference between the DSL as shown in this plan and the DSL as reported in the annual WUE reports.

19. Page 4-7, Goal Setting and Performance Reporting. The WSP states: "Annual reports must be available to the public and submitted to customers and ODW by July 1 each year." ***Please include copies of these annual reports to the customers in the WSP.***

Enclosed are copies of annual Water Use Efficiency Reports. NBWD has made these available to any interested members of the public. In the future, NBWD will include a section on WUE in their annual consumer confidence reports.

Section 5 - Wellhead Protection Program

20. Page 5-5, Potential Contaminant Sources. Table 5-2 lists the potential sources of contaminants. ***Please include a copy of the letter notifying these businesses that they are in the Wellhead Protection Area (WHPA) and confirm that the letters were sent to these businesses.***

A sample letter and mailing list is enclosed. These letters will be sent by ____.

21. Page 5-10,-Septic Systems. The WSP identifies Septic Systems as a potential contaminant source. ***Please provide a list of the names and addresses of all property owners with septic systems within the WHPA, the sample letter sent to them, and confirm that these letters have been mailed out to these property owners.***

A sample letter and mailing list is enclosed. These letters will be sent by ____.

22. Page 5-14, Spill/Incident Response Program. The WSP lists several agencies that need to be provided with a copy of the WHPA and advised of its significance. In addition to this list of agencies, State Patrol and local first responders should be provided with a copy of the WHPA. ***Please provide the list of agencies, the sample letter sent to them, and confirm that these letters have been mailed out to those agencies.***

State Patrol, the Local Fire District, and County Sheriff have been added to the test on Pages 5-14 through 5-15. A sample letter and mailing list is enclosed. These letters will be sent by ____.

Section 6 – Operation & Maintenance Program

23. Page 6-14, Table 6-7. ***Please include the measures the water district took in 2012 to reduce service line losses in empty homes when freezing conditions are present.***

The District dispatched all of its Operators to the field with route books to read approximately 1,100 meters on known vacant or inactive services (i.e. R.V. lots, vacation cabins, beach houses, etc.). If the meter recorded use, the Operator would shut and lock the service and a notice would be sent to the owner of the potential leak. An Operator was able to average 12 services an hour. The District had 5 Operators working in 12 hour shifts. All of the significant leaks were under control within 24 hours, and all of the leaks were under control within 36 hours. In the past the District solicited the help of Pacific County Fire District #1 personnel in locating and isolating leaks due to freeze damage. In 2012 the District started locating and isolating leaks early in the thaw. Careful planning was used during the freeze to be ready as soon as the thaw began so that a systematic coverage of targeted services would control the water loss.

*24. Page 6-19. We **recommend** installing transducers in the wells to monitor static water levels in the Operations and Maintenance (O & M) Improvements.*

Water level transducers are included in the design of the new Wiegardt wells, which will replace the existing south wells, Project S-01A in Table 8-1. NBWD plans to install water level transducers in the North wells as part of the North Wellfield Improvement Project S-01B.

Chapter 8 – Improvement Program

*25. Page 8-9, Table 8-1, Project #P-01, New booster pumping system at Birch Place and 227th Ave. It is our **recommendation** that this project be moved up from 2017 to a 2016 project due to customer complaints.*

We agree that the booster pump station project is a high priority, however improving the sources, treatment, and control systems are higher priorities. NBWD will make an effort to construct this booster pump station at the earliest opportunity, ahead of the 2017 scheduled time frame if possible.

Chapter 9 – Financial Plan

Page 9-1, Introduction: Appendix K is a very good source of financial information but it is very difficult to read. ***Please provide Appendix K on 11-inch by 17-inch paper printed in landscape mode.***

Enclosed are copies of these sheets printed on 11 x 17 paper as requested.

Miscellaneous

27. Please provide correspondence with adjacent utilities and each local government with jurisdiction in order to assess consistency with ongoing and adopted planning efforts. WAC 246-290-100(7).

Copies of the NBWD WSP have been provided to Surfside Homeowners Association on ____, to Pacific County on ____, and to the City of Long Beach on ____, pursuant to WAC 246-290-100(7). NBWD received a signed Local Government Consistency Checklist from Pacific County, as discussed in Item 3 above. There has been no other correspondence with any of these neighboring utilities regarding this water system planning effort.

WR File NR CG2-00174@2
WR Doc ID 6367015

State of Washington

DRAFT

REPORT OF EXAMINATION FOR WATER RIGHT CHANGE

Changed Place of Use*
Added or Changed Purpose of Use*
Added or Changed Point of Withdrawal/Diversion
* acknowledges changes made with passage of Municipal Water Law

PRIORITY DATE	WATER RIGHT NUMBER
December 15, 1969	CCG2-00174@2

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
North Beach Water District 25902 Vernon Ave., Suite C Ocean Park, WA 98502	Parcel 1211331300 – no apparent street address Equivalent to intersection of 252nd Street and Y Lane if extended to the property

Total Quantity Authorized for Withdrawal or Diversion

	UNITS	ANNUAL QUANTITY (AC-FT/YR)
500	GPM	168

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Municipal	500	0	GPM	168	0	01/01-12/31

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
		63000	

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Pacific	groundwater	Pacific Ocean	24

SOURCE	PARCEL	WELL TAG	TOWNSHIP	RANGE	SECTION	QQ Q	LATITUDE	LONGITUDE
Wiegardt Well 1	1211331300	BAF 021	12N	11W	33	SW/NE	46.48636	124.04033
Wiegardt Well 2		BAF 024					46.48596	124.04027
Wiegardt Well 3		BAF 025					46.48558	124.04029

Datum: NAD83/WGS84

Place of Use (See Attached Map)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State

Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

If the criteria in RCW 90.03.386(2) are not met, the POU of this water right reverts to the last POU described by Ecology in a water right authorization.

Proposed Works
Wiegardt Well 1: 8-inches in diameter and 175-foot deep, screened from 120 and 140 feet below ground surface (bgs). Wiegardt Well 2: 8-inches in diameter and 150 foot deep, screened from 120 and 140 feet bgs. Wiegardt Well 3: 8-inches in diameter and 173-foot deep, screened from 121 and 142 feet bgs. Wells used in a wellfield configuration.

Development Schedule		
BEGIN PROJECT	**COMPLETE PROJECT**	**PUT WATER TO FULL USE**
Started	January 1, 2019	January 1, 2030

Measurement of Water Use	
How often must water use be measured?	Monthly
How often must water use data be reported to Ecology?	Annually
What volume should be reported?	Total Annual Volume (acre feet)
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm)

Provisions

Wells, Well Logs and Well Construction Standards

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

The well must be capped upon completion, and the Department of Ecology must be notified in order that a video scan of the completed well can be conducted. The Department of Ecology must be notified within one week of completion of the well and prior to the setting of a pump, in order to make necessary arrangements for video scanning.

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

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

Measurements, Monitoring, Metering and Reporting
An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173.

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

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

Chloride Monitoring
By January 31st of each year, the April and September measurements from the subject well(s) must be submitted in writing to the Department of Ecology, including:

- Chloride and conductivity (the chemical analysis must be performed by a state-accredited laboratory)
- Depth to static water level (with pump off long enough to allow for stabilization)
- The chloride/conductivity sampling and the static water level measurement must be conducted concurrently.

This data collection will assist the applicant and Ecology in determining if actions are necessary to prevent an increasing trend in chloride concentrations (an indicator of seawater intrusion). Preventative actions may include – reducing the instantaneous pumping rate, reducing the annual volume pumped, scheduling pumping to coincide with low tides, raising the pump intake, and/or limiting the number of service connections.

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

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

Proof of Appropriation
The water right holder must file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been

constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the superseding permit. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections

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

Findings of Facts

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

Therefore, I ORDER approval of Application No CCG2-00174@2, 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 Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel RD SW, Ste 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Lacey, Washington, this _____ day of _____, 2015.

Michael J. Gallagher
Water Resources Program/Southwest Region
Department of Ecology

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

INVESTIGATOR'S REPORT
Water Right Control Number CCG2-00174@2
North Beach Water District

BACKGROUND

This report serves as the written findings of fact concerning Water Right Change Application Number CCG2-00174@2.

The North Beach Water District (NBWD), formerly the Ocean Bay Water Company, is in need of new wells to produce their allocation from the subject water right. The NBWD intends to replace the existing points of withdrawal (South Wells 1 and 2) with the new Wiegardt Wellfield. The existing wells are old and have begun showing signs of declining production capacity.

As directed under RCW 90.03.560, this application also changes the place of use according to RCW 90.03.386 (2) and the purpose of use according to RCW 90.03.015(3) and (4).

Ground Water Certificate (GWC) G2-00174 was issued to the Ocean Bay Water Company on August 17, 1972. Throughout its history, the right has provided water to the Ocean Park community and its surrounding area.

EXISTING Water Right Attributes

Issued to:	Ocean Bay Water Company
Priority Date:	December 15, 1969
Place of Use	The plat of Rushton-on-the-Bay Farm Estates and South Addition to Ocean Park

County	Waterbody	Tributary To	WRIA
Pacific	groundwater	Pacific Ocean	WRIA 24

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Community Domestic	500	GPM	168	01/01	12/31

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
South Well 1	76019308000	AGP154	12N	11W	33	NE NE	46.48667	-124.037081
South Well 2	12113312120	AGP155				NW NE	46.48825	-124.041850

Datum: NAD83/WGS84

GPM = Gallons per Minute; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian

REQUESTED Water Right Attributes

Applicant Name:	North Beach Water District
Date of Application:	11-24-2014
Place of Use	The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of the water right. If the criteria in RCW 90.03.386(2) are not met, the POU of this water right reverts to the last POU described by Ecology in a water right authorization.

County	Waterbody	Tributary To	WRIA
Pacific	groundwater	Pacific Ocean	WRIA 24

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Municipal	500	GPM	168	01/01	12/31

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Wiegardt Well 1	12113313262	BAF021	12N	11W	33	SW/NE	46.48636	-124.04033
Wiegardt Well 2	12113313262	BAF024	12N	11W	33	SW/NE	46.48596	-124.04027
Wiegardt Well 3	12113313262	BAF025	12N	11W	33	SE/NE	46.48558	-124.04029

Datum: NAD83/WGS84

GPM = Gallons per Minute; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian

Cost Reimbursement

This application is being processed under a cost reimbursement agreement between the applicant the Department of Ecology. This report has been prepared by Robinson Noble, Inc.

Legal Requirements for Requested Change

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 Chinook Observer on May 20, 2015 and May 27, 2015. No protests were received as a result of this public notice.

Consultation with the Department of Fish and Wildlife

The Department must give notice to the Department of Fish and Wildlife of applications to divert, withdraw, or store water. There are no fishery related surface water features within the area of influence of the proposed new wells, so consultation with Department of Fish and Wildlife was not necessary.

State Environmental Policy Act (SEPA)

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

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

None of the above conditions apply. Application CCG2-00174@2 is, therefore, exempt from any SEPA action regarding this water right change.

Water Resources Statutes and Case Law
RCW 90.03.380(1) states that a water right that has been put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed if it would not result in harm or injury to other water rights. The Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp.*

RCW 90.03.386(3) requires a municipal water supplier to apply cost-effective water conservation measures as part of its water system planning. The water supplier must also evaluate the effects of delaying the use of inchoate water rights before it may increase use of those inchoate rights. RCW 90.03.320 requires Ecology to consider the public water supplier's use of conserved water when establishing a surface or ground water right construction schedule.

RCW 90.03.386(2) states that a municipal water supplier may change its service area through the water system plan approval process. As long as the municipal water supplier is in compliance with the approved plan, the place of use for the water right is the service area of the plan.

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

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

When changing or adding points of withdrawal to groundwater rights (RCW 90.44.100) the wells must draw from the *same body of public groundwater*. Indicators that wells tap the *same body of public groundwater* include:

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

INVESTIGATION

This application was evaluated using Department of Ecology records of surface and groundwater rights, claims, and water well reports on file.

Additionally, hydrogeologic descriptions provided by J.V. Tracy in USGS Open File Report 77-647 (1978) and by Blakemore Thomas in USGS Water Resource Investigation Report 95-4026 (1995) were used. Local hydrologic information is gained from two Robinson Noble Reports, North Beach Water District Wiegardt Well 1 Construction and Testing Report (2013) and North Beach Water District Construction and Testing of the Wiegardt Wellfield (2014). These publications provide significant description of the regional setting and the aquifer-specific characteristics in the area of this investigation.

Project Location and Site Description

NBWD is a municipal water purveyor (Department of Health ID 63000) serving a 7.25-square-mile area on the Long Beach Peninsula with a 5.7-square mile area to the south identified as future service area. The service area occupies the middle third of the sand spit that forms the Long Beach peninsula.

See Figure 1

The proposed points of withdrawal, Wiegardt Wells 1, 2, and 3 have been installed and are ready to be connected to the NBWD distribution system. The District also plans on drilling up to 3 additional wells in this wellfield at some point in the future but will add them to this water right administratively through a Showing of Compliance (RCW 90.44.100(3)) since they will be drilled in the same quarter-quarter section as Wiegardt Wells 1, 2, and 3.

Site Visit

On May 1, 2015, Mike Krautkramer performed a field investigation in support of this *Application for Change*. Mr. Krautkramer visited the well sites of Wiegardt Wells 1, 2, and 3, and the surrounding area within a one-half mile radius. In addition, a visit was made to the existing points of withdrawal under the subject water right (South Wells 1 and 2) which are scheduled to be decommissioned once this change is authorized.

The potential for impact to the wetland west of the Wiegardt Wellfield was determined to be equivalent for the existing and proposed points of withdrawal. This was determined by walking the pertinent portion of the mapped wetland boundary with consideration of the confined nature of the aquifer tapped by the wells.

A windshield survey of the area within ½ mile of the Wiegardt Wells was conducted to identify nearby private water wells and compare to Ecology records.

History of Water Use

The subject water right was issued in August 1972 to the Ocean Bay Water Company, a predecessor of NBWD. The right has been used since that time as a primary source for the regional purveyor in a manner consistent with RCW 90.03.015. Total reported Water District use for the year 2013 Most recent year reported) was 350 acre-feet per year (af/yr) of which 24 af/yr was produced under the subject water right. Production from the wellfield has been stable since 2010. The current instantaneous capacity of the District's operational wells is 915 gpm (Gray & Osborne, Inc., 2015).

Proposed Use

Although GWC G2-00174 was issued for community domestic supply, based on the criteria in RCW 90.03.015, NBWD is defined as a municipal water purveyor as a matter of law. The use of the water produced from the new points of withdrawal will remain as municipal water to supply the service area of the NBWD.

The water system Plan (Gray & Osborne, Inc., 2015) indicates a future demand of 364 af/y by 2035. The future service area identified in the plan will extend southward approximately 2.5 miles to Cranberry Road and encompass the full width of the peninsula along its entire length. Existing water rights are adequate to provide the projected demand.

Other Rights Appurtenant to the Place of Use

North Beach Water District holds 6 water rights per their current water right assessment as presented in the March 2015 Water System Plan. These are:

- G2-00174,priority date 12/15/1969, for 500 gpm Qi and 168 af/y Qa (subject right)
- G2-00759, priority date 7/14/1965, for 200 gpm Qi and 320 af/y Qa
- G2-21399, priority date 8/23/1973, for 100 gpm Qi and 160 af/y Qa (32 af/y non-additive)
- G2-25737, priority date 10/22/1980, for 130 gpm Qi and 140 af/y Qa (all non-additive)
- G2-27073, priority date 3/16/1987, for 105 gpm Qi and 252 af/y Qa (all non-additive)
- G2-29907, priority date 2/10/2000, for 65 gpm Qi and 80 af/y Qa

The total allocation held by the District is 1,100 gpm Qi and 681 af/y cumulative Qa.

Although groundwater claims have been filed in Section 33, these properties lie within NBWD's service area (as defined in the March 2015 System Plan and are now likely being served by the District. All available information regarding permits indicates they are for single-domestic-use shallow wells that will not be impaired by the subject water right change which draws from a deeper, semi-confined groundwater regime.

Hydrologic/Hydrogeologic Evaluation

The District gets its water from wells completed near the bottom of the Water Table Aquifer on the peninsula (as defined in USGS publications). This aquifer consists of the upper 200 feet of the sediments that form the spit.

The regional geology/hydrogeology of the peninsula was described by J.V. Tracy in Open File Report 77-647 and again in 1995 by Blakemore Thomas in Water Resource Investigation Report 95-4026. These reports describe a hydrogeologic sequence that consists of a thick deposit of two sand units. The lower unit is gray fine sand deposited as near-shore ocean bottom. The upper unit is brown fine sand transported to the Pacific Ocean from the Columbia River and deposited along the Long Beach Peninsula

by longshore-drift. Both sand units are typically above a thick clay unit, which is encountered at a depth of about 200 feet in most deep wells. The sand above the clay is referred to as the Water Table Aquifer by both Tracy and Thomas. A deeper sand and gravel aquifer exists below the clay at depths of about 260 feet. Only a few wells have been drilled to this unit so its lateral extent is speculative in most areas. The full sequence of unconsolidated materials are considered a single body of public groundwater.

The water table aquifer (fine sand aquifer) is the primary water source on the peninsula. The aquifer is described regionally as a fairly uniform unconfined system (Thomas, 1995). However, well-test data show the aquifer behaves more like a confined aquifer due to subtle changes in the amount of silt/clay within the sand layers making the hydraulic conductivity variable. The vertical hydraulic conductivity is significantly lower than the horizontal hydraulic conductivity causing the response to pumping to be as if the sand is confined. For the sake of this investigation, a steady-state, water-table condition is used when considering the potential for impacts to surface water features and the parameter values provided from well tests of the North Beach Water System are used in assessing impacts to other groundwater users. This approach makes the assessment of both surface-water and well-interference aspects conservative.

Water level elevations in the center of the peninsula near the locations of the Wiegardt wells are 8 to 14 feet above sea level depending on the season. Water levels fall to about 2 feet above sea level at both the Pacific and Willapa Bay shore lines.

Site Conditions

The water table aquifer is the source for the existing points of withdrawal (South Wells 1 and 2) and proposed points of withdrawal (Wiegardt Wells 1, 2, 3). (Figure 1)

The northernmost of the Wiegardt wells (Wiegardt Well 1) is 700 feet south of South Well 2 and 900 feet west of South Well 1. Wiegardt Well 2 is 150 feet south of Wiegardt Well 1 and Well 3 is another 155 feet south of Well 2. South wells 1 and 2, and Wiegardt wells 1, 2 and 3 are completed at similar depths and draw water from the same (water table) aquifer and therefore are in the same body of public groundwater.
The completion details of the South Wells and the 3 wells of the new Wiegardt wellfield are provided below:

- South Well 1 is an 8-inch well drilled to 56 feet and completed between 41 and 56 feet in the water table aquifer. The well has an installed capacity of 30 gpm as reported in the 2015 system plan.
- South Well 2 is an 8-inch well drilled to 100 feet and completed between 85 and 100 feet in the water table aquifer. The well currently has a pumping capacity of 60 gpm as reported in the 2015 system plan.
- Wiegardt Well 1 is an 8-inch well drilled to 149 feet and completed between 118 and 138 feet in the water table aquifer. The well was tested at 150 gpm and is rated to produce between 125 and 200 gpm depending on pumping conditions. It is rated tentatively as a 150 gpm source in the 2015 system plan.
- Wiegardt Well 2 is an 8-inch well drilled to 150 feet and completed between 120 and 141 feet below land surface in the water table aquifer. The well was tested at 150 gpm and is listed as a tentative 150-gpm source in the 2015 system plan.
- Wiegardt Well 3 is an 8-inch well drilled to 172 feet and completed between 121 and 142 feet below land surface in the water table aquifer. The well was tested at 150 gpm and is listed as a tentative 150-gpm source in the 2015 system plan.

An extensive 72-hour test was performed once the wellfield was equipped to record the drawdown and recovery responses to pumping at Wiegardt Well 3. The distance-drawdown data indicate an aquifer transmissivity of 63,000 gpd/ft and a storage coefficient of 0.04 which suggests semi-confined aquifer conditions. The storage coefficient reduces to 0.038 after three days of pumping.

Distance-drawdown relationships defined in the Water District's wellfield report (Robinson Noble, June 2014) indicates a drawdown of near zero at distance of 1,000 feet after three days of continuous pumping.

The test response suggests that potential impacts to other users and surface water bodies (wetlands) on the peninsula is sufficiently small that it does not constitute a potential impairment or adverse impact.

The results of the test concluded production is sufficient to provide the recommended production from the Wiegardt Wells.

Impairment Considerations

Impairment, Qualifying Ground Water Withdrawal Facilities, and Well Interference
Water right changes have greatest potential to affect wells completed in the same aquifer near the new point of withdrawal.

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

There are 62 water well reports on record in Ecology's well log database for Section 33, T12N/R11W. All but two are small diameter jetted or driven wells (sand-point wells) between seven and 35 feet deep. The other two are the Coos Bay Development well (drilled in 1953) and Ray Robertson (drilled in 1974 and 112-foot deep, municipal well within Ocean Park).

Ecology's WRTS database shows no water right certificates or permits within 2,000 feet of the proposed Wiegardt wellfield. Since the test data from the 3-day wellfield test shows drawdown reaches zero at a distance of approximately 1,200 feet, interference drawdown beyond 2,000 feet will be unlikely.

Ecology's WRTS database also lists 123 water right claims in Section 33. The claimed uses are generally single domestic supply with some yard irrigation. A few claims specify irrigation, but even those are associated small lots (e.g. city lot type parcels). Bill Neal, NBWD manager, stated that most, if not all claims are situated in NBWD's service area which is supported by observations made in the field.

This proposed change is not expected to affect area users. The Wiegardt wellfield are roughly 1,000 feet south or west from South Wells 1 and 2 and the wells are in a semi-confined aquifer so impacts will only shift slightly southward. No significant change in impact is anticipated.

Impacts to surface water
There is no evidence that this change will result in adverse impacts to the wetlands or to any other surface water features. The proposed and existing points of withdrawal are only 1,000 feet apart and completed in the same aquifer.

Potential for seawater intrusion

The Wiegardt wellfield is situated along a north-south line that is roughly centered on the peninsula. The wells are 3,500 feet from the Bay and 4,000 feet from the Pacific.

NBWD's south wellfield has been operating for several decades without seawater intrusion. The aquifer's basal clay means that lateral groundwater movement from either the ocean or Willapa Bay is the only avenue for seawater intrusion to occur. A recharge analysis provided as part of the Wiegardt Wellfield Report (Robinson and Noble, 2014) shows that even with conservatively low recharge estimates, there is sufficient water within this aquifer to support the proposed withdrawals.

Water quality data collected during the pump test showed stable chloride levels. Specific conductivity, pH, and temperature were monitored 7 times throughout the 72-hour pump test. (Robinson Noble, 2014).

Although testing and analyses indicate seawater intrusion is not occurring at this location, it is recommended semi-annually testing be so that if chloride levels begin to rise then mitigative actions can be taken. Mitigative actions can consist of reducing the instantaneous rate being pumped or pumping only at low tides.

Public Interest Considerations

Nothing associated with the requested change is contrary to the public interest as discussed in RCW 90.03.

Consideration of Protests and Comments
No protests were filed against this application.

Conclusions

In accordance with Chapter 90.03 RCW, I conclude:
1) The water is physically and legally available,
2) The water will serve a beneficial use,
3) Existing water rights will not be impaired,
4) The issuance of the change will not be contrary to the public interest

RECOMMENDATIONS

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

Purpose of Use and Authorized Quantities

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

Q_i 500 gpm
Q_a 168 acre-feet per year
For Municipal Supply

Wiegardt Wells 1 and 2 in the SW¼, NE¼, Section 33, Township 12 North, Range 11W.W.M.
Wiegardt Well 3 in the SE¼, NE¼, Section 33, Township 12 North, Range 11W.W.M.

Place of Use
As described on Page 1.

Reported by: _____
F. Michael Krautkramer, L.HG Date

Reviewed by: _____
Tammy Hall, Water Resources Program Date

Selected References

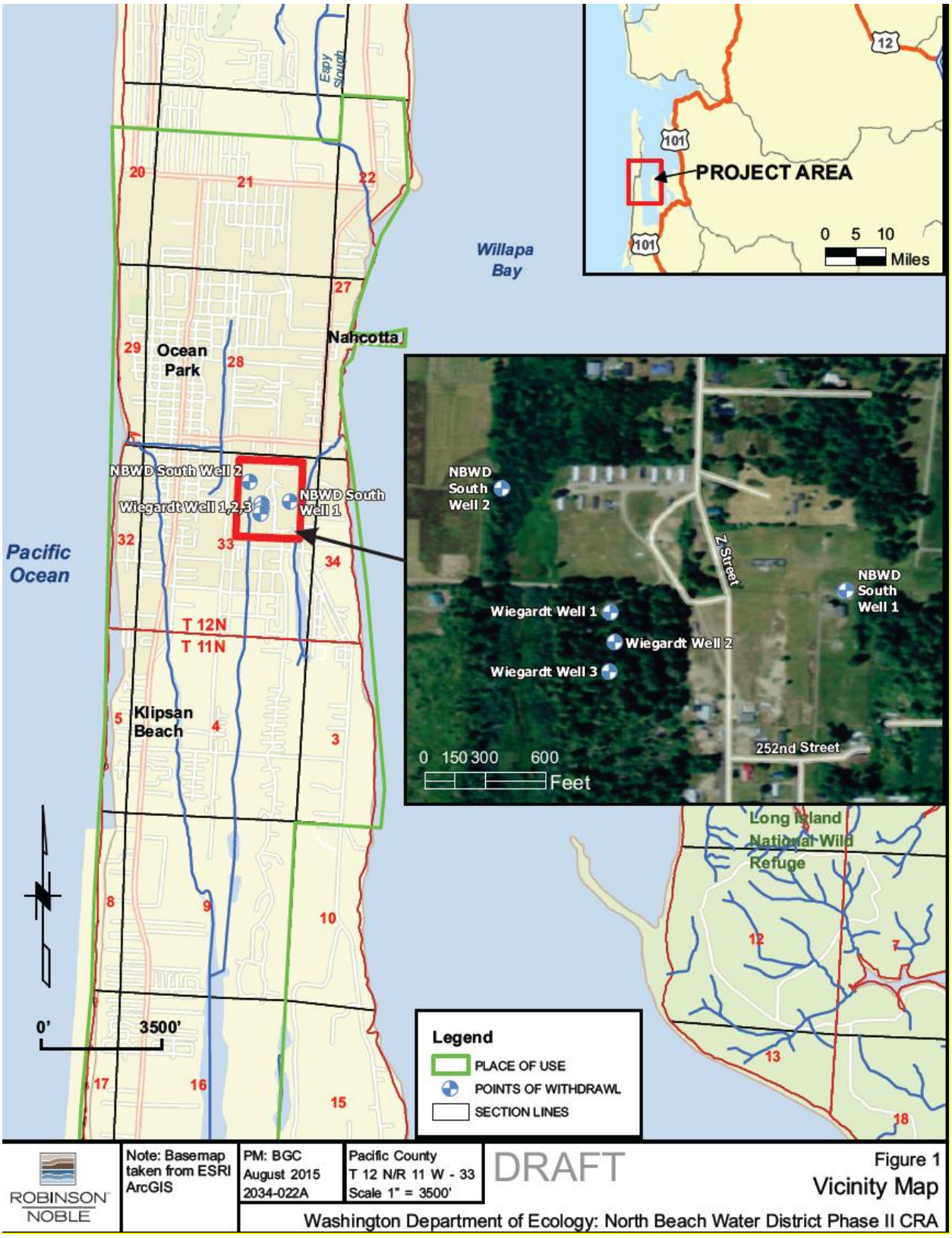
Gray & Osborne, Inc., 2015, North Beach Water District, Pacific County, Washington, Water System Plan, May 2015

Tracy, J.V., 1978, Ground-water resources of the North Beach Peninsula, Pacific County, Washington, USGS Open File Report 77-647

Thomas, Blakemore E., 1995, Ground-water flow and quality in the sand aquifer of Long Beach Peninsula, Washington, USGS Water Resources Investigations Report 95-4026

Robinson Noble, Inc., 2013, North Beach Water District Wiegardt Well 1 construction and testing report

Robinson Noble, Inc., 2014, North Beach Water District construction and testing of the Wiegardt Wellfield


PROJECT AREA
0 5 10
Miles
Willapa Bay
Espy Slough
Nahcotta
Ocean Park
Pacific Ocean
NBWD South Well 2
Wiegardt Well 1,2,3
NBWD South Well 1
T 12N
T 11N
Klipsan Beach
Long Island National Wild Refuge
NBWD South Well 2
Z Street
NBWD South Well 1
Wiegardt Well 1
Wiegardt Well 2
Wiegardt Well 3
252nd Street
0 150 300 600
Feet
0'
3500'
Legend
PLACE OF USE
POINTS OF WITHDRAWL
SECTION LINES
ROBINSON NOBLE
Note: Basemap taken from ESRI ArcGIS
PM: BGC
August 2015
2034-022A
Pacific County
T 12 N/R 11 W - 33
Scale 1" = 3500'
DRAFT
Figure 1
Vicinity Map
Washington Department of Ecology: North Beach Water District Phase II CRA

Current Date:	Monday, July 13, 2015	Current Estimated Design Cost:		$ 868,419.00	Bid Alt. Design	$ 115,000.00
Date	Description	Contract	Reimbursables	Total	Contract Amount	$ 753,419.00
10/6/2014	David E Jensen	$ 1,950.00	$ -	$ 1,950.00	Change Order #1	
11/5/2014	David E Jensen	$ 4,806.25	$ -	$ 4,806.25	Change Order #2	
12/5/2014	David E Jensen	$ 3,197.50	$ -	$ 3,197.50	Change Order #3	
1/5/2015	David E Jensen	$ 1,807.50	$ -	$ 1,807.50	Change Order #4	
2/6/2015	David E Jensen	$ 9,615.00	$ 25.50	$ 9,640.50	Change Order #5	
3/5/2015	David E Jensen	$ 12,252.00	$ -	$ 12,252.00		
4/2/2015	David E Jensen	$ 17,134.40	$ -	$ 17,134.40		
5/18/2015	David E Jensen	$ 17,794.60	$ 172.00	$ 17,966.60		
5/18/2015	David E Jensen (BP)	$ -	$ 7,127.16	$ 7,127.16		
6/9/2015	David E Jensen	$ 5,682.50	$ 236.67	$ 5,919.17		
7/8/2015	David E Jensen	$ 3,585.00	$ 1,390.92	$ 4,975.92		
8/10/2015	David E Jensen	$ 2,303.75	$ 300.00	$ 2,603.75		
9/10/2015	David E Jensen	$ 1,975.00	$ -	$ 1,975.00		
10/10/2015	David E Jensen					
11/10/2015	David E Jensen					
12/10/2015	David E Jensen					
1/10/2016	David E Jensen					
2/10/2016	David E Jensen					
3/10/2016	David E Jensen					
4/10/2016	David E Jensen					
Total		$ 82,103.50	$ 9,252.25	$ 91,355.75	Total	$ 868,419.00
10.5% of Estimated Design Cost:		$ 91,184.00				
Remaining		$ 9,080.50				

BSK Associates Engineers & Laboratories
Vancouver Analytical Laboratory
2517 E. Evergreen Blvd.
Vancouver, WA98661
360-750-0055 (Main)
360-750-0057 (FAX)

V5H0043
8/07/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/03/15	**12:00 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
S-1 3314 281st St	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:* S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number:
Unsatisfactory routine Collect Date:
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/04/2015 14:50**
Date Analyzed: **8/4/2015 15:35 JRD**	Date Reported: **08/05/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-04301	**08/05/2015 17:05:11 EMC**

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360-750-0057 (FAX)

V5H0043
8/07/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/03/15	**12:15 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
S-2 26200 Sandridge Rd	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:* S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number:
Unsatisfactory routine Collect Date:
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-__ __ __ __ __ __	**08/04/2015 14:50**
Date Analyzed: **8/4/2015 15:35 JRD**	Date Reported: **08/05/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-04302	**08/05/2015 17:05:11 EMC**

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Vancouver, WA98661
360-750-0055 (Main)
360-750-0057 (FAX)

V5H0043
8/07/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/03/15	**12:30 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
S-3 17149 264th Pl	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:* S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number:
Unsatisfactory routine Collect Date:
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/04/2015 14:50**
Date Analyzed: **8/4/2015 15:35 JRD**	Date Reported: **08/05/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-04303	**08/05/2015 17:05:11 EMC**

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Vancouver Analytical Laboratory
2517 E. Evergreen Blvd.
Vancouver, WA98661
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360-750-0057 (FAX)

V5H0180
8/14/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/10/15	**12:30 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **63000C**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
S-11 1311 197th	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number:
Unsatisfactory routine Collect Date:
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

MC Notify
[X] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [X] *E.Coli - Absent*

[ ] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/11/2015 12:58**
Date Analyzed: **8/11/2015 14:25 JRD**	Date Reported: **08/12/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-18001	**08/12/2015 16:01:45 EMC**

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Vancouver, WA98661
360-750-0055 (Main)
360-750-0057 (FAX)

V5H0180
8/14/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/10/15	**12:15 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **63000C**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
S-10 21401 Pacific Way	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number:
Unsatisfactory routine Collect Date:
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY	**DRINKING WATER RESULTS**	LAB USE ONLY
[ ] **Unsatisfactory** Total Coliform Present **and** [ ] *E.Coli - Present* [ ] *E.Coli - Absent*		[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/11/2015 12:58**
Date Analyzed: **8/11/2015 14:25 JRD**	Date Reported: **08/12/2015**
Sample Number (DOH number plus five digits): **144-18002**	Lab Use Only: Reviewed **08/12/2015 16:01:45 EMC**

BSK Associates Engineers & Laboratories
Vancouver Analytical Laboratory
2517 E. Evergreen Blvd.
Vancouver, WA98661
360-750-0055 (Main)
360-750-0057 (FAX)

V5H0180
8/14/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/10/15	**12:00 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **63000C**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
S-9 2121700 O St	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number:
Unsatisfactory routine Collect Date:
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

DRINKING WATER RESULTS

LAB USE ONLY	LAB USE ONLY
[ ] **Unsatisfactory** Total Coliform Present **and** [ ] *E.Coli - Present* [ ] *E.Coli - Absent*	[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/11/2015 12:58**
Date Analyzed: **8/11/2015 14:25 JRD**	Date Reported: **08/12/2015**
Sample Number (DOH number plus five digits): **144-18003**	Lab Use Only: Reviewed **08/12/2015 16:01:45 EMC**

BSK Associates Engineers & Laboratories
Vancouver Analytical Laboratory
2517 E. Evergreen Blvd.
Vancouver, WA98661
360-750-0055 (Main)
360-750-0057 (FAX)

V5H0252
8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**8:00 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
Well 1	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **2. Repeat Sample** (after unsat. routine)
[ ] Distribution System
[X] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from W

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-25201	**08/14/2015 16:04:56 EMC**

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360-750-0055 (Main)
360-750-0057 (FAX)

V5H0252
8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**8:15 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:
Well 4

Special instructions or comments:

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from W

[ ] **4. Sample Collected for information only**

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[X] Source Groundwater Rule (GWR)
(Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits): **144-25202**	Lab Use Only: Reviewed **08/14/2015 16:04:56 EMC**

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360-750-0057 (FAX)

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8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**8:30 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**
System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
Well 5	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some spring*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[X] Source Groundwater Rule (GWR)
(Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits): **144-25203**	Lab Use Only: Reviewed **08/14/2015 16:04:56 EMC**

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8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**9:00 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
Well 6	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WI

[ ] **4. Sample Collected for information only**

[ ] **2. Repeat Sample** (after unsat. routine)
[ ] Distribution System
[X] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits): **144-25204**	Lab Use Only: Reviewed **08/14/2015 16:04:56 EMC**

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COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**8:45 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
Well 8	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

[X] **2. Repeat Sample** (after unsat. routine)
[ ] Distribution System
[X] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-25205	**08/14/2015 16:04:56 EMC**

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V5H0252
8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**9:20 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
1309 197th	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

[X] **2. Repeat Sample** (after unsat. routine)
[X] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-25206	**08/14/2015 16:04:56 EMC**

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V5H0252
8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**9:10 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
Sample 5-11 1311 197th	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

[X] **2. Repeat Sample** (after unsat. routine)
[X] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-25207	**08/14/2015 16:04:56 EMC**

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V5H0252
8/18/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/13/15	**9:30 am**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected: **1313 197th**	Special instructions or comments:

Type of Sample (must check only **one** box of #1 through #4 listed below)

[ ] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S _____
Public systems must provide source number from WFI

[X] **2. Repeat Sample** (after unsat. routine)
[X] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/13/2015 13:57**
Date Analyzed: **8/13/2015 14:25 JRD**	Date Reported: **08/14/2015**
Sample Number (DOH number plus five digits): **144-25208**	Lab Use Only: Reviewed **08/14/2015 16:04:56 EMC**

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V5H0311
8/21/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/17/15	**12:00 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
2807 270th Place	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S S14
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code: **MICR-**___ ___ ___ ___ ___ ___	Date and Time Received: **08/18/2015 13:01**
Date Analyzed: **8/18/2015 14:05 JRD**	Date Reported: **08/19/2015**
Sample Number (DOH number plus five digits): **144-31101**	Lab Use Only: Reviewed **08/19/2015 17:02:13 EMC**

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V5H0311
8/21/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/17/15	**12:15 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
26500 Vernon Ave	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S S15
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/18/2015 13:01**
Date Analyzed: **8/18/2015 14:05 JRD**	Date Reported: **08/19/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-31102	**08/19/2015 17:02:13 EMC**

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V5H0311
8/21/2015

COLIFORM BACTERIA ANALYSIS

Date Sample Collected	Time Sample Collected	County:
08/17/15	**12:30 pm**	**Pacific**

Type of Water System:
[X] Group A [ ] Group B [ ] Other:

Group A and Group B Systems - Provide Water Facilities Inventory (WFI):
ID# : **630000**

System Name: **North Beach Water Districts**

Contact Person: **Dennis Schweizer**

Day Phone: **(360) 244-0047 ext:**	Cell:
Eve. Phone:	Fax: **(360) 665-4641**

Send results to:
North Beach Water District
Dennis Schweizer
PO Box 618, Ocean Park, WA 98640

Sample Information

Sample collected by: **Dennis Schweizer**

Sample location where sample was collected:	Special instructions or comments:
227th & Birch	

Type of Sample (must check only **one** box of #1 through #4 listed below)

[X] **1. Routine Distribution Sample**
Chlorinated: [ ] Yes [X] No
Chlorine Residual: Total: Free:

[ ] **3. Raw Water Source Sample**
[ ] *E.Coli - GWR source sample*
[ ] *Fecal - Surface, GWI, some springs*
[ ] *Other:*
S S20
Public systems must provide source number from WFI

2. Repeat Sample (after unsat. routine)
[ ] Distribution System
[ ] Source Groundwater Rule (GWR) (Population of 1,000 or less)
Unsatisfactory routine lab number: 144-0180-01
Unsatisfactory routine Collect Date: 8/10/15
Chlorinated: [ ] Yes [ ] No
Chlorine Residual: Total: Free:

[ ] **4. Sample Collected for information only**

DRINKING WATER RESULTS

LAB USE ONLY — LAB USE ONLY

[ ] **Unsatisfactory** Total Coliform Present **and**
[ ] *E.Coli - Present* [ ] *E.Coli - Absent*

[X] **Satisfactory**

Replacement Sample Required:
[ ] Sample too old (>30 hours) [ ] TNTC
[ ] Improper container [ ] Turbide culture

Bacterial Density Results: Plate Count _____/ml. E.coli _____/100ml.
Total Coliform _____/100ml. Fecal Coliform _____/100ml.

Method Code:	Date and Time Received:
MICR-___ ___ ___ ___ ___ ___	**08/18/2015 13:01**
Date Analyzed: **8/18/2015 14:05 JRD**	Date Reported: **08/19/2015**
Sample Number (DOH number plus five digits):	Lab Use Only: Reviewed
144-31103	**08/19/2015 17:02:13 EMC**

ALS Environmental
1317 South 13th Avenue
Kelso, WA 98626
ARSENIC TEST PANEL
for the State of Washington

REPORT OF ANALYSIS

Date Collected: (MM/DD/YY)	8/10/2015	System Group: (Select A, B, Other)	**A**
Water System ID Number:	63000C	System Name:	**North Beach Water**
Lab Sample Number:	01787391	County:	**Pacific**
Sample Location:	**NWF Sampler**	Source Number(s):	**S06**
Sample Purpose:		Date Received:	**08/10/15**
Select One		Date Analyzed:	**08/14/15**
X	RC- Routine/Compliance	Date Reported:	**08/28/15**
	C- Confirmation	Comments:	**K1508739-001**
	Investigative		
	Other(specify)		
Sample Composition:		**Sample Type: (Select One)**	
Select One			Pre-Treatment/Raw
X	S- Single Source	**X**	Post-Treatment/Finished
	B- Blended (List multiple source numbers)		Unknown
	C- Composite	Sample Collected by:	**Dennis S.**
	D- Distribution sample	Phone Number:	**360-665-4144**
Send Report to:	Bill Neal **WA DOH**	**Bill to:**	

DOH #	ANALYTE	RESULTS	UNITS	SRL	TRIGGER	MCL	MCL Exceeded check if yes	Method	Analyst
0004	ARSENIC	**0.008**	mg/L	0.001	0.010	0.010		200.8	**GJ**

NOTES:

Sample Result Below MCL

SRL (State Reporting Level): indicates the minimum reporting level required by the Washington Department of Health (DOH).
Trigger Level: DOH Drinking Water Response Level. Systems with compounds detected at concentrations in excess of this level are required to take additional samples. Contact your regional DOH office for further information.
MCL (Maximum Contaminant Level): If the contaminant amount exceeds the MCL, immediately contact your regional DOH office.
NA (Not Analyzed): in the results column indicates this compound was not included in the current analysis.
ND (Not Detected): in the results column indicates this compound was analyzed and not detected at a level greater than or equal to the SRL.
<(0.00X): indicates the compound was not detected in the sample at or above the concentration indicated. (lab mdl) lower than the SRL.

Comments: