

# ANNUAL REPORT

## FISCAL YEAR 2015-2016



Merritt Lake



Service Center



Pony Creek Treatment Plant

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## **Coos Bay-North Bend Water BOARD OF DIRECTORS' MESSAGE**

*“Providing a Reliable,  
Quality Service Meeting the  
Present and Future Needs of  
Our Communities”*

*Left to right standing: Mr. J. Gregory Solarz, Chair  
Ms. Melissa Cribbins, Secretary  
Charles J. Sharps, Ph.D., Vice-Chair  
Mr. Robert Dillard, Member*

Thank you for reviewing the 2015-2016 Coos Bay-North Bend Water Board's Annual Report. You will find information related to your utility's projects, finances, and water quality as well as an overview of the operations of the Coos Bay-North Bend Water Board and the services it provides. Additional information about your utility can be found on our website: [www.cbnbh2o.com](http://www.cbnbh2o.com)

America's infrastructure of roads, sewers, bridges, and water systems are at capacity and/or are wearing out. With our dedicated staff and General Manager's guidance and leadership, the Board has been able to anticipate potential shortfalls in our water system and has planned and scheduled Water Board operations, weeks, months and years ahead of time.

As members of your Water Board, we encourage your comments and suggestions. Please contact staff at the Water Board or ask to be connected to one of us at (541)267-3128. We respect your opinions and advice in operating your utility. For a closer look at your facilities, consider attending a board meeting or arranging for a tour.

### **BOARD OF DIRECTORS**

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J. Gregory Solarz, Chair

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Charles J. Sharps, Ph.D., Vice-Chair

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Melissa Cribbins, Secretary

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Robert Dillard, Member

## Water Utility Infrastructure Inventory

### Water Treatment Plants

Pony Creek Filtration Plant—12 MGD\*  
(North Spit Treatment Plant—1 MGD\*  
Non-functional-emergency use only)

### Surface Water Storage

- Upper Pony Creek Dam and Reservoir  
6,230 AC-FT
- Merritt Lake Dam and Reservoir  
385 AC-FT
- Joe Ney Dike, Reservoir and Pump  
Station  
275 AC-FT

### Dunes Aquifer System

18 Wells  
12 Miles of Pipe  
25 Test Wells (Piezometers)  
1 Booster Pump Station  
3 Monitoring Wells

### Distribution System

12,945 Water Services  
258 Miles of Pipe  
1,195 Hydrants  
5,494 Control and Hydrant Valves



\*MGD = Million Gallons per Day  
AC-FT= Acre Feet (325,830 gallons)

Pump Station Name	Associated Storage Facility
6th and I Street	10th & I Street Reservoir
10th and E Street	14th & F Street Reservoir
10th and Ingersol	Ingersol Reservoir
13th Court	Isthmus Heights Reservoir
14th and Nutwood Avenue	High Level Reservoir
Brights Mill	Brights Mill Reservoir
California Street	Libby Reservoir
Crestview	High Level Reservoir
Everest Avenue	Everest Reservoir
Flanagan Street	Bay Park Reservoir
Glasgow	Glasgow Reservoir
Glasgow Heights	Glasgow Reservoir
Hauser	Hauser Reservoir
High Level	High Level Reservoir
Market Street	Clearwell
Millington	Millington Reservoir
Minnesota Street	Clearwell
Newmark and Ash	Radar Reservoir
Newmark and Tremont	Union Avenue Reservoir
Oregon Street	Libby Reservoir
Pennsylvania Avenue	Libby Reservoir
Pigeon Point	Charleston Reservoir
Seven Devils	Charleston Reservoir
Shinglehouse Slough Road	Brights Mill Reservoir
Shorewood	Shorewood Reservoir
Sierra Avenue	Everest Reservoir
Telegraph Hill	High Level Reservoir
Terramar	Terramar Reservoir
Union Avenue High Level	High Level Reservoir
Wisconsin Avenue	Charleston Reservoir
Woodlawn High Level	High Level Reservoir



## Projects and Equipment Included in Fiscal Year 2015-16 Budget

No.	Project Listing	Estimated Cost
1	Install 12" main on South Empire Blvd, 4,200', Retire 4,200' 10" AC, from Reserve Funding .....	\$570,900
2	Install 2" on Isabelle from Winsor South 336', Retire 336' 2" GI .....	36,300
3	Install 2" on North 11 <sup>th</sup> and Redwood 440', Retire 540' 2" GI.....	47,500
4	Install 2" PVC on Minnesota 150', Retire 150' 2" GI .....	17,600
5	Install 2" on 7 <sup>th</sup> Avenue from Coos River Highway North 249', Retire 249' 2" AC .....	28,100
6	Install 6" PVC on Union at Grant Circle 300', Retire 220' 6" CI.....	44,300
7	Install 2" main on Everest Road for 3 <sup>rd</sup> Level Pump Station, 480' .....	36,500
8	Install 2" on Barham Terrace from Ocean East, 300', Retire 272' 2" GI .....	27,500
9	Install 2" main on North Main in Empire, 230', Retire 230' 2" GI .....	14,400
10	Wisconsin and Pigeon Point Pump Station Replacement – Preliminary Design .....	5,800
11	Pigeon Point Pump Station Roof.....	25,200
12	Everest 3 <sup>rd</sup> Level Pump Station .....	91,300
13	California Pump Station Manifold Replacement .....	5,300
14	Telegraph Pump Station Manifold Replacement .....	7,300
15	Ingersoll Pump Station Manifold Replacement .....	6,500
16	Flanagan and 6 <sup>th</sup> and I Pump Station Mag Meter Installations .....	22,300
17	Re-plumb Tremont Pump Station.....	55,600
18	Well Meter Replacements .....	6,500
19	Taylor Units for Influent Channel and Pump Well.....	3,300
20	Hydraulic to Electronic Scale Conversion Kits (2) .....	5,800
21	Meter Replacements.....	21,800
22	Distribution System Asbuilding and Mapping .....	20,000
23	McCullough Bridge 16" Steel Pipe Zinc Coating.....	38,800
<b>Total Project Costs</b>		<b>\$1,138,600</b>

## Projects and Equipment Included in Fiscal Year 2015-16 Budget

No.	Project Listing (Reserve Funded)	Estimated Cost
1	Install 12" main on South Empire Blvd, 4,200', Retire 4,200' 10" AC, from Reserve Funding .....	\$846,600
2	Matson Creek Mitigation .....	646,000
3	Seismic Analysis of Merritt Dam and Spillway.....	134,200
4	Cathodic Protection at Point Adams – Ground Bed.....	20,800
5	Telemetry Units at Terramar Pump Station and Reservoir .....	52,500
6	Fabric and Rock Yard between Treatment Plant and Basins .....	23,300
7	Fish Flow Telemetry .....	12,000
8	Ammoniator .....	11,200
<b>Total Project Costs from Reserves</b>		<b>\$1,746,600</b>

No.	Equipment Listing	Estimated Cost
1	Crew Truck (#5 Distribution) .....	63,800
2	Lawn Tractor.....	5,000
3	Tack Trailer .....	16,500
4	Equipment Trailer .....	25,000
5	Service Truck.....	22,000
6	Engineering Truck.....	25,000
7	Vehicle Accessories.....	7,100
8	Magnetic Locator for Engineering .....	800
9	Scrap Management Storage Bins (3) .....	2,700
10	Laptops for Crew Trucks (3) .....	9,000
11	Weedeater (2).....	1,000
12	Billing Laser Printer.....	2,000
13	Finance Laser Printers (2) .....	2,000
14	Jumping Jack Compactors (3) .....	9,600
15	Combo Meter/Backflow Assembly (2) .....	4,600
<b>Total Equipment Costs</b>		<b><u>\$196,100</u></b>
<b>Total Estimated Capital Expenditures</b>		<b><u>\$3,081,300</u></b>

## Frequently Asked Questions and Utility Statistics Fiscal Year 2015-2016

***Q: How many customers does the Water Board serve?***

A: As of June 30, 2016, our customer total is 12,945, which includes 10,025 customers inside the city limits of Coos Bay and North Bend and 2,920 customers outside the city limits. The total population served by the Water Board is approximately 34,500 within a service area of approximately 100 square miles.

***Q: How much per month does the average residential customer spend for water?***

A: The rates are different for customers inside the city limits than customers outside the city limits. The average monthly residential bill inside the city limits is \$27.49 and outside the city limits is \$39.25. The average residential customer uses 4,413 gallons of water monthly.

***Q: What does it take to get the water from the treatment plant to the customer's tap?***

A: More infrastructure than most people might imagine!

When the water leaves the treatment plant, it goes into the distribution system which consists of 258 miles of various sizes of pipeline, approximately 5,494 control and hydrant valves within those pipelines, and approximately 1,195 fire hydrants. It takes 31 pump stations within the distribution system to get the water to customers at adequate pressure, plus 19 storage reservoirs located throughout the system.

***Q: Where does the water come from that's treated by Pony Creek Water Treatment Plant?***

A: There are two surface water reservoirs upstream of the treatment plant, Upper Pony Creek and Merritt Reservoirs. The larger, Upper Pony Creek Reservoir, can hold 2 billion gallons of water; and Merritt Reservoir can hold 125 million gallons.

There is a third surface water storage area at Joe

Ney Slough which can store 90 million gallons. Water is pumped from Joe Ney through a pipeline into the Upper Pony Creek Reservoir when the need for more water arises.



***Q: How much water is produced in a year for customers?***

A: The total amount of water produced for customers this fiscal year was 1,328 million gallons of treated water and 175 million gallons of untreated water. The average daily demand for treated water was 3.64 million gallons and 0.479 million gallons for untreated water. The demand peaked at 6.404 million gallons per day for treated water in fiscal year 2015-16.

***Q: Does all the water produced reach our customers?***

A: Approximately 92.5% of the water produced at Pony Creek Water Treatment Plant reaches its ideal destination. Non-revenue water is the rest of the water that has been produced and is "lost" before it reaches the customer. Losses can be real losses such as leaks, water used for fire-fighting purposes, or apparent losses such as theft or metering inaccuracies. A team of Water Board staff meets on a regular basis to discuss potential improvements that can be made. The Water Board is in compliance with the latest Oregon rules and regulations, keeping non-revenue water loss below 10%.



***Q: How many water treatment plants are there?***

A: There are two. The main treatment plant is Pony Creek Water Treatment Plant. It is located on Ocean Boulevard in Coos Bay and has a production capacity of 12 million gallons per day (MGD). The North Spit Water Treatment Plant is located on TransPacific Lane in North Bend and has a capacity of 1 MGD. If an emergency arises, the North Spit Plant can treat water from the dunes well system to supplement the needs of Water Board customers.

***Q: How many wells are in the dunes?***

A: There are 18 production wells in the dunes which can produce up to 4 million gallons per day of untreated water.

<p style="text-align: center;"><b>Coos Bay-North Bend Water Board</b>  <b>Statement of Net Position as of June 30, 2016</b></p>
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**Assets:**

Current Assets:

Cash and Cash Equivalents	\$ 4,122,927	
Accounts Receivable - Water (Net)	393,447	
Accounts Receivable - Sewer	314,689	
Accounts Receivable - Other	9,239	
Inventory	446,788	
Prepaid Expenses	22,363	
Clearing Account	106,529	
Other Work in Progress	<u>116,708</u>	
Total Current Assets		\$ 5,532,690

Restricted Cash Assets		58,591
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Utility Plant:

Utility Plant (Net of Accumulated Depreciation)	\$63,846,245	
Construction in Progress	<u>1,313,832</u>	
Total Utility Plant		<u>65,160,077</u>

Total Assets:		<u>\$70,751,358</u>
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Deferred Outflow of Resources:		<u>\$ 668,206</u>
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**Liabilities and Net Assets:**

Current Liabilities:

Accounts Payable	\$ 258,916	
Accrued Salaries, Payroll Taxes and Insurance	157,715	
Accrued Interest on Long-term Debt	197,120	
Accrued Vacation	128,156	
Accrued Other Expenses	19,495	
Current Portion of Long-term Debt	1,099,544	
Sewer Service Collections Payable to Cities	616,866	
Sewer Service Receivables Payable to Cities	<u>314,689</u>	
Total Current Liabilities		\$ 2,792,501

Liabilities Payable from Restricted Assets		58,591
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Net Pension Liability		1,621,500
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Long-Term Liabilities:

Bonds Payable (Net of Current Portion)	<u>\$15,207,321</u>	
Total Long-Term Liabilities		<u>15,207,321</u>

Total Liabilities:		<u>19,679,913</u>
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Net Assets:

Investment in Capital Assets, Net of Related Debt	\$48,853,212	
Unrestricted	<u>2,886,439</u>	
Total Net Assets		<u>\$51,739,651</u>

## 2016 WATER QUALITY STATISTICS

One of the most important focuses of the Water Board is to provide high quality drinking water to our customers. Thousands of tests are performed annually as part of our quality control program and to insure compliance with state and federal regulations. The following results are reflective of 2016 reporting requirements.

Abbreviations and units used in trace concentration measurements issued by the Oregon Health Authority:

Waiver = non-vulnerability to contaminant

NTU = nephelometric turbidity unit

mg/L = milligrams per liter

pCi/L = picocuries per liter

MCL = maximum contaminant level

MFL = million fibers per liter (EPA)

ug/L = micrograms per liter

ND = not detected

CU = color units

< = less than

> = greater than

AL = action level

P/A = presence/absence

PARAMETER	UNIT	MCL	RESULTS
<b>MICROBIOLOGICAL</b>			
Turbidity	NTU	0.3	0.07
Coliform	P/A	5% positive	483 - Absent 1 - Present
<b>INORGANICS</b>			
Antimony	mg/L	0.006	ND @ 0.0002
Arsenic	mg/L	0.01	ND @ 0.001
Asbestos	MFL	7.0	ND
Barium	mg/L	2.0	ND @ 0.05
Beryllium	mg/L	0.004	ND @ 0.0001
Cadmium	mg/L	0.005	ND @ 0.0001
Chromium	mg/L	0.1	ND @ 0.005
Cyanide	mg/L	0.2	ND @ 0.003
Fluoride	mg/L	2 – 4	0.64
Lead	mg/L	0.015-AL	• 0.0018
Mercury	mg/L	0.002	ND @ 0.0002
Nickel	mg/L	0.1	ND @ 0.0005
Total Nitrate (as N)	mg/L	10.0	0.49
Nitrate + Nitrite (as N)	mg/L	10.0	0.37
Nitrite (as N)	mg/L	1.0	ND @ 0.05
Selenium	mg/L	0.05	0.0005820
Sodium (advisory)	mg/L	20	7.69
Thallium	mg/L	0.002	ND @ .0005
<b>SYNTHETIC ORGANIC CHEMICALS</b>			
2, 4-D	mg/L	0.07	ND @ 0.001
2,4,5-TP (Silvex)	mg/L	0.05	ND @ 0.005
Adipates	mg/L	0.4	ND @ 0.004
Alachlor	mg/L	0.002	ND @ 0.0002
Atrazine	mg/L	0.003	ND @ 0.0003
Benzoapyrene	mg/L	0.0002	ND @ 0.00004
BHC-gamma (Lindane)	mg/L	0.0002	ND @ 0.00002
Carbofuran	mg/L	0.04	ND @ 0.004
Chlordane	mg/L	0.002	ND @ 0.00025
Dalapon	mg/L	0.2	ND @ 0.005
Dibromochloropropane	mg/L	0.0002	ND @ 0.0000188
Dinoseb	mg/L	0.007	ND @ 0.0005
Dioxin	mg/L	0.00000003	Waiver
Diquat	mg/L	0.02	ND @ 0.002
Endothall	mg/L	0.1	ND @ 0.01
Endrin	mg/L	0.002	ND @ 0.00002
Ethylene Dibromide	mg/L	0.00005	ND @ 0.00001
Glyphosate	mg/L	0.7	ND @ 0.05
Heptachlor Epoxide	mg/L	0.0002	ND @ 0.00002
Heptachlor	mg/L	0.0002	ND @ 0.00002
Hexachlorobenzene	mg/L	0.001	ND @ 0.0001
Hexachlorocyclopentadiene	mg/L	0.05	ND @ 0.0005

•90<sup>th</sup> percentile for Lead and Copper

PARAMETERS	UNIT	MCL	RESULTS
<b>SYNTHETIC ORGANIC CHEMICALS cont'd.</b>			
Methoxychlor	mg/L	0.04	ND @ 0.0001
Pentachlorophenol	mg/L	0.001	ND @ 0.0001
Phthalates	mg/L	0.006	ND @ 0.0006
Picloram	mg/L	0.5	ND @ 0.005
Polychlorinated Biphenyls	mg/L	0.0005	ND @ 0.0001
Simazine	mg/L	0.004	ND @ 0.0004
Toxaphene	mg/L	0.003	ND @ 0.0003
Vydate (Oxamyl)	mg/L	0.2	ND @ 0.004
<b>VOLATILE ORGANIC CHEMICALS*</b>			
Trihalomethanes **	mg/L	0.08	0.031
Halo Acetic Acids ***	mg/L	0.06	0.032
1,1,1,2-Tetrachloroethane *	mg/L		ND @ 0.0005
1,1,1-Trichloroethane	mg/L	0.2	ND @ 0.0005
1,1,2,2-Tetrachloroethane *	mg/L		ND @ 0.0005
1,1,2-Trichloroethane	mg/L	0.005	ND @ 0.0005
1,1-Dichloroethane *	mg/L		ND @ 0.0005
1,1-Dichloroethylene	mg/L	0.007	ND @ 0.0005
1,1-Dichloropropene *	mg/L		ND @ 0.0005
1,2,3-Trichloropropane *	mg/L		ND @ 0.0005
1,2,4-Trichlorobenzene	mg/L	0.07	ND @ 0.0005
1,2-Dichloroethane	mg/L	0.005	ND @ 0.0005
1,2-Dichloropropane	mg/L	0.005	ND @ 0.0005
1,3-Dichloropropane *	mg/L		ND @ 0.0005
1,3-Dichloropropene *	mg/L		ND @ 0.0005
2,2-Dichloropropane *	mg/L		ND @ 0.0005
Benzene	mg/L	0.005	ND @ 0.0005
Bromobenzene *	mg/L		ND @ 0.0005
Bromodichloro-methane	mg/L		0.0051
Bromoform	mg/L		ND @ 0.0005
Bromomethane *	mg/L		ND @ 0.0005
Carbon Tetrachloride	mg/L	0.005	ND @ 0.0005
Chloroethane *	mg/L		ND @ 0.0005
Chloroform	mg/L		0.0035
Chloromethane *	mg/L		ND @ 0.0005
cis-1,2 Dichloroethylene	mg/L	0.07	ND @ 0.0005
Dibromochloro-methane	mg/L		0.00367
Dibromomethane	mg/L		ND @ 0.0005
Dichloromethane	mg/L	0.005	ND @ 0.0005
Ethylbenzene	mg/L	0.7	ND @ 0.0005
m-Dichlorobenzene *	mg/L		ND @ 0.0005
Methyl tert-butyl ether *	mg/L		ND @ 0.0005
Monochlorobenzene	mg/L	0.1	ND @ 0.0005
o-Chlorotoluene *	mg/L		ND @ 0.0005
o-Dichlorobenzene	mg/L	0.6	ND @ 0.0005
p-Chlorotoluene *	mg/L		ND @ 0.0005
p-Dichlorobenzene	mg/L	0.075	ND @ 0.0005
Styrene	mg/L	0.1	ND @ 0.0005
Tetrachloroethylene	mg/L	0.005	ND @ 0.0005
Toluene	mg/L	1.0	ND @ 0.0005
trans-1,2-Dichloroethylene	mg/L	0.1	ND @ 0.0005
Trichloroethylene	mg/L	0.005	ND @ 0.0005
Vinyl Chloride	mg/L	0.002	ND @ 0.0005
Xylenes (total)	mg/L	10.0	ND @ 0.0005
<b>RADIONUCLIDES-NATURAL ORIGIN</b>			
Gross Alpha	pCi/L	15	ND
Combined Radium 226/228	pCi/L	5	2.5
Combined Uranium	ug/L	30	ND @ 1.0
<b>SECONDARY CONTAMINANT</b>			
Color	CU	15	3
pH		6.5-8.5	8.3
Hardness	mg/L	250.0	12
Copper	mg/L	1.3-AL	• 0.0301
Iron	mg/L	0.3	0.07
Manganese	mg/L	0.05	0.016

\* Blanks under MCL represent unregulated volatile organic chemicals

\*\* Trihalomethanes include: Bromodichloromethane, Bromoform, Chloroform, Dibromochloromethane

\*\*\* Halo Acetic Acids include: Dibromoacetic acid, Dichloroacetic acid, Monobromoacetic acid, Monochloroacetic acid, Trichloroacetic acid





**VISIT OUR WEBSITE AT**

**[www.cbnbh2o.com](http://www.cbnbh2o.com)**

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**Administrative Assistant**

Personnel