ANNUAL REPORT

FISCAL YEAR 2014-2015













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

Coos Bay-North Bend Water BOARD OF DIRECTORS' MESSAGE

"Providing a Reliable,
Quality Service Meeting the
Present and Future Needs of
Our Communities"

Thank you for reviewing the 2014-2015 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

No doubt you are aware that America's infrastructure of roads, sewers, bridges, and water systems are at capacity and/or are wearing out. Fortunately, with our 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

Melissa Cribbins, Chair	Richard Vigue, Vice-Chair
J. Gregory Solarz, Secretary	Charles J. Sharps, Ph.D., Member

Water Utility Infrastructure Inventory

Water Treatment Plants

Pony Creek Filtration Plant—12 MGD* North Spit Treatment Plant—1 MGD*

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 Wells12 Miles of Pipe25 Test Wells (Piezometers)1 Booster Pump Station3 Monitoring Wells

Distribution System

12,839 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 2014-15 Budget

No.	Project Listing	Estimated Cost
1	Install 2" main on 5 th Avenue North of E Street, 330', Retire 330' 2" GI	\$ 19,400
2	Install 8" on Sheridan from Ohio to Maryland, 920', Retire 920' 6" CI	180,400
3	Install 16" main on Pine and North 8 th from Bayshore Drive to Koosbay Boulevard,	
	2000', Retire 2000' 14" CI	476,000
4	Install 6" PVC on State Street from Chester west 335', Retire 335',6" CI	35,500
5	Install 2" on E Street from 9 th Avenue west 738', Retire 738' 2" AC	22,900
6	Install 6" PVC on Madrona from California to Virginia 360', Retire 370' 2" GI	35,300
7	Install 2" main Everest Road for 3 rd Level Pump Station, 480'	29,200
8	Install 6" PVC on Juniper from 13 th Street east 260' plus 2" PVC on Juniper 201',	40.000
0	Retire 461' 2" GI	40,000
9	Install 2" on Barham Terrace from Ocean east, 300', Retire 272' 2" GI	22,000
10 11	Install 2" on South Barry, 300', Retire 272' 2" GI	11,200
12	Bay Park Reservoir Replacement Glasgow Reservoir Roof	232,300 11,000
13	Ingersoll Reservoir Fence using \$7,500 in Grant Funds	17,500
14	Englewood Water System Planning and Preliminary Design	19,500
15	Everest 3 rd Level Pump Station	73,000
16	Terramar Pump Station Upgrade Pipe and Pump	18,000
17	Well Meter Replacements	4,000
18	Chlorine Tank Lifting Bar and Digital Weight Indicator	4,600
19	Vacuum Chlorinators	17,800
20	Telemetry Units at Shinglehouse Pump Station and Brights Mill Pump Station and	,
	Reservoir	35,300
21	Telemetry Units at Terramar Pump Station and Reservoir	20,700
22	Meter Replacements	17,000
23	Distribution System Asbuilting and Mapping	20,000
24	Cathodic Protection at Point Adams - Ground Bed	16,700
25	Service Center Upstairs Carpet and Baseboard Replacement	10,000
26	McCullough Bridge 16" Steel Pipe Zinc Coating	31,000
27	Telemetry Units at Hauser Pump Station and Reservoir	17,700
28	Cathodic Protection at Point Adams - Rectifier	9,600
	Total Project Costs	\$1,447,600

Projects and Equipment Included in Fiscal Year 2014-15 Budget Continued

No.	Equipment Listing	Estimated Cost
1 2 3 4 5 6 7 8 9 10	4WD Pickup (#8 Engineering) 2WD Pickup (#7 Meter Reader) Forklift (#85 Distribution) Valve Maintenance Trailer Vehicle Accessories Computer Server Company-wide Computer Upgrade to Windows 7 Upgrade AutoCad Purchase Civil 3D Software Laser Printer for Accounting Meter Reading Autogun (2) Computer Equipment for Customer Service	\$ 24,200 19,800 47,000 60,000 4,000 7,000 20,000 10,500 2,000 2,800 3,200
	Total Equipment Costs Total Estimated Capital Expenditures	<u>\$200,500</u> \$1.648.100

Frequently Asked Questions and Utility Statistics Fiscal Year 2014-2015

Q: How many customers does the Water Board serve?

A: As of June 30, 2015, our customer total is 12,875, which includes 9,983 customers inside the city limits of Coos Bay and North Bend and 2,892 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 \$25.78 and outside the city limits is \$35.61. The average residential customer uses 4,249 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.



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

A: The total amount of water produced for customers this fiscal year was 1,336 million gallons of treated water and 169 million gallons of untreated water. The average daily demand for treated water was 3.66 million gallons and 0.466 million gallons for untreated water. The demand peaked at 7.086 million gallons per day for treated and 0.455 million gallons per day for untreated water in fiscal year 2014-15.

Q: How many water treatment plants are there?

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

Q: How many wells are in the dunes?

meet the needs of Water Board

customers.

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

Coos Bay-North Bend Water Board Statement of Net Position as of June 30, 2015

Assets:		
Current Assets: Cash and Cash Equivalents Accounts Receivable - Water (Net) Accounts Receivable - Sewer Accounts Receivable - Other Inventory Prepaid Expenses Clearing Account Other Work in Progress Total Current Assets	\$ 4,585,813 309,160 394,436 3,520 396,830 4,688 85,030 116,801	\$ 5,896,278
Restricted Cash Assets		115,689
Utility Plant: Utility Plant (Net of Accumulated Depreciation) Construction in Progress Total Utility Plant	\$61,795,956 	<u>63,584,611</u>
Total Assets:		\$69,596,578
Deferred Outflow of Resources:		\$ 590,548
Liabilities and Net Assets: Current Liabilities: Accounts Payable Accrued Salaries, Payroll Taxes and Insurance Accrued Interest on Long-term Debt Accrued Vacation Accrued Other Expenses Current Portion of Long-term Debt Sewer Service Collections Payable to Cities Sewer Service Receivables Payable to Cities Total Current Liabilities	\$ 364,944 126,542 211,018 153,552 19,865 980,062 634,447 347,271	\$ 2,837,701
Liabilities Payable from Restricted Assets		115,689
Net Pension Liability		1,377,976
Long-Term Liabilities: Bonds Payable (Net of Current Portion) Total Long-Term Liabilities Total Liabilities:	<u>\$15,498,865</u>	15,498,865 19,830,231
Net Assets: Investment in Capital Assets, Net of Related Debt Unrestricted Total Net Assets	\$47,105,684 3,251,211	<u>\$50,356,895</u>

2015 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 2015 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 **RESULTS** UNIT MCL Turbidity NTU 0.3 0.07 MICROBIOLOGICAL Coliform P/A 5% positive 482 - Absent 3 - Present **INORGANICS** ND @ 0.0002 0.006 Antimony mg/L 0.01 ND @ 0.001 mg/L Arsenic MFL 7.0 ND Asbestos Barium mg/L 2.0 ND @ 0.05 Bervllium mg/L 0.004 ND @ 0.0001 0.005 ND @ 0.0001 Cadmium mg/L Chromium mg/L 0.1 ND @ 0.005 Cyanide 0.2 ND @ 0.003 mg/L Fluoride mg/L 2 - 41.03 Lead mg/L 0.015-AL • 0.0018 Mercury 0.002 ND @ 0.0002 mg/L ND @ 0.0005 Nickel mg/L 0.1 Total Nitrate (as N) 10.0 0.55 mg/L Nitrate + Nitrite (as N) mg/L 10.0 0.37 ND @ 0.05 Nitrite (as N) mg/L 1.0 0.05 0.0005820 Selenium mg/L Sodium (advisory) 7.69 20 mg/L Thallium mg/L 0.002 ND @ .0005 SYNTHETIC ORGANIC CHEMICALS 2, 4-D 2,4,5-TP (Silvex) 0.07 ND @ 0.001 mg/L mg/L 0.05 ND @ 0.005 0.4 ND @ 0.004 Adipates mg/L Alachlor 0.002 ND @ 0.0002 mg/L 0.003 ND @ 0.0003 Atrazine mg/L 0.0002 ND @ 0.00004 Benzoapyrene mg/L BHC-gamma (Lindane) 0.0002 ND @ 0.00002 mg/L 0.04 ND @ 0.004 Carbofuran mg/L 0.002 ND @ 0.00025 Chlordane mg/L 0.2 ND @ 0.005 Dalapon mg/L Dibromochloropropane 0.0002 ND @ mg/L 0.0000188 0.007 ND @ 0.0005 Dinoseb mg/L Dioxin mg/L 0.00000003 Waiver 0.02 ND @ 0.002 Diquat mg/L ND @ 0.01 Endothall mg/L 0.1 Endrin 0.002 ND @ 0.00002 mg/L Ethylene Dibromide 0.00005 ND @ 0.00001 mg/L Glyphosate 0.7 ND @ 0.05 mg/L Heptachlor Epoxide mg/L 0.0002 ND @ 0.00002 0.0002 ND @ 0.00002 Heptachlor mg/L 0.001 Hexachlorobenzene ND @ 0.0001 mg/L Hexachlorocyclopentadiene 0.05 ND @ 0.0005 mg/L

•90 th	percentile for	Lead and	Copper
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PARAMETERS	UNIT	MCL	RESULTS
SYNTHETIC ORGANIC CHEM			
Methoxychlor	mg/L	0.04	ND @ 0.0001
Pentachlorophenol Phthalates	mg/L	0.001 0.006	ND @ 0.0001 ND @ 0.0006
Picloram	mg/L mg/L	0.006	ND @ 0.0006 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
VOLATILE ORGANIC CHEMI	CALS*		
Trihalomethanes **	mg/L	0.08	0.035
Halo Acetic Acids ***	mg/L	0.06	0.014
1,1,1,2-Tetrachloroethane *	mg/L	0.0	ND @ 0.0005
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane *	mg/L	0.2	ND @ 0.0005 ND @ 0.0005
1,1,2-Trichloroethane	mg/L mg/L	0.005	ND @ 0.0005
1,1-Dichloroethane *	mg/L	0.003	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	0.005	ND @ 0.0005
Benzene Bromobenzene *	mg/L	0.005	ND @ 0.0005
Bromodichloro-methane	mg/L mg/L		ND @ 0.0005 0.0062
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		0.0047
Chloromethane *	mg/L		ND @ 0.0005
cis-1,2 Dichloroethylene	mg/L	0.07	ND @ 0.0005
Dibromochloro-methane	mg/L		0.0052
Dibromomethane	mg/L	0.005	ND @ 0.0005
Dichloromethane	mg/L	0.005	ND @ 0.0005
Ethylbenzene m-Dichlorobenzene *	mg/L mg/L	0.7	ND @ 0.0005 ND @ 0.0005
Methyl tert-butyl ether *	mg/L		ND @ 0.0005
Monochlorobenzene	mg/L	0.1	ND @ 0.0005
o-Chlorotoluene *	mg/L	0	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 Trichloroethylene	mg/L	0.1	ND @ 0.0005
Vinyl Chloride	mg/L mg/L	0.005	ND @ 0.0005 ND @ 0.0005
Xylenes (total)	mg/L	10.0	ND @ 0.0005
RADIONUCLIDES-NATURAL			🐷 0.0000
Gross Alpha	pCi/L	15	ND
Combined Radium 226/228	pCi/L	5	2.5
Combined Uranium	ug/L	30	ND @ 1.0
SECONDARY CONTAMINAN		.	
Color	CU	15	9
pH	m = /1	6.5-8.5	8.1
Hardness	mg/L	250.0 1.3-AL	12
Copper	mg/L		• 0.0301
Iron Manganese	mg/L mg/L	0.3 0.05	0.04 0.016
manganooc	ı mg/L	0.00	5.010

- 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



Egret and pintail gathering at the mouth of the Matson Creek Fisheries
Restoration Project

Photo by Mike Gray/ODFW 2015

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