UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2020
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ___________ to____________

Commission file number 1-38681	Commission file number 1-15973
NW Natural HOLDINGS™	NW Natural®
NORTHWEST NATURAL HOLDING COMPANY	**NORTHWEST NATURAL GAS COMPANY**
(Exact name of registrant as specified in its charter)	(Exact name of registrant as specified in its charter)
Oregon (State or other jurisdiction of incorporation or organization) — **82-4710680** (I.R.S. Employer Identification No.)	**Oregon** (State or other jurisdiction of incorporation or organization) — **93-0256722** (I.R.S. Employer Identification No.)
250 SW Taylor Street	**250 SW Taylor Street**
Portland Oregon 97204 (Address of principal executive offices) (Zip Code)	**Portland Oregon 97204** (Address of principal executive offices) (Zip Code)
Registrant's telephone number: **(503) 226-4211**	Registrant's telephone number: **(503) 226-4211**

Securities registered pursuant to Section 12(b) of the Act:

Registrant	Title of each class	Trading Symbol	Name of each exchange on which registered
NORTHWEST NATURAL HOLDING COMPANY	Common Stock	NWN	New York Stock Exchange
NORTHWEST NATURAL GAS COMPANY	None		

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

NORTHWEST NATURAL HOLDING COMPANY Yes ☒ No ☐ NORTHWEST NATURAL GAS COMPANY Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

NORTHWEST NATURAL HOLDING COMPANY Yes ☒ No ☐ NORTHWEST NATURAL GAS COMPANY Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

NORTHWEST NATURAL HOLDING COMPANY		NORTHWEST NATURAL GAS COMPANY	
Large Accelerated Filer	☒	Large Accelerated Filer	☐
Accelerated Filer	☐	Accelerated Filer	☐
Non-accelerated Filer	☐	Non-accelerated Filer	☒
Smaller Reporting Company	☐	Smaller Reporting Company	☐
Emerging Growth Company	☐	Emerging Growth Company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

NORTHWEST NATURAL HOLDING COMPANY Yes ☐ No ☒ NORTHWEST NATURAL GAS COMPANY Yes ☐ No ☒

At October 29, 2020, 30,568,578 shares of Northwest Natural Holding Company's Common Stock (the only class of Common Stock) were outstanding. All shares of Northwest Natural Gas Company's Common Stock (the only class of Common Stock) outstanding were held by Northwest Natural Holding Company. This combined Form 10-Q is separately filed by Northwest Natural Holding Company and Northwest Natural Gas Company. Information contained in this document relating to Northwest Natural Gas Company is filed by Northwest Natural Holding Company and separately by Northwest Natural Gas Company. Northwest Natural Gas Company makes no representation as to information relating to Northwest Natural Holding Company or its subsidiaries, except as it may relate to Northwest Natural Gas Company and its subsidiaries.

NORTHWEST NATURAL GAS COMPANY
NORTHWEST NATURAL HOLDING COMPANY
For the Quarterly Period Ended September 30, 2020

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PART I. FINANCIAL INFORMATION
FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to the safe harbors created by such Act. Forward-looking statements can be identified by words such as anticipates, assumes, intends, plans, seeks, believes, estimates, expects, and similar references to future periods. Examples of forward-looking statements include, but are not limited to, statements regarding the following:

- plans, projections and predictions;
- objectives, goals, visions or strategies;
- assumptions, generalizations and estimates;
- ongoing continuation of past practices or patterns;
- future events or performance;
- trends;
- risks;
- uncertainties;
- timing and cyclicality;
- economic conditions;
- earnings and dividends;
- capital expenditures and allocation;
- capital markets or loss of capital;
- capital or organizational structure;
- climate change and our role in a low-carbon, renewable-energy future;
- renewable natural gas and hydrogen;
- growth;
- customer rates;
- illness or quarantine;
- labor relations and workforce succession;
- commodity costs;
- desirability and cost competitiveness of natural gas;
- gas reserves;
- operational performance and costs;
- energy policy, infrastructure and preferences;
- public policy approach and involvement;
- efficacy of derivatives and hedges;
- liquidity, financial positions, and planned securities issuances;
- valuations;
- project and program development, expansion, or investment;
- business development efforts, including acquisitions and integration thereof;
- implementation and execution of our water strategy;
- pipeline capacity, demand, location, and reliability;
- adequacy of property rights and operations center development;
- technology implementation and cybersecurity practices;
- competition;
- procurement and development of gas (including renewable natural gas) and water supplies;
- estimated expenditures, supply chain and third party availability and impairment;
- costs of compliance;
- customers bypassing our infrastructure;
- credit exposures;
- uncollectible account amounts;
- rate or regulatory outcomes, recovery or refunds, and the availability of public utility commissions to take action;
- impacts or changes of executive orders, laws, rules and regulations;
- tax liabilities or refunds, including effects of tax legislation;
- levels and pricing of gas storage contracts and gas storage markets;
- outcomes, timing and effects of potential claims, litigation, regulatory actions, and other administrative matters;
- projected obligations, expectations and treatment with respect to retirement plans;
- effects of projections related to, and our ability to mitigate the effects of, the novel coronavirus (COVID-19) and the economic conditions resulting therefrom;
- disruptions caused by social unrest, including related protests or disturbances;
- availability, adequacy, and shift in mix, of gas and water supplies;
- effects of new or anticipated changes in critical accounting policies or estimates;
- approval and adequacy of regulatory deferrals;
- effects and efficacy of regulatory mechanisms; and
- environmental, regulatory, litigation and insurance costs and recoveries, and timing thereof.

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy, and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks, and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We therefore caution you against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Important factors that could cause actual results to differ materially from those in the forward-looking statements are discussed in NW Holdings' and NW Natural's 2019 Annual Report on Form 10-K, Part I, Item 1A "*Risk Factors*" and Part II, Item 7 and Item 7A, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and "*Quantitative and Qualitative Disclosures about Market Risk*," and in Part I, Items 2 and 3, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and "*Quantitative and Qualitative Disclosures About Market Risk*", respectively of Part II of this report.

Any forward-looking statement made in this report speaks only as of the date on which it is made. Factors or events that could cause actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

NORTHWEST NATURAL HOLDING COMPANY

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands, except per share data	2020	2019	2020	2019
Operating revenues	$ 93,284	$ 90,317	$ 513,406	$ 499,108
Operating expenses:				
Cost of gas	23,741	22,603	173,489	163,167
Operations and maintenance	41,352	40,886	134,256	131,854
Environmental remediation	867	967	6,494	7,258
General taxes	8,656	7,993	26,924	24,899
Revenue taxes	3,555	3,534	19,752	19,956
Depreciation and amortization	25,934	23,375	76,445	67,334
Other operating expenses	767	593	2,246	2,131
Total operating expenses	104,872	99,951	439,606	416,599
Income (loss) from operations	(11,588)	(9,634)	73,800	82,509
Other income (expense), net	(3,287)	(2,267)	(9,902)	(18,782)
Interest expense, net	9,165	10,948	32,339	31,807
Income (loss) before income taxes	(24,040)	(22,849)	31,559	31,920
Income tax expense (benefit)	(5,363)	(4,343)	7,092	4,957
Net income (loss) from continuing operations	(18,677)	(18,506)	24,467	26,963
Income (loss) from discontinued operations, net of tax	765	(795)	267	(1,968)
Net income (loss)	(17,912)	(19,301)	24,734	24,995
Other comprehensive income:				
Amortization of non-qualified employee benefit plan liability, net of taxes of $66 and $43 for the three months ended and $182 and $125 for the nine months ended September 30, 2020 and 2019, respectively	186	114	506	344
Comprehensive income (loss)	$ (17,726)	$ (19,187)	$ 25,240	$ 25,339
Average common shares outstanding:				
Basic	30,555	30,429	30,528	29,563
Diluted	30,555	30,429	30,575	29,628
Earnings (loss) from continuing operations per share of common stock:				
Basic	$ (0.61)	$ (0.61)	$ 0.80	$ 0.91
Diluted	(0.61)	(0.61)	0.80	0.91
Earnings (loss) from discontinued operations per share of common stock:				
Basic	$ 0.02	$ (0.02)	$ 0.01	$ (0.07)
Diluted	0.02	(0.02)	0.01	(0.07)
Earnings (loss) per share of common stock:				
Basic	$ (0.59)	$ (0.63)	$ 0.81	$ 0.84
Diluted	(0.59)	(0.63)	0.81	0.84

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands	September 30, 2020	September 30, 2019	December 31, 2019
Assets:			
Current assets:			
Cash and cash equivalents	$ 35,926	$ 10,522	$ 9,648
Accounts receivable	40,278	29,617	67,137
Accrued unbilled revenue	14,787	17,934	56,192
Allowance for uncollectible accounts	(1,786)	(180)	(673)
Regulatory assets	29,740	47,996	41,929
Derivative instruments	24,094	5,987	6,802
Inventories	45,082	41,230	43,985
Gas reserves	12,265	16,392	15,278
Income taxes receivable	—	—	256
Other current assets	25,534	18,617	38,004
Discontinued operations current assets (Note 17)	16,928	14,612	15,134
Total current assets	242,848	202,727	293,692
Non-current assets:			
Property, plant, and equipment	3,680,872	3,416,718	3,476,746
Less: Accumulated depreciation	1,073,623	1,027,330	1,037,847
Total property, plant, and equipment, net	2,607,249	2,389,388	2,438,899
Gas reserves	37,696	51,978	48,394
Regulatory assets	324,176	313,890	343,146
Derivative instruments	12,921	1,610	3,337
Other investments	48,963	63,018	63,333
Operating lease right of use asset	78,036	3,917	2,950
Assets under sales-type leases	144,971	147,918	146,310
Goodwill	70,292	49,333	49,929
Other non-current assets	50,945	27,839	38,464
Total non-current assets	3,375,249	3,048,891	3,134,762
Total assets	$ 3,618,097	$ 3,251,618	$ 3,428,454

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands, including share information	September 30, 2020	September 30, 2019	December 31, 2019
Liabilities and equity:			
Current liabilities:			
Short-term debt	$ 223,000	$ 65,580	$ 149,100
Current maturities of long-term debt	95,173	94,671	75,109
Accounts payable	83,813	76,197	113,370
Taxes accrued	13,772	13,382	11,971
Interest accrued	9,645	10,406	7,451
Regulatory liabilities	59,236	37,573	44,657
Derivative instruments	1,784	4,156	2,000
Operating lease liabilities	1,081	3,171	2,101
Other current liabilities	49,870	39,873	62,705
Discontinued operations current liabilities (Note 17)	13,922	13,399	13,709
Total current liabilities	551,296	358,408	482,173
Long-term debt	860,235	806,014	805,955
Deferred credits and other non-current liabilities:			
Deferred tax liabilities	296,516	284,625	295,643
Regulatory liabilities	649,521	615,813	625,717
Pension and other postretirement benefit liabilities	202,938	215,007	228,129
Derivative instruments	921	2,998	609
Operating lease liabilities	80,854	732	841
Other non-current liabilities	123,041	123,352	123,388
Total deferred credits and other non-current liabilities	1,353,791	1,242,527	1,274,327
Commitments and contingencies (Note 16)			
Equity:			
Common stock - no par value; authorized 100,000 shares; issued and outstanding 30,565, 30,435, and 30,472 at September 30, 2020 and 2019, and December 31, 2019, respectively	563,852	556,623	558,282
Retained earnings	299,150	296,256	318,450
Accumulated other comprehensive loss	(10,227)	(8,210)	(10,733)
Total equity	852,775	844,669	865,999
Total liabilities and equity	$ 3,618,097	$ 3,251,618	$ 3,428,454

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (UNAUDITED)

In thousands, except per share amounts	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Total shareholders' equity, beginning balances	$ 884,001	$ 876,746	$ 865,999	$ 762,634
Common stock:				
Beginning balances	562,766	555,052	558,282	457,640
Stock-based compensation	459	485	4,091	2,309
Shares issued pursuant to equity-based plans, net of shares withheld for taxes	627	1,082	1,485	3,718
2019 stock issuance and costs	—	4	(6)	92,956
Ending balances	563,852	556,623	563,852	556,623
Retained earnings:				
Beginning balances	331,648	330,018	318,450	312,182
Net income (loss)	(17,912)	(19,301)	24,734	24,995
Dividends on common stock	(14,586)	(14,461)	(44,034)	(42,287)
Reclassification of tax effects from the TCJA	—	—	—	1,366
Ending balances	299,150	296,256	299,150	296,256
Accumulated other comprehensive income (loss):				
Beginning balances	(10,413)	(8,324)	(10,733)	(7,188)
Other comprehensive income	186	114	506	344
Reclassification of tax effects from the TCJA	—	—	—	(1,366)
Ending balances	(10,227)	(8,210)	(10,227)	(8,210)
Total shareholders' equity, ending balances	$ 852,775	$ 844,669	$ 852,775	$ 844,669
Dividends per share of common stock	$ 0.4775	$ 0.4750	$ 1.4325	$ 1.4250

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Nine Months Ended September 30,	
In thousands	2020	2019
Operating activities:		
Net income	$ 24,734	$ 24,995
Adjustments to reconcile net income to cash provided by operations:		
Depreciation and amortization	76,445	67,334
Regulatory amortization of gas reserves	13,711	14,474
Deferred income taxes	(390)	2,471
Qualified defined benefit pension plan expense	13,800	10,464
Contributions to qualified defined benefit pension plans	(23,670)	(7,810)
Deferred environmental expenditures, net	(16,469)	(10,992)
Amortization of environmental remediation	6,494	7,258
Regulatory revenue recovery deferral from the TCJA	—	742
Regulatory disallowance of pension costs	—	10,500
Other	(4,483)	9,058
Changes in assets and liabilities:		
Receivables, net	77,236	80,205
Inventories	(1,126)	(3,293)
Income and other taxes	12,038	21,510
Accounts payable	(20,311)	(31,767)
Interest accrued	2,194	3,100
Deferred gas costs	(2,472)	(47,085)
Decoupling mechanism	4,175	11,095
Other, net	(14,072)	(6,713)
Discontinued operations	706	(255)
Cash provided by operating activities	148,540	155,291
Investing activities:		
Capital expenditures	(193,336)	(152,993)
Acquisitions, net of cash acquired	(38,078)	(56,189)
Leasehold improvement expenditures	(7,827)	(13,027)
Proceeds from the sale of assets	8,003	281
Proceeds from sale of equity method investment	7,000	—
Other	(240)	(2,714)
Discontinued operations	(2,287)	(648)
Cash used in investing activities	(226,765)	(225,290)
Financing activities:		
Proceeds from stock options exercised	68	1,723
Proceeds from common stock issued	—	93,182
Long-term debt issued	150,000	175,000
Long-term debt retired	(75,000)	(10,000)
Proceeds from term loan due within one year	150,000	—
Change in short-term debt	(76,100)	(152,040)
Cash dividend payments on common stock	(41,508)	(39,605)
Other	(2,957)	(372)
Cash provided by financing activities	104,503	67,888
Increase (decrease) in cash and cash equivalents	26,278	(2,111)
Cash and cash equivalents, beginning of period	9,648	12,633
Cash and cash equivalents, end of period	$ 35,926	$ 10,522
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalization	$ 29,829	$ 27,736
Income taxes paid (refunded), net	9,344	(6,096)

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Operating revenues	$ 88,367	$ 87,592	$ 502,053	$ 494,680
Operating expenses:				
Cost of gas	23,797	22,659	173,657	163,335
Operations and maintenance	38,657	37,710	126,111	125,436
Environmental remediation	867	967	6,494	7,258
General taxes	8,554	7,881	26,564	24,695
Revenue taxes	3,555	3,534	19,752	19,956
Depreciation and amortization	25,681	23,074	74,857	66,821
Other operating expenses	725	586	2,167	2,114
Total operating expenses	101,836	96,411	429,602	409,615
Income (loss) from operations	(13,469)	(8,819)	72,451	85,065
Other income (expense), net	(4,002)	(2,323)	(10,744)	(18,905)
Interest expense, net	8,806	10,459	30,518	30,979
Income (loss) before income taxes	(26,277)	(21,601)	31,189	35,181
Income tax expense (benefit)	(6,057)	(4,013)	6,942	5,820
Net income (loss)	(20,220)	(17,588)	24,247	29,361
Other comprehensive income:				
Amortization of non-qualified employee benefit plan liability, net of taxes of $66 and $43 for the three months ended and $182 and $125 for the nine months ended September 30, 2020 and 2019, respectively	186	114	506	344
Comprehensive income (loss)	$ (20,034)	$ (17,474)	$ 24,753	$ 29,705

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands	September 30, 2020	September 30, 2019	December 31, 2019
Assets:			
Current assets:			
Cash and cash equivalents	$ 27,133	$ 6,274	$ 5,919
Accounts receivable	31,659	29,065	66,823
Accrued unbilled revenue	14,709	17,843	56,139
Receivables from affiliates	641	1,106	787
Allowance for uncollectible accounts	(1,784)	(178)	(672)
Regulatory assets	29,740	47,996	41,929
Derivative instruments	24,094	5,987	6,802
Inventories	44,709	41,148	43,896
Gas reserves	12,265	16,392	15,278
Other current assets	20,236	17,519	33,258
Total current assets	203,402	183,152	270,159
Non-current assets:			
Property, plant, and equipment	3,633,570	3,397,053	3,456,075
Less: Accumulated depreciation	1,070,405	1,026,631	1,036,593
Total property, plant, and equipment, net	2,563,165	2,370,422	2,419,482
Gas reserves	37,696	51,978	48,394
Regulatory assets	324,136	313,890	343,146
Derivative instruments	12,921	1,610	3,337
Other investments	48,929	49,503	49,837
Operating lease right of use asset	77,949	3,745	2,760
Assets under sales-type leases	144,972	147,918	146,310
Other non-current assets	50,197	27,423	38,062
Total non-current assets	3,259,965	2,966,489	3,051,328
Total assets	$ 3,463,367	$ 3,149,641	$ 3,321,487

See Notes to Unaudited Consolidated Financial Statements

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NORTHWEST NATURAL GAS COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands	September 30, 2020	September 30, 2019	December 31, 2019
Liabilities and equity:			
Current liabilities:			
Short-term debt	$ 150,000	$ 45,500	$ 125,100
Current maturities of long-term debt	59,940	94,633	74,907
Accounts payable	82,582	75,126	111,641
Payables to affiliates	11,134	4,185	1,546
Taxes accrued	13,604	12,941	11,717
Interest accrued	9,552	10,405	7,441
Regulatory liabilities	59,236	37,573	44,657
Derivative instruments	1,784	4,156	2,000
Operating lease liabilities	1,020	3,075	1,979
Other current liabilities	48,555	38,328	61,438
Total current liabilities	437,407	325,922	442,426
Long-term debt	857,174	768,995	769,081
Deferred credits and other non-current liabilities:			
Deferred tax liabilities	307,257	298,039	309,297
Regulatory liabilities	648,651	615,813	625,717
Pension and other postretirement benefit liabilities	202,938	215,007	228,129
Derivative instruments	921	2,998	609
Operating lease liabilities	80,830	654	772
Other non-current liabilities	122,684	123,259	123,260
Total deferred credits and other non-current liabilities	1,363,281	1,255,770	1,287,784
Commitments and contingencies (Note 16)			
Equity:			
Common stock	319,557	319,634	319,557
Retained earnings	496,175	487,530	513,372
Accumulated other comprehensive loss	(10,227)	(8,210)	(10,733)
Total equity	805,505	798,954	822,196
Total liabilities and equity	$ 3,463,367	$ 3,149,641	$ 3,321,487

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY (UNAUDITED)

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Total shareholder's equity, beginning balances	$ 839,369	$ 830,115	$ 822,196	$ 715,668
Common stock:				
Beginning balances	319,557	319,634	319,557	226,452
Capital contribution from parent	—	—	—	93,182
Common stock	319,557	319,634	319,557	319,634
Retained earnings:				
Beginning balances	530,225	518,805	513,372	496,404
Net income (loss)	(20,220)	(17,588)	24,247	29,361
Dividends on common stock	(13,830)	(13,687)	(41,444)	(39,601)
Reclassification of tax effects from the TCJA	—	—	—	1,366
Ending balances	496,175	487,530	496,175	487,530
Accumulated other comprehensive income (loss):				
Beginning balances	(10,413)	(8,324)	(10,733)	(7,188)
Other comprehensive income	186	114	506	344
Reclassification of tax effects from the TCJA	—	—	—	(1,366)
Ending balances	(10,227)	(8,210)	(10,227)	(8,210)
Total shareholder's equity, ending balances	$ 805,505	$ 798,954	$ 805,505	$ 798,954

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

In thousands	Nine Months Ended September 30, 2020	2019
Operating activities:		
Net income	$ 24,247	$ 29,361
Adjustments to reconcile net income to cash provided by operations:		
Depreciation and amortization	74,857	66,821
Regulatory amortization of gas reserves	13,711	14,474
Deferred income taxes	(2,407)	(5)
Qualified defined benefit pension plan expense	13,800	10,464
Contributions to qualified defined benefit pension plans	(23,670)	(7,810)
Deferred environmental expenditures, net	(16,469)	(10,992)
Amortization of environmental remediation	6,494	7,258
Regulatory revenue deferral from the TCJA	—	742
Regulatory disallowance of pension costs	—	10,500
Other	(4,410)	7,903
Changes in assets and liabilities:		
Receivables, net	78,217	83,581
Inventories	(842)	(3,321)
Income and other taxes	22,104	13,505
Accounts payable	(22,703)	(30,281)
Interest accrued	2,111	3,132
Deferred gas costs	(2,472)	(47,085)
Decoupling mechanism	4,175	11,095
Other, net	(12,030)	(4,878)
Cash provided by operating activities	154,713	154,464
Investing activities:		
Capital expenditures	(188,553)	(151,915)
Leasehold improvement expenditures	(7,827)	(13,027)
Proceeds from the sale of assets	8,003	281
Other	(234)	(2,714)
Cash used in investing activities	(188,611)	(167,375)
Financing activities:		
Capital contribution from parent	—	93,182
Long-term debt issued	150,000	140,000
Long-term debt retired	(75,000)	(10,000)
Proceeds from term loan due within one year	150,000	—
Change in short-term debt	(125,100)	(172,000)
Cash dividend payments on common stock	(41,444)	(39,601)
Other	(3,344)	(343)
Cash provided by financing activities	55,112	11,238
Increase (decrease) in cash and cash equivalents	21,214	(1,673)
Cash and cash equivalents, beginning of period	5,919	7,947
Cash and cash equivalents, end of period	$ 27,133	$ 6,274
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalization	$ 28,139	$ 26,927
Income taxes paid (refunded), net	950	(6,096)

See Notes to Unaudited Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. ORGANIZATION AND PRINCIPLES OF CONSOLIDATION

The accompanying consolidated financial statements represent the respective, consolidated financial results of NW Holdings and NW Natural and all respective companies that each registrant directly or indirectly controls, either through majority ownership or otherwise. This is a combined report of NW Holdings and NW Natural, which includes separate consolidated financial statements for each registrant.

NW Natural's regulated natural gas distribution activities are reported in the natural gas distribution (NGD) segment. The NGD segment is NW Natural's core operating business and serves residential, commercial, and industrial customers in Oregon and southwest Washington. The NGD segment is the only reportable segment for NW Holdings and NW Natural. All other activities, water businesses, and other investments are aggregated and reported as other at their respective registrant.

In addition, NW Holdings has reported discontinued operations results related to the pending sale of Gill Ranch Storage, LLC (Gill Ranch). See Note 17 for additional information.

NW Holdings' direct and indirect wholly-owned subsidiaries as of the filing date of this report include:

- Northwest Natural Gas Company (NW Natural);
  - Northwest Energy Corporation (Energy Corp);
    - NWN Gas Reserves LLC (NWN Gas Reserves);
  - NW Natural RNG Holding Company, LLC;
- NW Natural Energy, LLC (NWN Energy);
  - NW Natural Gas Storage, LLC (NWN Gas Storage);
    - Gill Ranch Storage, LLC (Gill Ranch), which is presented as a discontinued operation;
- NNG Financial Corporation (NNG Financial);
  - KB Pipeline Company (KB);
- NW Natural Water Company, LLC (NWN Water);
  - Salmon Valley Water Company;
  - NW Natural Water of Oregon, LLC (NWN Water of Oregon);
    - Sunstone Water, LLC;
    - Sunstone Infrastructure, LLC;
    - Sunriver Water LLC (Sunriver Water);
    - Sunriver Environmental LLC (Sunriver Environmental);
  - NW Natural Water of Washington, LLC (NWN Water of Washington);
    - Cascadia Infrastructure, LLC;
    - Cascadia Water, LLC (Cascadia);
    - Suncadia Water Company, LLC (Suncadia Water);
    - Suncadia Environmental Company, LLC (Suncadia Environmental);
  - NW Natural Water of Idaho, LLC (NWN Water of Idaho);
    - Falls Water Co., Inc. (Falls Water);
    - Gem State Water Company, LLC (Gem State):
    - Gem State Infrastructure, LLC; and
  - NW Natural Water of Texas, LLC (NWN Water of Texas);
    - Blue Topaz Water, LLC;
    - Blue Topaz Infrastructure, LLC; and
    - T&W Water Service Company.

Investments in corporate joint ventures and partnerships that NW Holdings does not directly or indirectly control, and for which it is not the primary beneficiary, include NNG Financial's investment in Kelso-Beaver Pipeline, which is accounted for under the equity method, and NWN Energy's investment in Trail West Holdings, LLC (TWH), which was accounted for under the equity method through August 6, 2020. See Note 13 for activity related to TWH. NW Holdings and its direct and indirect subsidiaries are collectively referred to herein as NW Holdings, and NW Natural and its direct and indirect subsidiaries are collectively referred to herein as NW Natural. The consolidated financial statements of NW Holdings and NW Natural are presented after elimination of all intercompany balances and transactions.

Information presented in these interim consolidated financial statements is unaudited, but includes all material adjustments management considers necessary for a fair statement of the results for each period reported including normal recurring accruals. These consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes included in NW Holdings' and NW Natural's combined 2019 Annual Report on Form 10-K (2019 Form 10-K). A significant part of NW Holdings' and NW Natural's business is of a seasonal nature; therefore, NW Holdings and NW Natural results of operations for interim periods are not necessarily indicative of full year results. Seasonality affects the comparability of the results of other operations across quarters but not across years.

During the second quarter of 2018, we moved forward with our long-term strategic plans, which include a shift away from the California gas storage business. In June 2018, NWN Gas Storage, a wholly-owned subsidiary of NW Natural at the time and now a wholly-owned subsidiary of NW Holdings, entered into a Purchase and Sale Agreement that provides for the sale of all of the membership interests in its wholly-owned subsidiary, Gill Ranch, subject to various regulatory approvals and closing conditions. We have concluded that the pending sale of Gill Ranch qualifies as assets and liabilities held for sale and discontinued operations. As such, the results of Gill Ranch have been presented as a discontinued operation for NW Holdings for all periods presented on the consolidated statements of comprehensive income and cash flows, and the assets and liabilities associated with Gill Ranch have been classified as discontinued operations assets and liabilities on the NW Holdings consolidated balance sheet. See Note 17 for additional information.

Notes to the consolidated financial statements reflect the activity of continuing operations for both NW Holdings and NW Natural for all periods presented, unless otherwise noted.

2. SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies are described in Note 2 of the 2019 Form 10-K. There were no material changes to those accounting policies during the nine months ended September 30, 2020 other than those set forth in this Note 2. The following are current updates to certain critical accounting policy estimates and new accounting standards.

Industry Regulation

In applying regulatory accounting principles, NW Holdings and NW Natural capitalize or defer certain costs and revenues as regulatory assets and liabilities pursuant to orders of the Oregon Public Utilities Commission (OPUC), Washington Utilities and Transportation Commission (WUTC), Idaho Public Utilities Commission (IPUC) or Public Utility Commission of Texas (PUCT), which provide for the recovery of revenues or expenses from, or refunds to, utility customers in future periods, including a return or a carrying charge in certain cases.

Amounts deferred as regulatory assets and liabilities for NW Holdings and NW Natural were as follows:

	Regulatory Assets		
	September 30,		December 31,
In thousands	2020	2019	2019
NW Natural:			
Current:			
Unrealized loss on derivatives(1)	$ 1,459	$ 4,156	$ 2,000
Gas costs	5,207	21,094	20,140
Environmental costs(2)	4,440	5,100	4,762
Decoupling(3)	155	413	1,969
Pension balancing(4)	7,131	5,215	5,939
Income taxes	2,208	2,209	2,209
Other(5)	9,140	9,809	4,910
Total current	$ 29,740	$ 47,996	$ 41,929
Non-current:			
Unrealized loss on derivatives(1)	$ 921	$ 2,998	$ 609
Pension balancing(4)	45,203	50,019	48,251
Income taxes	16,792	17,758	17,173
Pension and other postretirement benefit liabilities	159,207	164,709	173,262
Environmental costs(2)	84,567	69,250	87,624
Gas costs	110	921	2,866
Decoupling(3)	6	—	—
Other(5)	17,330	8,235	13,361
Total non-current	$ 324,136	$ 313,890	$ 343,146
Other (NW Holdings)	40	—	—
Total non-current - NW Holdings	$ 324,176	$ 313,890	$ 343,146

In thousands	Regulatory Liabilities September 30, 2020	2019	December 31, 2019
NW Natural:			
Current:			
Gas costs	$ 1,625	$ 3,204	$ 1,223
Unrealized gain on derivatives(1)	23,738	5,720	6,622
Decoupling(3)	12,702	2,007	4,831
Income taxes	6,900	7,763	8,435
Other(5)	14,271	18,879	23,546
Total current	$ 59,236	$ 37,573	$ 44,657
Non-current:			
Gas costs	$ 69	$ 50	$ 2,013
Unrealized gain on derivatives(1)	12,921	1,610	3,337
Decoupling(3)	874	80	6,378
Income taxes(6)	196,558	206,572	198,219
Accrued asset removal costs(7)	421,353	396,418	401,893
Other(5)	16,876	11,083	13,877
Total non-current - NW Natural	$ 648,651	$ 615,813	$ 625,717
Other (NW Holdings)	870	—	—
Total non-current - NW Holdings	$ 649,521	$ 615,813	$ 625,717

(1) Unrealized gains or losses on derivatives are non-cash items and therefore do not earn a rate of return or a carrying charge. These amounts are recoverable through NGD rates as part of the annual Purchased Gas Adjustment (PGA) mechanism when realized at settlement.
(2) Refer to footnote (3) of the Deferred Regulatory Asset table in Note 16 for a description of environmental costs.
(3) This deferral represents the margin adjustment resulting from differences between actual and expected volumes.
(4) Refer to Note 9 for information regarding the deferral of pension expenses.
(5) Balances consist of deferrals and amortizations under approved regulatory mechanisms and typically earn a rate of return or carrying charge.
(6) This balance represents estimated amounts associated with the Tax Cuts and Jobs Act. See Note 10.
(7) Estimated costs of removal on certain regulated properties are collected through rates.

We believe all costs incurred and deferred at September 30, 2020 are prudent. All regulatory assets and liabilities are reviewed annually for recoverability, or more often if circumstances warrant. If we should determine that all or a portion of these regulatory assets or liabilities no longer meet the criteria for continued application of regulatory accounting, then NW Holdings and NW Natural would be required to write-off the net unrecoverable balances in the period such determination is made.

COVID-19 Impact
COVID-19, which was declared a pandemic by the World Health Organization in March 2020, has resulted in widespread global, national and local effects. On March 23, 2020, the Governors of Oregon and Washington, the states in which NW Natural’s service territories are located, issued stay at home executive orders. These and subsequent executive orders required the closure of “non-essential” businesses and permitted the continuation of “essential services.” As a result of these measures, NW Natural issued a notification in mid-March that it would not charge late payment fees or disconnect customers for late payment. Furthermore, we suspended sending outstanding receivable balances to collections.

During 2020, our regulated utilities filed applications in their respective jurisdictions requesting authorization to defer certain financial impacts associated with COVID-19 such as bad debt expense, financing costs to secure liquidity, lost revenues related to late fees and reconnection fees, and other COVID-19 related costs, net of offsetting direct expense reductions associated with COVID-19. The OPUC has approved the regulatory deferral and issued other guidelines related to COVID-19 moratoriums and fees for NW Natural.

New Accounting Standards
We consider the applicability and impact of all accounting standards updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on NW Holdings' or NW Natural's consolidated financial position or results of operations.

Recently Adopted Accounting Pronouncements
CREDIT LOSSES. On June 16, 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments," which applies to financial assets subject to credit losses and measured at amortized cost. The new standard requires financial assets measured at amortized cost to be presented at the net amount expected to be collected and the

allowance for credit losses is to be recorded as a valuation account that is deducted from the amortized cost basis. The amendments in this update were effective beginning January 1, 2020 and were applied with modified retrospective methodology. The adoption of this ASU did not materially affect the financial statements and disclosures of NW Holdings or NW Natural.
The majority of NW Holdings' and NW Natural's financial assets are either short-term in nature, such as trade receivables, or relate to leased gas facilities under approved rate schedules.

Allowance for trade receivables. Accounts receivable consist primarily of amounts due for natural gas sales and transportation services to NGD customers and amounts due for gas storage services. The payment term of these receivables is generally 15 days. NW Holdings and NW Natural establish allowances for uncollectible accounts (allowance) for trade receivables, including accrued unbilled revenue, based on customer types that share similar risk characteristics: residential, commercial, and industrial. For these short-term receivables, it is not expected that forecasted economic conditions would significantly affect the loss estimates under stable economic conditions. For extreme situations like a financial crisis, natural disaster, and the economic slowdown caused by pandemics like COVID-19, we enhance our review and analysis.

After considering the significant exposure to quarantine-related job losses in Oregon and Washington state, NW Holdings and NW Natural expanded our standard review procedures for our allowance for uncollectible accounts calculation, including analyzing the significant indications of unemployment rate and comparing to historic economic data during the 2007-2009 time period when the country experienced an economic recession. We then considered other qualitative information including recent customer interactions related to payment plans and credit issues, statistics from our website related to credit inquiries, and economic stimulus provided by the federal government which could have a beneficial impact on residential and commercial customers' abilities to ultimately make payment on their accounts. Taking all of these factors into consideration, our enhanced methods of evaluating the potential for uncollectable accounts resulted in an increase to our provision. Our provision calculation for residential and commercial accounts was estimated net write-offs as a percentage of gas sales. For industrial accounts we continue to analyze those accounts on an account-by-account basis with specific reserves taken as necessary.

The following table presents the activity related to the NW Holdings provision for uncollectible accounts by pool, substantially all of which is related to NW Natural's accounts receivable:

	As of December 31, 2019	Nine Months Ended September 30, 2020		As of September 30, 2020
In thousands	Beginning Balance	Provision recorded	Write-offs recognized, net of recoveries	Ending Balance
Allowance for uncollectible accounts related to accounts receivable:				
Residential	$ 432	$ 506	$ 179	$ 1,117
Commercial	57	145	260	462
Industrial	72	26	(40)	58
Accrued unbilled and other	112	57	(20)	149
Total	$ 673	$ 734	$ 379	$ 1,786

Allowance for net investments in sales-type leases. NW Natural currently holds two net investments in sales-type leases, with substantially all of the net investment balance related to the North Mist natural gas storage agreement with Portland General Electric (PGE) which is billed under an OPUC-approved rate schedule. See Note 6 for more information on the North Mist lease. Due to the nature of this service, PGE may recover the costs of the lease through general rate cases. Therefore, we expect the risk of loss due to the credit of this lessee to be remote. As such, no allowance for uncollectibility was recorded for our sales-type lease receivables. NW Natural will continue monitoring the credit health of the lessees and the overall economic environment, including the economic factors closely tied to the financial health of our current and future lessees.

FAIR VALUE MEASUREMENT. On August 28, 2018, the FASB issued ASU 2018-13, "Changes to the Disclosure Requirements for Fair Value Measurement." The purpose of the amendment is to modify the disclosure requirements for fair value measurements. The amendments in this update were effective for us beginning January 1, 2020. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements and the narrative description of measurement uncertainty should be applied prospectively. All other amendments should be applied retrospectively. NW Holdings and NW Natural do not have either Level 3 fair value measurements or transfers between Level 1 or Level 2 in their current portfolios. The adoption did not have an impact on the financial statements or disclosures of NW Holdings or NW Natural.

RETIREMENT BENEFITS. On August 28, 2018, the FASB issued ASU 2018-14, "Changes to the Disclosure Requirements for Defined Benefit Plans." The purpose of the amendment is to modify the disclosure requirements for defined benefit pension and other postretirement plans. The amendments in this update were effective for us beginning January 1, 2020 and were applied retrospectively. The adoption of this ASU did not materially affect the financial statements and disclosures of NW Holdings or NW Natural.

CLOUD COMPUTING. On August 29, 2018, the FASB issued ASU 2018-15, "Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." The purpose of the amendment is to align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The amendments in this update are effective for us beginning January 1, 2020. Early adoption is permitted, and NW Holdings and NW Natural early adopted ASU 2018-15 in the quarter ended March 31, 2019 utilizing the prospective application methodology. The adoption of this ASU did not materially affect the financial statements and disclosures of NW Holdings or NW Natural.

GOODWILL. On January 26, 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment." The ASU removes Step 2 from the goodwill impairment test and under the amended guidance an entity should perform its annual goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount in which the carrying amounts exceed the fair value of the reporting unit. The amendments in this standard are effective for us beginning January 1, 2020 and early adoption is permitted for interim or annual goodwill impairment tests performed after January 1, 2017. NW Natural early adopted ASU 2017-04 in the quarter ended September 30, 2018. The adoption of this ASU did not materially affect the financial statements and disclosures of NW Holdings or NW Natural.

Recently Issued Accounting Pronouncements

INCOME TAXES. On December 18, 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." The purpose of the amendment is to reduce cost and complexity related to accounting for income taxes by removing certain exceptions to the general principles and improving consistent application for other areas in Topic 740. The amendments in this update are effective for us beginning January 1, 2021. Early adoption is permitted. The amended presentation and disclosure guidance should be applied retrospectively. We do not expect this ASU to materially affect the financial statements and disclosures of NW Holdings or NW Natural.

REFERENCE RATE REFORM. On March 12, 2020, the FASB issued ASU 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The purpose of the amendment is to provide optional expedients and exceptions for applying generally accepted accounting principles (GAAP) to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments in this Update apply only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The amendments in this Update are effective for all entities as of March 12, 2020 through December 31, 2022. We do not expect this ASU to materially affect the financial statements and disclosures of NW Holdings or NW Natural.

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3. EARNINGS PER SHARE

Basic earnings per share are computed using NW Holdings' net income and the weighted average number of common shares outstanding for each period presented. Diluted earnings per share are computed in the same manner, except using the weighted average number of common shares outstanding plus the effects of the assumed exercise of stock options and the payment of estimated stock awards from other stock-based compensation plans that are outstanding at the end of each period presented. Anti-dilutive stock awards are excluded from the calculation of diluted earnings per common share.

NW Holdings' diluted earnings or loss per share are calculated as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands, except per share data	2020	2019	2020	2019
Net income (loss) from continuing operations	$ (18,677)	$ (18,506)	$ 24,467	$ 26,963
Income (loss) from discontinued operations, net of tax	765	(795)	267	(1,968)
Net income (loss)	$ (17,912)	$ (19,301)	$ 24,734	$ 24,995
Average common shares outstanding - basic	30,555	30,429	30,528	29,563
Additional shares for stock-based compensation plans (See Note 7)	—	—	47	65
Average common shares outstanding - diluted	30,555	30,429	30,575	29,628
Earnings (loss) from continuing operations per share of common stock:				
Basic	$ (0.61)	$ (0.61)	$ 0.80	$ 0.91
Diluted	$ (0.61)	$ (0.61)	$ 0.80	$ 0.91
Earnings (loss) from discontinued operations per share of common stock:				
Basic	$ 0.02	$ (0.02)	$ 0.01	$ (0.07)
Diluted	$ 0.02	$ (0.02)	$ 0.01	$ (0.07)
Earnings (loss) per share of common stock:				
Basic	$ (0.59)	$ (0.63)	$ 0.81	$ 0.84
Diluted	$ (0.59)	$ (0.63)	$ 0.81	$ 0.84
Additional information:				
Anti-dilutive shares	47	69	1	1

4. SEGMENT INFORMATION

We primarily operate in one reportable business segment, which is NW Natural's local gas distribution business and is referred to as the NGD segment. NW Natural and NW Holdings also have investments and business activities not specifically related to the NGD, which are aggregated and reported as other and described below for each entity.

Natural Gas Distribution
NW Natural's local gas distribution segment is a regulated utility principally engaged in the purchase, sale, and delivery of natural gas and related services to customers in Oregon and southwest Washington. In addition to NW Natural's local gas distribution business, the NGD segment also includes the portion of the Mist underground storage facility used to serve NGD customers, the North Mist gas storage expansion, and NWN Gas Reserves, which is a wholly-owned subsidiary of Energy Corp.

NW Natural
NW Natural's activities in Other include Interstate Storage Services and third-party asset management service for NW Natural’s contracted interstate pipeline and storage capacity, appliance retail center operations, and corporate operating and non-operating revenues and expenses that cannot be allocated to NGD operations.

Earnings from third party asset management include earnings from the management of upstream interstate pipeline and storage capacity when not needed to serve NGD customers. Under the Oregon sharing mechanism, NW Natural retains 80% of the pre-tax income from these services when the costs of the capacity were not included in NGD rates, or 10% of the pre-tax income when the costs have been included in these rates. The remaining 20% and 90%, respectively, are recorded in a deferred regulatory account for prospective NGD customer billing credits.

NW Holdings
NW Holdings' activities in Other include all remaining activities not associated with NW Natural, specifically: NWN Water, which consolidates the water and wastewater utility operations and is pursuing other investments in the water sector through itself and wholly-owned subsidiaries; NWN Gas Storage, a wholly-owned subsidiary of NWN Energy; NWN Energy's equity investment in TWH through August 6, 2020; and other pipeline assets in NNG Financial. For more information on the sale of TWH, see Note 13. Other also includes corporate revenues and expenses that cannot be allocated to other operations, including certain business development activities.

Segment Information Summary

Inter-segment transactions were immaterial for the periods presented. The following table presents summary financial information concerning the reportable segment and other of continuing operations. See Note 17 for information regarding discontinued operations for NW Holdings and NW Natural.

	Three Months Ended September 30,				
In thousands	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2020					
Operating revenues	$ 83,761	$ 4,606	$ 88,367	$ 4,917	$ 93,284
Depreciation and amortization	25,433	248	25,681	253	25,934
Income (loss) from operations	(16,196)	2,727	(13,469)	1,881	(11,588)
Net income (loss) from continuing operations	(22,120)	1,900	(20,220)	1,543	(18,677)
Capital expenditures	69,213	1,113	70,326	728	71,054
2019					
Operating revenues	$ 83,063	$ 4,529	$ 87,592	$ 2,725	$ 90,317
Depreciation and amortization	22,830	244	23,074	301	23,375
Income (loss) from operations	(11,580)	2,761	(8,819)	(815)	(9,634)
Net income (loss) from continuing operations	(19,570)	1,982	(17,588)	(918)	(18,506)
Capital expenditures	60,596	644	61,240	606	61,846

	Nine Months Ended September 30,				
In thousands	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2020					
Operating revenues	$ 489,240	$ 12,813	$ 502,053	$ 11,353	$ 513,406
Depreciation and amortization	74,117	740	74,857	1,588	76,445
Income from operations	65,496	6,955	72,451	1,349	73,800
Net income from continuing operations	19,476	4,771	24,247	220	24,467
Capital expenditures	186,842	1,711	188,553	4,783	193,336
Total assets at September 30, 2020(1)	3,451,771	11,596	3,463,367	137,802	3,601,169
2019					
Operating revenues	$ 480,088	$ 14,592	$ 494,680	$ 4,428	$ 499,108
Depreciation and amortization	66,071	750	66,821	513	67,334
Income (loss) from operations	75,975	9,090	85,065	(2,556)	82,509
Net income (loss) from continuing operations	22,848	6,513	29,361	(2,398)	26,963
Capital expenditures	151,114	801	151,915	1,078	152,993
Total assets at September 30, 2019(1)	3,101,372	48,269	3,149,641	87,365	3,237,006
Total assets at December 31, 2019(1)	3,273,835	47,652	3,321,487	91,833	3,413,320

(1) Total assets for NW Holdings exclude assets related to discontinued operations of $16.9 million, $14.6 million, and $15.1 million as of September 30, 2020, September 30, 2019, and December 31, 2019, respectively.

Natural Gas Distribution Margin

NGD margin is a financial measure used by the Chief Operating Decision Maker (CODM), consisting of NGD operating revenues, reduced by the associated cost of gas, environmental remediation expense, and revenue taxes. The cost of gas purchased for NGD customers is generally a pass-through cost in the amount of revenues billed to regulated NGD customers. Environmental remediation expense represents collections received from customers through the environmental recovery mechanism in Oregon as well as adjustments for the environmental earnings test when applicable. This is offset by environmental remediation expense presented in operating expenses. Revenue taxes are collected from NGD customers and remitted to taxing authorities. The collections from customers are offset by the expense recognition of the obligation to the taxing authority. By subtracting cost of gas, environmental remediation expense, and revenue taxes from NGD operating revenues, NGD margin provides a key metric used by the CODM in assessing the performance of the NGD segment.

The following table presents additional segment information concerning NGD margin:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
NGD margin calculation:				
NGD distribution revenues	$ 79,357	$ 77,916	$ 474,989	$ 472,691
Other regulated services	4,404	5,147	14,251	7,397
Total NGD operating revenues	83,761	83,063	489,240	480,088
Less: NGD cost of gas	23,797	22,659	173,657	163,335
Environmental remediation	867	967	6,494	7,258
Revenue taxes	3,555	3,534	19,752	19,956
NGD margin	$ 55,542	$ 55,903	$ 289,337	$ 289,539

5. REVENUE

The following tables present disaggregated revenue from continuing operations:

	Three Months Ended September 30,				
In thousands	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2020					
Natural gas sales	$ 78,427	$ —	$ 78,427	$ —	$ 78,427
Gas storage revenue, net	—	2,482	2,482	—	2,482
Asset management revenue, net	—	939	939	—	939
Appliance retail center revenue	—	1,185	1,185	—	1,185
Other revenue	333	—	333	4,917	5,250
Revenue from contracts with customers	78,760	4,606	83,366	4,917	88,283
Alternative revenue	395	—	395	—	395
Leasing revenue	4,606	—	4,606	—	4,606
Total operating revenues	$ 83,761	$ 4,606	$ 88,367	$ 4,917	$ 93,284
2019					
Natural gas sales	$ 80,480	$ —	$ 80,480	$ —	$ 80,480
Gas storage revenue, net	—	2,333	2,333	—	2,333
Asset management revenue, net	—	1,208	1,208	—	1,208
Appliance retail center revenue	—	988	988	—	988
Other revenue	247	—	247	2,725	2,972
Revenue from contracts with customers	80,727	4,529	85,256	2,725	87,981
Alternative revenue	(2,607)	—	(2,607)	—	(2,607)
Leasing revenue	4,943	—	4,943	—	4,943
Total operating revenues	$ 83,063	$ 4,529	$ 87,592	$ 2,725	$ 90,317

In thousands	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
	Nine Months Ended September 30,				
2020					
Natural gas sales	$ 469,113	$ —	$ 469,113	$ —	$ 469,113
Gas storage revenue, net	—	7,267	7,267	—	7,267
Asset management revenue, net	—	1,999	1,999	—	1,999
Appliance retail center revenue	—	3,547	3,547	—	3,547
Other revenue	1,002	—	1,002	11,353	12,355
Revenue from contracts with customers	470,115	12,813	482,928	11,353	494,281
Alternative revenue	5,288	—	5,288	—	5,288
Leasing revenue	13,837	—	13,837	—	13,837
Total operating revenues	$ 489,240	$ 12,813	$ 502,053	$ 11,353	$ 513,406
2019					
Natural gas sales	$ 488,681	$ —	$ 488,681	$ —	$ 488,681
Gas storage revenue, net	—	7,856	7,856	—	7,856
Asset management revenue, net	—	3,174	3,174	—	3,174
Appliance retail center revenue	—	3,562	3,562	—	3,562
Other revenue	351	—	351	4,428	4,779
Revenue from contracts with customers	489,032	14,592	503,624	4,428	508,052
Alternative revenue	(16,126)	—	(16,126)	—	(16,126)
Leasing revenue	7,182	—	7,182	—	7,182
Total operating revenues	$ 480,088	$ 14,592	$ 494,680	$ 4,428	$ 499,108

NW Natural's revenue represents substantially all of NW Holdings' revenue and is recognized for both registrants when the obligation to customers is satisfied and in the amount expected to be received in exchange for transferring goods or providing services. Revenue from contracts with customers contains one performance obligation that is generally satisfied over time, using the output method based on time elapsed, due to the continuous nature of the service provided. The transaction price is determined by a set price agreed upon in the contract or dependent on regulatory tariffs. Customer accounts are settled on a monthly basis or paid at time of sale and based on historical experience. It is probable that we will collect substantially all of the consideration to which we are entitled. We evaluated the probability of collection in accordance with the current expected credit losses standard.

NW Holdings and NW Natural do not have any material contract assets, as net accounts receivable and accrued unbilled revenue balances are unconditional and only involve the passage of time until such balances are billed and collected. NW Holdings and NW Natural do not have any material contract liabilities.

Revenue taxes are included in operating revenues with an equal and offsetting expense recognized in operating expense in the consolidated statements of comprehensive income. Revenue-based taxes are primarily franchise taxes, which are collected from NGD customers and remitted to taxing authorities.

Natural Gas Distribution

Natural gas sales. NW Natural's primary source of revenue is providing natural gas to customers in the NGD service territory, which includes residential, commercial, industrial and transportation customers. NGD revenue is generally recognized over time upon delivery of the gas commodity or service to the customer, and the amount of consideration received and recognized as revenue is dependent on the Oregon and Washington tariffs. Customer accounts are to be paid in full each month, and there is no right of return or warranty for services provided. Revenues include firm and interruptible sales and transportation services, franchise taxes recovered from the customer, late payment fees, service fees, and accruals for gas delivered but not yet billed (accrued unbilled revenue). The accrued unbilled revenue balance is based on estimates of deliveries during the period from the last meter reading and management judgment is required for a number of factors used in this calculation, including customer use and weather factors.

We applied the significant financing practical expedient and have not adjusted the consideration NW Natural expects to receive from NGD customers for the effects of a significant financing component as all payment arrangements are settled annually. Due to the election of the right to invoice practical expedient, we do not disclose the value of unsatisfied performance obligations.

Alternative revenue. Weather normalization (WARM) and decoupling mechanisms are considered to be alternative revenue programs. Alternative revenue programs are considered to be contracts between NW Natural and its regulator and are excluded from revenue from contracts with customers.

Leasing revenue. Leasing revenue primarily consists of revenues from NW Natural's North Mist Storage contract with Portland General Electric (PGE) in support of PGE's gas-fired electric power generation facilities under an initial 30-year contract with options to extend, totaling up to an additional 50 years upon mutual agreement of the parties. The facility is accounted for as a sales-type lease with regulatory accounting deferral treatment. The investment is included in rate base under an established cost-of-service tariff schedule, with revenues recognized according to the tariff schedule and as such, profit upon commencement was deferred and will be amortized over the lease term. Leasing revenue also contains rental revenue from small leases of property owned by NW Natural to third parties. The majority of these transactions are accounted for as operating leases and the revenue is recognized over the term of the lease agreement. Lease revenue is excluded from revenue from contracts with customers. See Note 6 for additional information.

NW Natural Other
Gas storage revenue. NW Natural's other revenue includes gas storage activity, which includes Interstate Storage Services used to store natural gas for customers. Gas storage revenue is generally recognized over time as the gas storage service is provided to the customer and the amount of consideration received and recognized as revenue is dependent on set rates defined per the storage agreements. Noncash consideration in the form of dekatherms of natural gas is received as consideration for providing gas injection services to gas storage customers. This noncash consideration is measured at fair value using the average spot rate. Customer accounts are generally paid in full each month, and there is no right of return or warranty for services provided. Revenues include firm and interruptible storage services, net of the profit sharing amount refunded to NGD customers.

Asset management revenue. Revenues include the optimization of third-party storage assets and pipeline capacity and are provided net of the profit sharing amount refunded to NGD customers. Certain asset management revenues received are recognized over time using a straight-line approach over the term of each contract, and the amount of consideration received and recognized as revenue is dependent on a variable pricing model. Variable revenues earned above guaranteed amounts are estimated and recognized at the end of each period using the most likely amount approach. Additionally, other asset management revenues may be based on a fixed rate. Generally, asset management accounts are settled on a monthly basis.

As of September 30, 2020, unrecognized revenue for the fixed component of the transaction price related to gas storage and asset management revenue was approximately $61.9 million. Of this amount, approximately $4.4 million will be recognized during the remainder of 2020, $18.2 million in 2021, $14.5 million in 2022, $11.6 million in 2023, $7.8 million in 2024 and $5.4 million thereafter. The amounts presented here are calculated using current contracted rates.

Appliance retail center revenue. NW Natural owns and operates an appliance store that is open to the public, where customers can purchase natural gas home appliances. Revenue from the sale of appliances is recognized at the point in time in which the appliance is transferred to the third party responsible for delivery and installation services and when the customer has legal title to the appliance. It is required that the sale be paid for in full prior to transfer of legal title. The amount of consideration received and recognized as revenue varies with changes in marketing incentives and discounts offered to customers.

NW Holdings Other
NW Holdings' primary source of other revenue is providing water and wastewater services to customers. Water and wastewater service revenue is generally recognized over time upon delivery of the water commodity or service to the customer, and the amount of consideration received and recognized as revenue is dependent on the tariffs established in the state we operate. Customer accounts are to be paid in full each month, and there is no right of return or warranty for services provided.

We applied the significant financing practical expedient and have not adjusted the consideration we expect to receive from water distribution customers for the effects of a significant financing component as all payment arrangements are settled annually. Due to the election of the right to invoice practical expedient, we do not disclose the value of unsatisfied performance obligations.

6. LEASES

Lease Revenue
Leasing revenue primarily consists of NW Natural's North Mist natural gas storage agreement with Portland General Electric (PGE), which is billed under an OPUC-approved rate schedule and includes an initial 30-year term with options to extend, totaling up to an additional 50 years upon mutual agreement of the parties. Under U.S. GAAP, this agreement is classified as a sales-type lease and qualifies for regulatory accounting deferral treatment. The investment in the storage facility is included in rate base under a separately established cost-of-service tariff, with revenues recognized according to the tariff schedule. As such, the selling profit that was calculated upon commencement as part of the sale-type lease recognition was deferred and will be amortized over the lease term. Billing rates under the cost-of-service tariff will be updated annually to reflect current information including depreciable asset levels, forecasted operating expenses, and the results of regulatory proceedings, as applicable, and revenue received under this agreement is recognized as operating revenue on the consolidated statements of comprehensive income. There are no variable payments or residual value guarantees. The lease does not contain an option to

purchase the underlying assets.

NW Natural also maintains a sales-type lease for specialized compressor facilities to provide high pressure compressed natural gas (CNG) services. Lease payments are outlined in an OPUC-approved rate schedule over a 10-year term. There are no variable payments or residual value guarantees. The selling profit computed upon lease commencement was not significant.

Our lessor portfolio also contains small leases of property owned by NW Natural to third parties. These transactions are accounted for as operating leases and the revenue is recognized over the term of the lease agreement.

The components of lease revenue at NW Natural were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Lease revenue				
Operating leases	$ 18	$ 48	$ 71	$ 143
Sales-type leases	4,588	4,895	13,766	7,039
Total lease revenue	$ 4,606	$ 4,943	$ 13,837	$ 7,182

Total future minimum lease payments to be received under non-cancellable leases at NW Natural at September 30, 2020 are as follows:

In thousands	Operating	Sales-Type	Total
Remainder of 2020	$ 18	$ 4,509	$ 4,527
2021	50	17,518	17,568
2022	45	17,026	17,071
2023	45	16,557	16,602
2024	45	15,867	15,912
Thereafter	94	267,027	267,121
Total lease revenue	$ 297	$ 338,504	$ 338,801
Less: imputed interest		192,653	
Total leases receivable		$ 145,851	

The total leases receivable above is reported under the NGD segment and the short- and long-term portions are included within other current assets and assets under sales-type leases on the consolidated balance sheets, respectively. The total amount of unguaranteed residual assets was $4.2 million, $3.9 million and $4.0 million at September 30, 2020 and 2019 and December 31, 2019, respectively, and is included in assets under sales-type leases on the consolidated balance sheets. Additionally, under regulatory accounting, the revenues and expenses associated with these agreements are presented on the consolidated statements of comprehensive income such that their presentation aligns with similar regulated activities at NW Natural.

Lease Expense

Operating Leases

We have operating leases for land, buildings and equipment. Our primary lease is for NW Natural's corporate operations center. Our leases have remaining lease terms of one year to 20 years. Many of our lease agreements include options to extend the lease, which we do not include in our minimum lease terms unless they are reasonably certain to be exercised. Short-term leases with a term of 12 months or less are not recorded on the balance sheet. As most of our leases do not provide an implicit rate and are entered into by NW Natural, we use an estimated discount rate representing the rate we would have incurred to finance the funds necessary to purchase the leased asset and is based on information available at the lease commencement date in determining the present value of lease payments.

The components of lease expense, a portion of which is capitalized, were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
NW Natural:				
Operating lease expense	$ 746	$ 1,158	$ 2,862	$ 3,455
Short-term lease expense	$ 300	$ 323	$ 783	$ 814
Other (NW Holdings):				
Operating lease expense	$ 17	$ 47	$ 109	$ 139
NW Holdings:				
Operating lease expense	$ 763	$ 1,205	$ 2,971	$ 3,594
Short-term lease expense	$ 300	$ 323	$ 783	$ 814

Supplemental balance sheet information related to operating leases as of September 30, 2020 is as follows:

	September 30,		December 31,
In thousands	2020	2019	2019
NW Natural:			
Operating lease right of use asset	$ 77,949	$ 3,745	$ 2,760
Operating lease liabilities - current liabilities	$ 1,020	$ 3,075	$ 1,979
Operating lease liabilities - non-current liabilities	80,830	654	772
Total operating lease liabilities	$ 81,850	$ 3,729	$ 2,751
Other (NW Holdings):			
Operating lease right of use asset	$ 87	$ 172	$ 190
Operating lease liabilities - current liabilities	$ 61	$ 96	$ 122
Operating lease liabilities - non-current liabilities	24	78	69
Total operating lease liabilities	$ 85	$ 174	$ 191
NW Holdings:			
Operating lease right of use asset	$ 78,036	$ 3,917	$ 2,950
Operating lease liabilities - current liabilities	$ 1,081	$ 3,171	$ 2,101
Operating lease liabilities - non-current liabilities	80,854	732	841
Total operating lease liabilities	$ 81,935	$ 3,903	$ 2,942

The weighted-average remaining lease terms and weighted-average discount rates for the operating leases at NW Natural were as follows:

	September 30,		December 31,
In thousands	2020	2019	2019
Weighted-average remaining lease term (years)	19.4	0.9	1.0
Weighted-average discount rate	7.22 %	3.86 %	3.98 %

Commencement of Significant Lease

In October 2017, NW Natural entered into a 20-year operating lease agreement for a new corporate operations center in Portland, Oregon in anticipation of the expiration of the prior corporate operations center lease in 2020. The lease commenced in March 2020 upon substantial completion of the landlord's work. Total estimated base rent payments over the life of the lease are $159.4 million. There is an option to extend the term of the lease for two additional periods of seven years.

There is a material timing difference between the minimum lease payments and expense recognition as calculated under operating lease accounting rules. OPUC issued an order allowing us to align our expense recognition with cash payments for ratemaking purposes. We recorded the difference between the minimum lease payments and the aggregate of the imputed interest on the finance lease obligation and amortization of the right-of-use asset as a deferred regulatory asset on our balance sheet. The balance of the regulatory asset as of September 30, 2020 was $3.7 million.

Maturities of operating lease liabilities at September 30, 2020 were as follows:

In thousands	NW Natural	Other (NW Holdings)	NW Holdings
Remainder of 2020	$ 1,665	$ 17	$ 1,682
2021	6,761	52	6,813
2022	6,849	18	6,867
2023	6,986	—	6,986
2024	7,150	—	7,150
Thereafter	130,969	—	130,969
Total lease payments	160,380	87	160,467
Less: imputed interest	78,530	2	78,532
Total lease obligations	81,850	85	81,935
Less: current obligations	1,020	61	1,081
Long-term lease obligations	$ 80,830	$ 24	$ 80,854

As of September 30, 2020, finance lease liabilities with maturities of less than one year were $0.9 million at NW Natural.

Supplemental cash flow information related to leases was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
NW Natural:				
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	$ 673	$ 1,113	$ 2,800	$ 3,319
Finance cash flows from finance leases	$ 215	$ —	$ 672	$ —
Right of use assets obtained in exchange for lease obligations				
Operating leases	$ 106	$ —	$ 78,539	$ 7,054
Finance leases	$ 676	$ —	$ 1,386	$ —
Other (NW Holdings):				
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	$ 18	$ 45	$ 109	$ 132
Right of use assets obtained in exchange for lease obligations				
Operating leases	$ —	$ —	$ —	$ 304
NW Holdings:				
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	$ 691	$ 1,158	$ 2,909	$ 3,451
Finance cash flows from finance leases	$ 215	$ —	$ 672	$ —
Right of use assets obtained in exchange for lease obligations				
Operating leases	$ 106	$ —	$ 78,539	$ 7,358
Finance leases	$ 676	$ —	$ 1,386	$ —

Finance Leases

NW Natural also leases building storage spaces for use as a gas meter room in order to provide natural gas to multifamily or mixed use developments. These contracts are accounted for as finance leases and typically involve a one-time upfront payment with no remaining liability. The right of use assets for finance leases were $1.8 million, $0.3 million and $0.5 million at September 30, 2020 and 2019 and at December 31, 2019, respectively.

7. STOCK-BASED COMPENSATION

Stock-based compensation plans are designed to promote stock ownership in NW Holdings by employees and officers. These compensation plans include a Long Term Incentive Plan (LTIP), an Employee Stock Purchase Plan (ESPP), and a Restated Stock Option Plan. For additional information on stock-based compensation plans, see Note 8 in the 2019 Form 10-K and the updates provided below.

Long Term Incentive Plan

Performance Shares

LTIP performance shares incorporate a combination of market, performance, and service-based factors. During the nine months ended September 30, 2020, the final performance factor under the 2018 LTIP was approved and 32,625 performance-based shares were granted under the 2018 LTIP for accounting purposes. As such, NW Natural and other subsidiaries began recognizing compensation expense. In February 2019 and 2020, LTIP shares were awarded to participants; however, the agreements allow for one of the performance factors to remain variable until the first quarter of the third year of the award period. As the performance factor will not be approved until the first quarters of 2021 and 2022, respectively, there is not a mutual understanding of the awards' key terms and conditions between NW Holdings and the participants as of September 30, 2020, and therefore, no expense was recognized for the 2019 and 2020 awards. NW Holdings will calculate the grant date fair value and NW Natural will recognize expense over the remaining service period for each award once the final performance factor has been approved.

For the 2019 and 2020 LTIP awards, share payouts range from a threshold of 0% to a maximum of 200% based on achievement of pre-established goals. The performance criteria for the 2019 and 2020 performance shares consists of a three-year Return on Invested Capital (ROIC) threshold that must be satisfied and a cumulative EPS factor, which can be modified by a total shareholder return factor (TSR modifier) relative to the performance of the Russell 2500 Utilities Index over the performance period of three years for each respective award. If the targets were achieved for the 2019 and 2020 awards, NW Holdings would grant for accounting purposes 35,170 and 31,830 shares in the first quarters of 2021 and 2022, respectively.

As of September 30, 2020, there was $0.2 million of unrecognized compensation cost associated with the 2018 LTIP grants, which is expected to be recognized through 2020.

Restricted Stock Units
During the nine months ended September 30, 2020, 33,426 RSUs were granted under the LTIP with a weighted-average grant date fair value of $70.94 per share. Generally, the RSUs awarded are forfeitable and include a performance-based threshold as well as a vesting period of four years from the grant date. The majority of our RSU grants obligate NW Holdings, upon vesting, to issue the RSU holder one share of common stock. The grant may also include a cash payment equal to the total amount of dividends paid per share between the grant date and vesting date of that portion of the RSU depending on the structure of the award agreement. The fair value of an RSU is equal to the closing market price of common stock on the grant date. As of September 30, 2020, there was $4.0 million of unrecognized compensation cost from grants of RSUs, which is expected to be recognized by NW Natural and other subsidiaries over a period extending through 2025.

8. DEBT

Short-Term Debt
At September 30, 2020, NW Holdings and NW Natural had short-term debt outstanding of $223.0 million and $150.0 million, respectively. NW Holdings' short-term debt consisted of $73.0 million in revolving credit agreement loans at NW Holdings, a $150.0 million 364-day term loan at NW Natural, and no commercial paper outstanding. The weighted average interest rate on short-term debt outstanding at September 30, 2020 was 0.89% and 0.75% at NW Holdings and NW Natural, respectively.

On March 23, 2020, NW Natural entered into a $150.0 million 364-day term loan credit agreement. NW Natural borrowed the full amount thereunder. The proceeds of which are expected to be used for general corporate purposes and to provide additional liquidity. All principal and unpaid interest under the Term Loan is due and payable on March 22, 2021. NW Natural may prepay the principal and interest, and amounts prepaid may not be reborrowed. The Term Loan requires that NW Natural maintain credit ratings with Standard & Poor’s and Moody’s Investor Services. A change in NW Natural’s debt ratings may result in a change to the interest rate on the Term Loan but is not an event of default. The Term Loan requires NW Natural to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the banks to terminate their lending commitments and to accelerate the maturity of all amounts outstanding. NW Natural was in compliance with the covenant requiring the maintenance of an indebtedness to total capitalization ratio as of September 30, 2020, with a consolidated indebtedness to total capitalization ratio of 57.0%.

Subsequent Event
On October 30, 2020, NW Natural repaid the $150.0 million 364-day term loan in full, which was funded by issuing short-term commercial paper.

Long-Term Debt
At September 30, 2020, NW Holdings and NW Natural had long-term debt outstanding of $955.4 million and $917.1 million, respectively, which included $7.6 million of unamortized debt issuance costs at NW Natural. NW Natural's long-term debt consists of first mortgage bonds (FMBs) with maturity dates ranging from 2021 through 2050, interest rates ranging from 2.82% to 9.05%, and a weighted average interest rate of 4.60%.

In March 2020, NW Natural issued $150.0 million of FMBs with an interest rate of 3.60%, due in 2050. In February 2020, NW Natural retired $75.0 million of FMBs with an interest rate of 5.37%.

In June 2019, NW Natural Water, a wholly-owned subsidiary of NW Holdings, entered into a two-year term loan agreement for $35.0 million, due in 2021. The loan carried an interest rate of 0.74% at September 30, 2020, which is based upon the two-month LIBOR rate. The loan is guaranteed by NW Holdings and requires NW Holdings to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Holdings was in compliance with this covenant at September 30, 2020, with a consolidated indebtedness to total capitalization ratio of 58.0%.

Fair Value of Long-Term Debt
NW Holdings' and NW Natural's outstanding debt does not trade in active markets. The fair value of long-term debt is estimated using the value of outstanding debt at natural gas distribution companies with similar credit ratings, terms, and remaining maturities to NW Holdings' and NW Natural's debt that actively trade in public markets. Substantially all outstanding debt at NW Holdings is comprised of NW Natural debt. These valuations are based on Level 2 inputs as defined in the fair value hierarchy. See Note 2 in the 2019 Form 10-K for a description of the fair value hierarchy.

The following table provides an estimate of the fair value of NW Holdings' long-term debt, including current maturities of long-term debt, using market prices in effect on the valuation date:

	NW Holdings		
	September 30,		December 31,
In thousands	2020	2019	2019
Gross long-term debt	$ 962,994	$ 906,757	$ 886,776
Unamortized debt issuance costs	(7,586)	(6,072)	(5,712)
Carrying amount	$ 955,408	$ 900,685	$ 881,064
Estimated fair value[(1)]	$ 1,118,565	$ 997,096	$ 957,268

[(1)] Estimated fair value does not include unamortized debt issuance costs.

The following table provides an estimate of the fair value of NW Natural's long-term debt, including current maturities of long-term debt, using market prices in effect on the valuation date:

	NW Natural		
	September 30,		December 31,
In thousands	2020	2019	2019
Gross long-term debt	$ 924,700	$ 869,700	$ 849,700
Unamortized debt issuance costs	(7,586)	(6,072)	(5,712)
Carrying amount	$ 917,114	$ 863,628	$ 843,988
Estimated fair value[(1)]	$ 1,080,663	$ 959,906	$ 919,835

[(1)] Estimated fair value does not include unamortized debt issuance costs.

9. PENSION AND OTHER POSTRETIREMENT BENEFIT COSTS

NW Natural maintains a qualified non-contributory defined benefit pension plan (Pension Plan), non-qualified supplemental pension plans for eligible executive officers and other key employees, and other postretirement employee benefit plans. NW Natural also has a qualified defined contribution plan (Retirement K Savings Plan) for all eligible employees. The Pension Plan and Retirement K Savings Plan have plan assets, which are held in qualified trusts to fund retirement benefits.

The service cost component of net periodic benefit cost for NW Natural pension and other postretirement benefit plans is recognized in operations and maintenance expense in the consolidated statements of comprehensive income. The other non-service cost components are recognized in other income (expense), net in the consolidated statements of comprehensive income.

The following table provides the components of net periodic benefit cost for the pension and other postretirement benefit plans:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	Pension Benefits		Other Postretirement Benefits		Pension Benefits		Other Postretirement Benefits	
In thousands	2020	2019	2020	2019	2020	2019	2020	2019
Service cost	$ 1,673	$ 1,516	$ 67	$ 67	$ 4,988	$ 4,549	$ 195	$ 202
Interest cost	4,071	4,662	229	281	12,093	13,985	675	845
Expected return on plan assets	(5,358)	(5,207)	—	—	(16,350)	(15,621)	—	—
Amortization of prior service costs	—	1	(119)	(117)	—	5	(353)	(351)
Amortization of net actuarial loss	5,082	3,604	173	97	14,638	10,810	458	290
Net periodic benefit cost	5,468	4,576	350	328	15,369	13,728	975	986
Amount allocated to construction	(695)	(608)	(25)	(25)	(2,043)	(1,790)	(71)	(72)
Net periodic benefit cost charged to expense	4,773	3,968	325	303	13,326	11,938	904	914
Regulatory pension disallowance	—	—	—	—	—	10,500	—	—
Amortization of regulatory balancing account	675	675	—	—	4,757	14,467	—	—
Net amount charged to expense	$ 5,448	$ 4,643	$ 325	$ 303	$ 18,083	$ 36,905	$ 904	$ 914

Net periodic benefit costs are reduced by amounts capitalized to NGD plant. In addition, a certain amount of net periodic benefit costs were recorded to the regulatory balancing account, representing net periodic pension expense for the qualified plan above the amount set in rates, as approved by the OPUC, from 2011 through October 31, 2018.

In March 2019, the OPUC issued an order concluding the NW Natural 2018 Oregon rate case. The Order allowed for the application of certain deferred revenues and tax benefits from the Tax Cuts and Jobs Act (TCJA) to reduce NW Natural's pension regulatory balancing account. A corresponding total of $12.5 million in pension expenses were recognized in operating and maintenance expense and other income (expense), net in the consolidated statements of comprehensive income in the first quarter of 2019, with offsetting benefits recorded within operating revenues and income taxes. The Order also directed NW Natural to reduce the balancing account by an additional $10.5 million, which was also charged to operating and maintenance expense and other income (expense), net in the consolidated statements of comprehensive income. Amortization of the remaining amount of the balancing account began in the second quarter of 2019 in accordance with the Order.

The following table presents amounts recognized in accumulated other comprehensive loss (AOCL) and the changes in AOCL related to non-qualified employee benefit plans:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Beginning balance	$ (10,413)	$ (8,324)	$ (10,733)	$ (7,188)
Amounts reclassified from AOCL:				
Amortization of actuarial losses	252	157	688	469
Reclassification of stranded tax effects[1]	—	—	—	(1,366)
Total reclassifications before tax	252	157	688	(897)
Tax (benefit) expense	(66)	(43)	(182)	(125)
Total reclassifications for the period	186	114	506	(1,022)
Ending balance	$ (10,227)	$ (8,210)	$ (10,227)	$ (8,210)

(1) Reclassification of $1.4 million of income tax effects resulting from the TCJA from accumulated other comprehensive loss to retained earnings was made pursuant to the adoption of ASU 2018-02.

Employer Contributions to Company-Sponsored Defined Benefit Pension Plans
For the nine months ended September 30, 2020, NW Natural made cash contributions totaling $23.7 million to qualified defined benefit pension plans. NW Natural expects further plan contributions of $5.3 million during the remainder of 2020.

Defined Contribution Plan
The Retirement K Savings Plan is a qualified defined contribution plan under Internal Revenue Code Sections 401(a) and 401(k). Employer contributions totaled $6.2 million and $5.3 million for the nine months ended September 30, 2020 and 2019, respectively.

See Note 10 in the 2019 Form 10-K for more information concerning these retirement and other postretirement benefit plans.

10. INCOME TAX

An estimate of annual income tax expense is made each interim period using estimates for annual pre-tax income, regulatory flow-through adjustments, tax credits, and other items. The estimated annual effective tax rate is applied to year-to-date, pre-tax income to determine income tax expense for the interim period consistent with the annual estimate. Discrete events are recorded in the interim period in which they occur or become known.

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The effective income tax rate varied from the federal statutory rate due to the following:

	Three Months Ended September 30,			
	NW Holdings		NW Natural	
In thousands	2020	2019	2020	2019
Income tax at statutory rate (federal)	$ (5,048)	$ (4,799)	$ (5,518)	$ (4,536)
State	(1,452)	(1,708)	(1,595)	(1,641)
Increase (decrease):				
Differences required to be flowed-through by regulatory commissions	1,051	2,090	1,051	2,090
Other, net	86	74	5	74
Total provision for income taxes on continuing operations	$ (5,363)	$ (4,343)	$ (6,057)	$ (4,013)
Effective income tax rate for continuing operations	22.3 %	19.0 %	23.1 %	18.6 %

	Nine Months Ended September 30,			
	NW Holdings		NW Natural	
In thousands	2020	2019	2020	2019
Income tax at statutory rate (federal)	$ 6,628	$ 6,703	$ 6,550	$ 7,388
State	1,892	1,797	1,861	1,975
Increase (decrease):				
Differences required to be flowed-through by regulatory commissions	(1,301)	(3,207)	(1,301)	(3,207)
Other, net	(127)	(336)	(168)	(336)
Total provision for income taxes on continuing operations	$ 7,092	$ 4,957	$ 6,942	$ 5,820
Effective income tax rate for continuing operations	22.5 %	15.5 %	22.3 %	16.5 %

The NW Holdings and NW Natural effective income tax rates for the nine months ended September 30, 2020 compared to the same periods in 2019 changed primarily as a result of changes in pre-tax income and regulatory amortization of deferred TCJA benefits as approved in the March 2019 OPUC order. See "*U.S. Federal TCJA Matters*" below and Note 11 in the 2019 Form 10-K for more detail on income taxes and effective tax rates.

The IRS Compliance Assurance Process (CAP) examination of the 2018 tax year was completed during the second quarter of 2020. There were no material changes to the return as filed. The 2019 and 2020 tax years are subject to examination under CAP.

U.S. Federal TCJA Matters

On December 22, 2017, the Tax Cuts and Jobs Act (TCJA) was enacted and permanently lowered the U.S. federal corporate income tax rate to 21% from the previous maximum rate of 35%, effective for the tax year beginning January 1, 2018. The TCJA included specific provisions related to regulated public utilities that provide for the continued deductibility of interest expense and the elimination of bonus tax depreciation for property both acquired and placed into service on or after January 1, 2018. See Note 11 in the 2019 Form 10-K.

11. PROPERTY, PLANT, AND EQUIPMENT

The following table sets forth the major classifications of property, plant, and equipment and accumulated depreciation of continuing operations:

	September 30,		December 31,
In thousands	2020	2019	2019
NW Natural:			
NGD plant in service	$ 3,441,301	$ 3,236,227	$ 3,302,049
NGD work in progress	120,722	91,302	84,965
Less: Accumulated depreciation	1,051,018	1,007,742	1,017,931
NGD plant, net	2,511,005	2,319,787	2,369,083
Other plant in service	65,103	63,360	63,513
Other construction work in progress	6,444	6,164	5,548
Less: Accumulated depreciation	19,387	18,889	18,662
Other plant, net	52,160	50,635	50,399
Total property, plant, and equipment, net	$ 2,563,165	$ 2,370,422	$ 2,419,482
Other (NW Holdings):			
Other plant in service	$ 47,302	$ 19,665	$ 20,671
Less: Accumulated depreciation	3,218	699	1,254
Other plant, net	$ 44,084	$ 18,966	$ 19,417
NW Holdings:			
Total property, plant, and equipment, net	$ 2,607,249	$ 2,389,388	$ 2,438,899
NW Natural and NW Holdings:			
Capital expenditures in accrued liabilities	$ 37,236	$ 35,461	$ 32,502

NW Holdings
Other plant balances include long-lived assets associated with water and wastewater utility operations and non-regulated activities not held by NW Natural or its subsidiaries.

NW Natural
Other plant balances include long-lived assets not related to NGD.

12. GAS RESERVES

NW Natural has invested $188 million through the gas reserves program in the Jonah Field located in Wyoming as of September 30, 2020. Gas reserves are stated at cost, net of regulatory amortization, with the associated deferred tax benefits recorded as liabilities in the consolidated balance sheets. The investment in gas reserves provides long-term price protection for NGD customers through the original agreement with Encana Oil & Gas (USA) Inc. under which NW Natural invested $178 million and the amended agreement with Jonah Energy LLC under which an additional $10 million was invested.

The cost of gas, including a carrying cost for the rate base investment, is included in the annual Oregon PGA filing, which allows NW Natural to recover these costs through customer rates. The investment under the original agreement, less accumulated amortization and deferred taxes, earns a rate of return. See Note 13 in the 2019 Form 10-K.

Gas produced from the additional wells is included in the Oregon PGA at a fixed rate of $0.4725 per therm, which approximates the 10-year hedge rate plus financing costs at the inception of the investment.

The following table outlines NW Natural's net gas reserves investment:

	September 30,		December 31,
In thousands	2020	2019	2019
Gas reserves, current	$ 12,265	$ 16,392	$ 15,278
Gas reserves, non-current	175,042	170,915	172,029
Less: Accumulated amortization	137,346	118,937	123,635
Total gas reserves[(1)]	49,961	68,370	63,672
Less: Deferred taxes on gas reserves	11,972	13,293	15,515
Net investment in gas reserves	$ 37,989	$ 55,077	$ 48,157

(1) The net investment in additional wells included in total gas reserves was $3.2 million, $4.0 million and $3.8 million at September 30, 2020 and 2019 and December 31, 2019, respectively.

NW Natural's investment is included in NW Holdings' and NW Natural's consolidated balance sheets under gas reserves with the maximum loss exposure limited to the investment balance.

13. INVESTMENTS

Investments in Gas Pipeline

On August 6, 2020, NWN Energy completed the sale of 100% of its interest in Trail West Holdings, LLC (TWH) to an unrelated third party for a purchase price of $14.0 million, $7.0 million of which was paid upon closing the transaction, and $7.0 million is to be paid upon the one-year anniversary of the close date. The completion of the sale resulted in an after-tax gain of approximately $0.5 million.

TWH was a variable interest entity reported under equity method accounting through its sale. The investment in TWH did not meet the criteria to be classified as held for sale or discontinued operations. The investment balance in TWH was $13.4 million at September 30, 2019 and December 31, 2019. See Note 14 in the 2019 Form 10-K.

Other Investments

Other investments include financial investments in life insurance policies, which are accounted for at cash surrender value, net of policy loans. See Note 14 in the 2019 Form 10-K.

14. BUSINESS COMBINATIONS

2020 Business Combinations

During the nine months ended September 30, 2020, NWN Water and its subsidiaries completed two significant acquisitions qualifying as business combinations. The aggregate fair value of the preliminary cash consideration transferred for these acquisitions was $38.1 million, most of which was preliminarily allocated to property, plant and equipment and goodwill. These transactions align with NW Holdings' water sector strategy as it continues to expand its water services territories in the Pacific Northwest and beyond and included:

- Suncadia Water Company, LLC and Suncadia Environmental Company, LLC were acquired by NWN Water of Washington on January 31, 2020, and
- T&W Water Service Company was acquired by NWN Water of Texas on March 2, 2020.

As each of these acquisitions met the criteria of a business combination, a preliminary allocation of the consideration to the acquired net assets based on their estimated fair value as of the acquisition date was performed. The allocation for each of these business combinations is considered preliminary as of September 30, 2020, as facts and circumstances that existed as of the acquisition date may be discovered as we continue to integrate these businesses. In accordance with U.S. GAAP, the fair value determination involves management judgment in determining the significant estimates and assumptions used and was made using existing regulatory conditions for net assets associated with Suncadia Water Company, LLC and T&W Water Service Company. These allocations are considered preliminary as of September 30, 2020, as facts and circumstances that existed as of the acquisition date may be discovered as we continue to integrate the acquired businesses. As a result, subsequent adjustments to the preliminary valuation of tangible assets, contract assets and liabilities, tax positions, and goodwill may be required. Subsequent adjustments are not expected to be significant, and any such adjustments are expected to be completed within the one-year measurement period for all acquisitions described above.

Total preliminary goodwill of $19.3 million was recognized from the acquisitions described above. No intangible assets aside from goodwill were acquired. The goodwill recognized is attributable to the regulated water utility service territories, experienced workforces, and the strategic benefits from both the water and wastewater utilities expected from growth in their service territories. The total amount of goodwill that is expected to be deductible for income tax purposes is approximately $16.5 million. The acquisition costs associated with each business combination were expensed as incurred. The results of these business combinations were not material to the consolidated financial results of NW Holdings for the three and nine months ended September 30, 2020.

Other Business Combinations
During the nine months ended September 30, 2020, NWN Water completed two additional acquisitions, comprised of three water systems and one wastewater system, which qualified as business combinations. The aggregate fair value of the preliminary consideration transferred for these acquisitions was approximately $1.5 million. These business combinations were not significant to NW Holdings' results of operations.

2019 Business Combinations
Sunriver
On May 31, 2019, NWN Water of Oregon, a wholly-owned indirect subsidiary of NW Holdings, completed the acquisition of Sunriver Water LLC and Sunriver Environmental LLC (collectively referred to as Sunriver), a privately-owned water utility and wastewater treatment company located in Sunriver, Oregon that serves approximately 9,400 connections. The acquisition-date fair value of the total consideration transferred, after closing adjustments, was approximately $55.0 million in cash consideration. The transaction aligns with NW Holdings' water sector strategy as it continues to expand its water utility service territory in the Pacific Northwest and begins to pursue wastewater investment opportunities.

The Sunriver acquisition met the criteria of a business combination, and as such a preliminary allocation of the consideration to the acquired assets based on their estimated fair value as of the acquisition date was performed. In accordance with U.S. GAAP, the fair value determination was made using existing regulatory conditions for assets associated with Sunriver Water LLC as well as existing market conditions and standard valuation approaches for assets associated with Sunriver Environmental LLC in order to allocate value as determined by an independent third party assessor for certain assets, which involved the use of management judgment in determining the significant estimates and assumptions used by the assessor, with the remaining difference from the consideration transferred being recorded as goodwill. The acquisition costs were expensed as incurred.

Final goodwill of $41.1 million was recognized from this acquisition. The goodwill recognized is attributable to Sunriver's regulated water utility service territory, experienced workforce, and the strategic benefits for both the water utility and wastewater services expected from growth in its service territory. No intangible assets aside from goodwill were acquired. The total amount of goodwill that is expected to be deductible for income tax purposes is approximately $50.2 million.

The final purchase price for the acquisition has been allocated to the net assets acquired as of the acquisition date and is as follows:

In thousands		May 31, 2020
Current assets	$	222
Property, plant and equipment		12,866
Goodwill		41,054
Deferred tax assets		828
Current liabilities		(22)
Total net assets acquired	$	54,948

The amount of Sunriver revenues included in NW Holdings' consolidated statements of comprehensive income included $1.9 million and $4.9 million for the three and nine months ended September 30, 2020, respectively. Earnings included in NW Holdings' consolidated statements of comprehensive income included $0.6 million and $1.3 million for the three and nine months ended September 30, 2020, respectively.

Other Business Combinations
During 2019, NWN Water completed three additional acquisitions qualifying as business combinations. The aggregate fair value of the preliminary consideration transferred for these acquisitions was approximately $2.0 million. These business combinations were not significant to NW Holdings' results of operations.

Goodwill
NW Holdings allocates goodwill to reporting units based on the expected benefit from the business combination. We perform an annual impairment assessment of goodwill at the reporting unit level, or more frequently if events and circumstances indicate that goodwill might be impaired. An impairment loss is recognized if the carrying value of a reporting unit’s goodwill exceeds its fair value.

As a result of all acquisitions completed, total goodwill was $70.3 million as of September 30, 2020, $49.3 million as of September 30, 2019 and $49.9 million as of December 31, 2019. The increase in the goodwill balance was primarily due to additions associated with our acquisitions in the water sector. All of our goodwill is related to water and wastewater acquisitions and is included in the other category for segment reporting purposes. The annual impairment assessment of goodwill occurs in the fourth quarter of each year. There have been no impairments recognized to date.

15. DERIVATIVE INSTRUMENTS

NW Natural enters into financial derivative contracts to hedge a portion of the NGD segment's natural gas sales requirements. These contracts include swaps, options, and combinations of option contracts. These derivative financial instruments are primarily used to manage commodity price variability. A small portion of NW Natural's derivative hedging strategy involves foreign currency exchange contracts.

NW Natural enters into these financial derivatives, up to prescribed limits, primarily to hedge price variability related to physical gas supply contracts as well as to hedge spot purchases of natural gas. The foreign currency forward contracts are used to hedge the fluctuation in foreign currency exchange rates for pipeline demand charges paid in Canadian dollars.

In the normal course of business, NW Natural also enters into indexed-price physical forward natural gas commodity purchase contracts and options to meet the requirements of NGD customers. These contracts qualify for regulatory deferral accounting treatment.

NW Natural also enters into exchange contracts related to the third-party asset management of its gas portfolio, some of which are derivatives that do not qualify for hedge accounting or regulatory deferral, but are subject to NW Natural's regulatory sharing agreement. These derivatives are recognized in operating revenues, net of amounts shared with NGD customers.

Notional Amounts
The following table presents the absolute notional amounts related to open positions on NW Natural derivative instruments:

	September 30,		December 31,
In thousands	2020	2019	2019
Natural gas (in therms):			
Financial	860,400	752,090	651,540
Physical	706,592	751,950	512,849
Foreign exchange	$ 6,754	$ 6,446	$ 6,650

Purchased Gas Adjustment (PGA)
Derivatives entered into by NW Natural for the procurement or hedging of natural gas for future gas years generally receive regulatory deferral accounting treatment. In general, commodity hedging for the current gas year is completed prior to the start of the gas year, and hedge prices are reflected in the weighted-average cost of gas in the PGA filing. Rates and hedging approaches may vary between states due to different rate structures and mechanisms. Hedge contracts entered into after the start of the PGA period are subject to the PGA incentive sharing mechanism in Oregon. NW Natural entered the 2019-20 and 2018-19 gas years with forecasted sales volumes hedged at 52% and 48% in financial swap and option contracts, and 19% and 24% in physical gas supplies, respectively. Hedge contracts entered into prior to the PGA filing in September 2019 were included in the PGA for the 2019-20 gas year. Hedge contracts entered into after the PGA filing, and related to subsequent gas years, may be included in future PGA filings and qualify for regulatory deferral.

Unrealized and Realized Gain/Loss

The following table reflects the income statement presentation for the unrealized gains and losses from NW Natural's derivative instruments, which also represents all derivative instruments at NW Holdings:

	Three Months Ended September 30,			
	2020		2019	
In thousands	Natural gas commodity	Foreign exchange	Natural gas commodity	Foreign exchange
Benefit (expense) to cost of gas	$ 28,122	$ 136	$ 2,391	$ (133)
Operating revenues (expense)	658	—	2,002	—
Amounts deferred to regulatory accounts on balance sheet	(28,684)	(136)	(4,102)	133
Total gain (loss) in pre-tax earnings	$ 96	$ —	$ 291	$ —

	Nine Months Ended September 30,			
	2020		2019	
In thousands	Natural gas commodity	Foreign exchange	Natural gas commodity	Foreign exchange
Benefit (expense) to cost of gas	$ 28,271	$ 129	$ 4,255	$ 24
Operating revenues (expense)	(1,021)	—	36	—
Amounts deferred to regulatory accounts on balance sheet	(27,398)	(129)	(4,284)	(24)
Total gain (loss) in pre-tax earnings	$ (148)	$ —	$ 7	$ —

UNREALIZED GAIN/LOSS. Outstanding derivative instruments related to regulated NGD operations are deferred in accordance with regulatory accounting standards. The cost of foreign currency forward and natural gas derivative contracts are recognized immediately in the cost of gas; however, costs above or below the amount embedded in the current year PGA are subject to a regulatory deferral tariff and therefore, are recorded as a regulatory asset or liability.

REALIZED GAIN/LOSS. NW Natural realized no net gains/losses and net losses of $3.2 million for the three and nine months ended September 30, 2020, respectively, from the settlement of natural gas financial derivative contracts, whereas, net losses of $1.1 million and net gains $9.2 million were realized for the three and nine months ended September 30, 2019, respectively. Realized gains and losses offset the higher or lower cost of gas purchased, resulting in no incremental amounts to collect or refund to customers.

Credit Risk Management of Financial Derivatives Instruments

No collateral was posted with or by NW Natural counterparties as of September 30, 2020 or 2019. NW Natural attempts to minimize the potential exposure to collateral calls by diversifying counterparties to manage liquidity risk. Counterparties generally allow a certain credit limit threshold before requiring NW Natural to post collateral against loss positions. Given NW Natural's counterparty credit limits and portfolio diversification, it was not subject to collateral calls in 2020 or 2019. The collateral call exposure is set forth under credit support agreements, which generally contain credit limits.

NW Natural could also be subject to collateral call exposure where it has agreed to provide adequate assurance, which is not specific as to the amount of credit limit allowed, but could potentially require additional collateral in the event of a material adverse change. If credit-risk related contingent features within these contracts were triggered as of September 30, 2020, assuming current gas prices and a credit rating downgrade to a speculative level, we would not be required to post collateral calls, including estimates for adequate assurance.

NW Natural's financial derivative instruments are subject to master netting arrangements; however, they are presented on a gross basis in the consolidated balance sheets. NW Natural and its counterparties have the ability to set-off obligations to each other under specified circumstances. Such circumstances may include a defaulting party, a credit change due to a merger affecting either party, or any other termination event.

NW Natural’s current commodity financial swap and option contracts outstanding reflect unrealized gains of $34.1 million at September 30, 2020 and unrealized losses of $2.3 million at September 30, 2019. If netted by counterparty, NW Natural's physical and financial derivative position would result in an asset of $35.6 million and a liability of $1.3 million as of September 30, 2020, an asset of $4.3 million and a liability of $3.9 million as of September 30, 2019, and an asset of $9.4 million and a liability of $1.9 million as of December 31, 2019.

NW Natural is exposed to derivative credit and liquidity risk primarily through securing fixed price natural gas commodity swaps with financial counterparties. NW Natural utilizes master netting arrangements through International Swaps and Derivatives Association contracts to minimize this risk along with collateral support agreements with counterparties based on their credit ratings. In certain cases, NW Natural requires guarantees or letters of credits from counterparties to meet its minimum credit requirement standards. See Note 16 in the 2019 Form 10-K for additional information.

Fair Value

In accordance with fair value accounting, NW Natural includes non-performance risk in calculating fair value adjustments. This includes a credit risk adjustment based on the credit spreads of NW Natural counterparties when in an unrealized gain position, or on NW Natural's own credit spread when in an unrealized loss position. The inputs in our valuation models include natural gas futures, volatility, credit default swap spreads and interest rates. Additionally, the assessment of non-performance risk is generally derived from the credit default swap market and from bond market credit spreads. The impact of the credit risk adjustments for all outstanding derivatives was immaterial to the fair value calculation at September 30, 2020. Using significant other observable or Level 2 inputs, the net fair value was an asset of $34.3 million, an asset of $0.4 million, and an asset of $7.5 million as of September 30, 2020 and 2019, and December 31, 2019, respectively. No Level 3 inputs were used in our derivative valuations, and there were no transfers between Level 1 or Level 2 during the nine months ended September 30, 2020 and 2019. See Note 2 in the 2019 Form 10-K.

16. ENVIRONMENTAL MATTERS

NW Natural owns, or previously owned, properties that may require environmental remediation or action. The range of loss for environmental liabilities is estimated based on current remediation technology, enacted laws and regulations, industry experience gained at similar sites, and an assessment of the probable level of involvement and financial condition of other potentially responsible parties (PRPs). When amounts are prudently expended related to site remediation of those sites described herein, NW Natural has recovery mechanisms in place to collect 96.7% of remediation costs allocable to Oregon customers and 3.3% of costs allocable to Washington customers.

These sites are subject to the remediation process prescribed by the Environmental Protection Agency (EPA) and the Oregon Department of Environmental Quality (ODEQ). The process begins with a remedial investigation (RI) to determine the nature and extent of contamination and then a risk assessment (RA) to establish whether the contamination at the site poses unacceptable risks to humans and the environment. Next, a feasibility study (FS) or an engineering evaluation/cost analysis (EE/CA) evaluates various remedial alternatives. It is at this point in the process when NW Natural is able to estimate a range of remediation costs and record a reasonable potential remediation liability, or make an adjustment to the existing liability. From this study, the regulatory agency selects a remedy and issues a Record of Decision (ROD). After a ROD is issued, NW Natural would seek to negotiate a consent decree or consent judgment for designing and implementing the remedy. NW Natural would have the ability to further refine estimates of remediation liabilities at that time.

Remediation may include treatment of contaminated media such as sediment, soil and groundwater, removal and disposal of media, institutional controls such as legal restrictions on future property use, or natural recovery. Following construction of the remedy, the EPA and ODEQ also have requirements for ongoing maintenance, monitoring and other post-remediation care that may continue for many years. Where appropriate and reasonably known, NW Natural will provide for these costs in the remediation liabilities described below.

Due to the numerous uncertainties surrounding the course of environmental remediation and the preliminary nature of several site investigations, in some cases, NW Natural may not be able to reasonably estimate the high end of the range of possible loss. In those cases, the nature of the possible loss has been disclosed, as has the fact that the high end of the range cannot be reasonably estimated where a range of potential loss is available. Unless there is an estimate within the range of possible losses that is more likely than other cost estimates within that range, NW Natural records the liability at the low end of this range. It is likely changes in these estimates and ranges will occur throughout the remediation process for each of these sites due to the continued evaluation and clarification concerning responsibility, the complexity of environmental laws and regulations and the determination by regulators of remediation alternatives. In addition to remediation costs, NW Natural could also be subject to Natural Resource Damages (NRD) claims. NW Natural will assess the likelihood and probability of each claim and recognize a liability if deemed appropriate. Refer to "*Other Portland Harbor*" below.

Environmental Sites

The following table summarizes information regarding liabilities related to environmental sites, which are recorded in other current liabilities and other noncurrent liabilities in NW Natural's balance sheet:

	Current Liabilities			Non-Current Liabilities		
	September 30,		December 31,	September 30,		December 31,
In thousands	2020	2019	2019	2020	2019	2019
Portland Harbor site:						
Gasco/Siltronic Sediments	$ 8,338	$ 5,976	$ 11,632	$ 43,509	$ 43,861	$ 46,082
Other Portland Harbor	2,760	2,211	2,543	5,882	5,331	6,920
Gasco/Siltronic Upland site	8,775	8,202	14,203	41,515	42,267	43,616
Central Service Center site	—	5	—	—	—	—
Front Street site	10,610	6,009	10,847	1,044	5,024	—
Oregon Steel Mills	—	—	—	179	179	179
Total	$ 30,483	$ 22,403	$ 39,225	$ 92,129	$ 96,662	$ 96,797

PORTLAND HARBOR SITE. The Portland Harbor is an EPA listed Superfund site that is approximately 10 miles long on the Willamette River and is adjacent to NW Natural's Gasco uplands site. NW Natural is one of over one hundred PRPs, each jointly and severally liable, at the Superfund site. In January 2017, the EPA issued its Record of Decision, which selects the remedy for the clean-up of the Portland Harbor site (Portland Harbor ROD). The Portland Harbor ROD estimates the present value total cost at approximately $1.05 billion with an accuracy between -30% and +50% of actual costs.

NW Natural's potential liability is a portion of the costs of the remedy for the entire Portland Harbor Superfund site. The cost of that remedy is expected to be allocated among more than one hundred PRPs. NW Natural is participating in a non-binding allocation process with the other PRPs in an effort to resolve its potential liability. The Portland Harbor ROD does not provide any additional clarification around allocation of costs among PRPs; accordingly, NW Natural has not modified any of the recorded liabilities at this time as a result of the issuance of the Portland Harbor ROD.

NW Natural manages its liability related to the Superfund site as two distinct remediation projects: the Gasco/Siltronic Sediments and Other Portland Harbor projects.

Gasco/Siltronic Sediments. In 2009, NW Natural and Siltronic Corporation entered into a separate Administrative Order on Consent with the EPA to evaluate and design specific remedies for sediments adjacent to the Gasco uplands and Siltronic uplands sites. NW Natural submitted a draft EE/CA to the EPA in May 2012 to provide the estimated cost of potential remedial alternatives for this site. In March 2020, NW Natural and the EPA amended the Administrative Order on Consent to include additional remedial design activities downstream of the Gasco sediments site and in the navigation channel. Siltronic Corporation is not a party to the amended order. At this time, the estimated costs for the various sediment remedy alternatives in the draft EE/CA for the additional studies and design work needed before the cleanup can occur, and for regulatory oversight throughout the cleanup range from $51.8 million to $350 million. NW Natural has recorded a liability of $51.8 million for the Gasco sediment clean-up, which reflects the low end of the range. At this time, we believe sediments at the Gasco sediments site represent the largest portion of NW Natural's liability related to the Portland Harbor site discussed above.

Other Portland Harbor. While we believe liabilities associated with the Gasco/Siltronic sediments site represent NW Natural's largest exposure, there are other potential exposures associated with the Portland Harbor ROD, including NRD costs and harborwide remedial design and cleanup costs (including downstream petroleum contamination), for which allocations among the PRPs have not yet been determined.

NW Natural and other parties have signed a cooperative agreement with the Portland Harbor Natural Resource Trustee council to participate in a phased NRD assessment to estimate liabilities to support an early restoration-based settlement of NRD claims. One member of this Trustee council, the Yakama Nation, withdrew from the council in 2009, and in 2017, filed suit against NW Natural and 29 other parties seeking remedial costs and NRD assessment costs associated with the Portland Harbor site, set forth in the complaint. The complaint seeks recovery of alleged costs totaling $0.3 million in connection with the selection of a remedial action for the Portland Harbor site as well as declaratory judgment for unspecified future remedial action costs and for costs to assess the injury, loss or destruction of natural resources resulting from the release of hazardous substances at and from the Portland Harbor site. The Yakama Nation has filed two amended complaints addressing certain pleading defects and dismissing the State of Oregon. On the motion of NW Natural and certain other defendants, the federal court has stayed the case pending the outcome of the non-binding allocation proceeding discussed above. NW Natural has recorded a liability for NRD claims which is at the low end of the range of the potential liability; the high end of the range cannot be reasonably estimated at this time. The NRD liability is not included in the aforementioned range of costs provided in the Portland Harbor ROD.

GASCO UPLANDS SITE. A predecessor of NW Natural, Portland Gas and Coke Company, owned a former gas manufacturing plant that was closed in 1958 (Gasco site) and is adjacent to the Portland Harbor site described above. The Gasco site has been under investigation by NW Natural for environmental contamination under the ODEQ Voluntary Cleanup Program (VCP). It is not included in the range of remedial costs for the Portland Harbor site noted above. The Gasco site is managed in two parts, the uplands portion and the groundwater source control action.

NW Natural submitted a revised Remedial Investigation Report for the uplands to ODEQ in May 2007. In March 2015, ODEQ approved Remedial Assessment (RA) for this site, enabling commencement of work on the FS in 2016. NW Natural has recognized a liability for the remediation of the uplands portion of the site which is at the low end of the range of potential liability; the high end of the range cannot be reasonably estimated at this time.

In October 2016, ODEQ and NW Natural agreed to amend their VCP agreement to incorporate a portion of the Siltronic property adjacent to the Gasco site formerly owned by Portland Gas & Coke between 1939 and 1960 into the Gasco RA and FS, excluding the uplands for Siltronic. Previously, NW Natural was conducting an investigation of manufactured gas plant constituents on the entire Siltronic uplands for ODEQ. Siltronic will be working with ODEQ directly on environmental impacts to the remainder of its property.

In September 2013, NW Natural completed construction of a groundwater source control system, including a water treatment station, at the Gasco site. NW Natural has estimated the cost associated with the ongoing operation of the system and has recognized a liability which is at the low end of the range of potential cost. NW Natural cannot estimate the high end of the range at this time due to the uncertainty associated with the duration of running the water treatment station, which is highly dependent on the remedy determined for both the upland portion as well as the final remedy for Gasco sediment exposure.

OTHER SITES. In addition to those sites above, NW Natural has environmental exposures at three other sites: Central Service Center, Front Street and Oregon Steel Mills. NW Natural may have exposure at other sites that have not been identified at this time. Due to the uncertainty of the design of remediation, regulation, timing of the remediation and in the case of the Oregon Steel Mills site, pending litigation, liabilities for each of these sites have been recognized at their respective low end of the range of potential liability; the high end of the range could not be reasonably estimated at this time.

Central Service Center site. The investigative phase to characterize the existing site has been completed and determined by the Oregon Department of Environmental Quality (DEQ) to be sufficient to allow for the issuance of a Conditional No Further Action (cNFA). NW Natural is now conducting ongoing environmental monitoring activities over the next 5 years in order to meet the conditions which were included within the cNFA.

Front Street site. The Front Street site was the former location of a gas manufacturing plant NW Natural operated (the former Portland Gas Manufacturing site, or PGM). At ODEQ’s request, NW Natural conducted a sediment and source control investigation and provided findings to ODEQ. In December 2015, an FS on the former Portland Gas Manufacturing site was completed.

In July 2017, ODEQ issued the PGM ROD. The ROD specifies the selected remedy, which requires a combination of dredging, capping, treatment, and natural recovery. In addition, the selected remedy also requires institutional controls and long-term inspection and maintenance. NW Natural revised its estimate of the remaining cost to construct the remedy to be approximately $7.1 million. Further, NW Natural has recognized an additional liability of $4.6 million for munitions and design costs, regulatory and permitting issues, and post-construction work. Construction of the remedy began in early July 2020 and was completed in October 2020.

Oregon Steel Mills site. Refer to "*Legal Proceedings"* below.

<u>Environmental Cost Deferral and Recovery</u>
NW Natural has authorizations in Oregon and Washington to defer costs related to remediation of properties that are owned or were previously owned by NW Natural. In Oregon, a Site Remediation and Recovery Mechanism (SRRM) is currently in place to recover prudently incurred costs allocable to Oregon customers, subject to an earnings test. On October 21, 2019, the WUTC authorized an Environmental Cost Recovery Mechanism (ECRM) for recovery of prudently incurred costs allocable to Washington customers beginning November 1, 2019. See Note 18 in the 2019 Form 10-K for a description of SRRM and ECRM collection processes.

The following table presents information regarding the total regulatory asset deferred:

In thousands	September 30, 2020	September 30, 2019	December 31, 2019
Deferred costs and interest [1]	$ 35,919	$ 36,392	$ 36,673
Accrued site liabilities [2]	122,226	118,699	135,662
Insurance proceeds and interest	(69,138)	(80,741)	(79,949)
Total regulatory asset deferral[1]	$ 89,007	$ 74,350	$ 92,386
Current regulatory assets[3]	4,440	5,100	4,762
Long-term regulatory assets[3]	84,567	69,250	87,624

(1) Includes pre-review and post-review deferred costs, amounts currently in amortization, and interest, net of amounts collected from customers.

(2) Excludes 3.3% of the Front Street site liability, or $0.4 million in 2020 and $0.4 million in 2019, as the OPUC only allows recovery of 96.7% of costs for those sites allocable to Oregon, including those that historically served only Oregon customers.

(3) Environmental costs relate to specific sites approved for regulatory deferral by the OPUC and WUTC. In Oregon, NW Natural earns a carrying charge on cash amounts paid, whereas amounts accrued but not yet paid do not earn a carrying charge until expended. It also accrues a carrying charge on insurance proceeds for amounts owed to customers. In Washington, neither the cash paid nor insurance proceeds received accrue a carrying charge. Current environmental costs represent remediation costs management expects to collect from customers in the next 12 months. Amounts included in this estimate are still subject to a prudence and earnings test review by the OPUC and do not include the $5.0 million tariff rider. The amounts allocable to Oregon are recoverable through NGD rates, subject to an earnings test.

ENVIRONMENTAL EARNINGS TEST. To the extent NW Natural earns at or below its authorized Return on Equity (ROE) as defined by the SRRM, remediation expenses and interest in excess of the $5.0 million tariff rider and $5.0 million insurance proceeds are recoverable through the SRRM. To the extent NW Natural earns more than its authorized ROE in a year, it is required to cover environmental expenses and interest on expenses greater than the $10.0 million with those earnings that exceed its authorized ROE.

Legal Proceedings
NW Holdings is not currently party to any direct claims or litigation, though in the future it may be subject to claims and litigation arising in the ordinary course of business.

NW Natural is subject to claims and litigation arising in the ordinary course of business including the matters discussed above and ordinary course claims and litigation noted below. Although the final outcome of any of these legal proceedings cannot be predicted with certainty, including the matter described below, NW Natural and NW Holdings do not expect that the ultimate disposition of any of these matters will have a material effect on financial condition, results of operations or cash flows. See also Part II, Item 1, "*Legal Proceedings*".

OREGON STEEL MILLS SITE. See Note 18 in the 2019 Form 10-K.

For additional information regarding other commitments and contingencies, see Note 17 in the 2019 Form 10-K.

17. DISCONTINUED OPERATIONS

NW Holdings
On June 20, 2018, NWN Gas Storage, then a wholly-owned subsidiary of NW Natural, entered into a Purchase and Sale Agreement (the Agreement) that provides for the sale by NWN Gas Storage of all of the membership interests in Gill Ranch. Gill Ranch owns a 75% interest in the natural gas storage facility located near Fresno, California known as the Gill Ranch Gas Storage Facility. Pacific Gas and Electric Company (PG&E) owns the remaining 25% interest in the Gill Ranch Gas Storage Facility. The CPUC regulates Gill Ranch under a market-based rate model which allows for the price of storage services to be set by the marketplace.

The Agreement provides for an initial cash purchase price of $25.0 million (subject to a working capital adjustment), plus potential additional payments to NWN Gas Storage of up to $26.5 million in the aggregate if Gill Ranch achieves certain economic performance levels for the first three full gas storage years (April 1 of one year through March 31 of the following year) occurring after the closing and the remaining portion of the gas storage year during which the closing occurs.

The sale of Gill Ranch was approved by the CPUC in December 2019, and the transaction is subject to other customary closing conditions and covenants, including the requirement that all of the representations and warranties be true and correct as of the closing date except, as would not, in the case of certain representations and warranties, be reasonably expected to have a material adverse effect on Gill Ranch. The Agreement, as amended, is subject to termination by either party if the transaction has not closed by November 20, 2020.

The following table presents the carrying amounts of the major components of Gill Ranch that are classified as discontinued operations assets and liabilities on the consolidated balance sheets:

	NW Holdings Discontinued Operations		
	September 30,		December 31,
In thousands	2020	2019	2019
Assets:			
Accounts receivable	$ 1,106	$ 907	$ 333
Inventories	730	712	695
Other current assets	64	45	457
Property, plant, and equipment, net	14,663	12,583	13,284
Operating lease right of use asset	118	118	118
Other non-current assets	247	247	247
Total discontinued operations assets - current assets [(1)]	$ 16,928	$ 14,612	$ 15,134
Liabilities:			
Accounts payable	$ 1,747	$ 1,375	$ 1,250
Other current liabilities	796	342	848
Operating lease liabilities	113	114	116
Other non-current liabilities	11,266	11,568	11,495
Total discontinued operations liabilities - current liabilities [(1)]	$ 13,922	$ 13,399	$ 13,709

[(1)] The total assets and liabilities of Gill Ranch are classified as current as of the periods presented above because it is probable that the sale will be completed within one year.

The following table presents the operating results of Gill Ranch, which was reported within the gas storage segment historically, and is presented net of tax on the consolidated statements of comprehensive income:

	NW Holdings Discontinued Operations			
	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands, except per share data	2020	2019	2020	2019
Revenues	$ 3,584	$ 1,410	$ 7,866	$ 4,879
Expenses:				
Operations and maintenance	2,148	2,113	6,332	6,377
General taxes	61	40	161	159
Depreciation and amortization	105	105	317	317
Other expenses and interest	229	233	688	699
Total expenses	2,543	2,491	7,498	7,552
Income (loss) from discontinued operations before income taxes	1,041	(1,081)	368	(2,673)
Income tax expense (benefit)	276	(286)	101	(705)
Income (loss) from discontinued operations, net of tax	$ 765	$ (795)	$ 267	$ (1,968)
Earnings (loss) from discontinued operations per share of common stock:				
Basic	$ 0.02	$ (0.02)	$ 0.01	$ (0.07)
Diluted	$ 0.02	$ (0.02)	$ 0.01	$ (0.07)

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is management’s assessment of NW Holdings' and NW Natural's financial condition, including the principal factors that affect results of operations. The discussion refers to the consolidated results from continuing operations for the three and nine months ended September 30, 2020 and 2019 of NW Holdings, the substantial majority of which consist of the operating results of NW Natural. See Note 1 for a complete list of NW Holdings' and NW Natural's direct and indirect wholly owned subsidiaries. When significant activity exists at NW Holdings that does not exist at NW Natural, additional disclosure has been provided. References in this discussion to "Notes" are to the Notes to Unaudited Consolidated Financial Statements in this report. A significant portion of the business results are seasonal in nature, and, as such, the results of operations for the three and nine month periods are not necessarily indicative of expected fiscal year results. Therefore, this discussion should be read in conjunction with NW Holdings' and NW Natural's 2019 Annual Report on Form 10-K, as applicable (2019 Form 10-K).

NW Natural's natural gas distribution activities are reported in the natural gas distribution (NGD) segment. The NGD segment includes our NW Natural local gas distribution business, NWN Gas Reserves, which is a wholly owned subsidiary of Energy Corp, and the NGD-portion of NW Natural's Mist storage facility in Oregon. Other activities aggregated and reported as other at NW Natural include the non-NGD storage activity at Mist as well as asset management services and the appliance retail center operations. Other activities aggregated and reported as other at NW Holdings include NWN Energy's equity investment in Trail West Holdings, LLC (TWH) through August 6, 2020; NNG Financial's investment in Kelso-Beaver Pipeline (KB Pipeline); and NWN Water, which through itself or its subsidiaries owns and continues to pursue investments in the water sector. See Note 4 for further discussion of our business segment and other, as well as our direct and indirect wholly owned subsidiaries. See Note 13 for information on our TWH investment.
NON-GAAP FINANCIAL MEASURES. In addition to presenting the results of operations and earnings amounts in total, certain financial measures are expressed in cents per share, which are non-GAAP financial measures. All references in this section to earnings per share (EPS) are on the basis of diluted shares. We use such non-GAAP financial measures to analyze our financial performance because we believe they provide useful information to our investors and creditors in evaluating our financial condition and results of operations. Our non-GAAP financial measures should not be considered a substitute for, or superior to, measures calculated in accordance with U.S. GAAP.

EXECUTIVE SUMMARY

We manage our business and strategic initiatives with a long-term view of providing natural gas service safely and reliably to customers, working with regulators on key policy initiatives, and remaining focused on growing our business. See *"2020 Outlook"* in the 2019 Form 10-K for more information. Current operational highlights include:
- Continue to provide customers with essential natural gas and water utility services during the COVID-19 pandemic;
- NGD business added over 14,000 meters during the past twelve months for a growth rate of 1.9% at September 30, 2020;
- Completed rule making for Senate Bill 98 enabling NW Natural to procure renewable natural gas for customers;
- Received Oregon general rate case order providing a revenue requirement increase of approximately $45 million; and
- Continued our focus on our water utility strategy with additional closed transactions in 2020, bringing our total connections to approximately 26,000.

Key quarter-to-date financial highlights for NW Holdings include:

	Three Months Ended September 30,				
	2020		2019		QTD
In thousands, except per share data	Amount	Per Share	Amount	Per Share	Change
Net loss from continuing operations	$ (18,677)	$ (0.61)	$ (18,506)	$ (0.61)	$ (171)
Income (loss) from discontinued operations, net of tax	765	0.02	(795)	(0.02)	1,560
Consolidated net loss	$ (17,912)	$ (0.59)	$ (19,301)	$ (0.63)	$ 1,389

Key quarter-to-date financial highlights for NW Natural include:

	Three Months Ended September 30,		
	2020	2019	QTD
In thousands	Amount	Amount	Change
Consolidated net loss	$ (20,220)	$ (17,588)	$ (2,632)
NGD margin	$ 55,542	$ 55,903	$ (361)

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019.

Consolidated net loss increased $2.6 million at NW Natural primarily due to the following factors:
- a $0.9 million increase in operations and maintenance expenses primarily as a result of higher compensation and non-payroll expenses; and
- a $3.3 million increase in depreciation expense and general taxes due to NGD property, plant, and equipment additions, as we continued to invest in our gas utility system; partially offset by,
- a $1.7 million decrease in interest expense primarily due to deferring to a regulatory asset $1.6 million of interest on financings undertaken in March 2020 as a precautionary measure to strengthen our liquidity position as the pandemic unfolded. The deferred interest expense primarily related to interest incurred in the second quarter of 2020.

Net loss from continuing operations increased $0.2 million at NW Holdings primarily due to the following factors:
- a $2.6 million increase in consolidated net loss at NW Natural as discussed above, partially offset by
- a $2.5 million increase in other net income primarily reflecting higher earnings at our water and wastewater utilities that have been acquired since the prior period.

Key year-to-date financial highlights for NW Holdings include:

	Nine Months Ended September 30,				YTD
	2020		2019		
In thousands, except per share data	Amount	Per Share	Amount	Per Share	Change
Net income from continuing operations	$ 24,467	$ 0.80	$ 26,963	$ 0.91	$ (2,496)
Income (loss) from discontinued operations, net of tax	267	0.01	(1,968)	(0.07)	2,235
Consolidated net income	$ 24,734	$ 0.81	$ 24,995	$ 0.84	$ (261)

Key year-to-date financial highlights for NW Natural include:

	Nine Months Ended September 30,		YTD
	2020	2019	
In thousands	Amount	Amount	Change
Consolidated net income	$ 24,247	$ 29,361	$ (5,114)
NGD margin	289,337	289,539	(202)

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019.

Consolidated net income decreased $5.1 million at NW Natural primarily due to the following factors:
- a $9.9 million increase in depreciation expense and general taxes due to property, plant, and equipment additions, as we continued to invest in our gas utility system;
- a $1.1 million increase in income tax expense primarily related to the prior period including an income tax benefit related to the return of deferred TCJA benefits to customers and the regulatory pension disallowance; partially offset by
- a $8.2 million decrease in other expense, net primarily related to higher 2019 pension expenses (non-service cost component) recognized due to the recovery of amounts in NW Natural's pension balancing account, which were primarily offset within NGD margin and income tax benefits and which did not recur in 2020.

Net income from continuing operations decreased $2.5 million at NW Holdings primarily due to the following factors:
- a $5.1 million decrease in consolidated net income at NW Natural as discussed above, partially offset by
- a $2.6 million increase in other net income primarily reflecting higher earnings at our water and wastewater utilities that have been acquired since the prior period.

COVID-19 AND CURRENT ECONOMIC CONDITIONS. The novel coronavirus (COVID-19), which was declared a pandemic by the World Health Organization in March 2020, has resulted in severe and widespread global, national, and local economic and societal disruptions. On March 23, 2020, the Governors of Oregon and Washington, the states in which NW Natural's service territories are located, issued stay at home executive orders. These and subsequent executive orders required the closure of "non-essential" businesses and permitted the continuation of "essential services." All of the services provided by NW Natural and NW Natural Water were considered "essential services" under the executive orders applicable to the jurisdictions in which they operate. Our service territories are currently in various phases of reopening, which has permitted the reopening of many businesses that were considered non-essential. We will continue to monitor these orders as circumstances change.

As a critical infrastructure energy company that provides an essential service to our customers, NW Natural has well-defined emergency response command structures and protocols. In response to the pandemic, NW Natural mobilized its incident command team and business continuity plans in early March, and continues to operate under these structures and protocols, with a focus on the safety of our 1,200 employees and the 2.5 million people, business partners and communities we serve. NW Natural has generally suspended business travel out of our service territory and implemented work-from-home plans for employees wherever possible. For employees whose role requires them to work in the field, we are following CDC, OSHA, and state specific guidance. Measures include: following social distancing guidelines; use of personal protective equipment (PPE) including masks, face coverings and gloves; enhanced sanitizing protocols; requiring employee health screenings prior to entering a NW Natural facility; and other measures intended to mitigate the spread of this disease and keep our employees and customers safe and informed. Our water companies are following similar protocols.

Our water and natural gas utility businesses continue to serve our customers without interruption. To support our customers in this unusual time, in mid-March, NW Natural voluntarily and temporarily stopped charging late fees and disconnecting customers for nonpayment. NW Natural also provided Oregon natural gas customers with annual bill credits primarily in June totaling approximately $17.0 million related to NW Natural's revenue sharing mechanism.

Additionally, as a precaution to strengthen our liquidity and guard against volatile markets as the COVID-19 pandemic unfolded, we took the following steps:

- NW Natural drew $227 million on its credit facility and NW Holdings drew $35 million on its credit facility in March, and subsequently repaid all of NW Natural's borrowings on its credit facility and $27 million of NW Holdings' borrowing on its credit facility during the second and third quarter;
- NW Natural secured a $150 million 364-day term loan due March 22, 2021 and borrowed the full amount;
- NW Natural held commercial paper of $73 million at March 30, 2020, and subsequently retired all by the end of the third quarter; and
- NW Natural issued $150 million 30-year first mortgage bonds in March 2020 with an interest rate of 3.6%.

NW Holdings held $35.9 million of cash as of September 30, 2020 on a consolidated basis, and NW Natural held $27.1 million of cash on a stand-alone basis. We believe with these financings and ongoing cash flows from operations, both companies currently have ample liquidity to manage their respective cash needs.

The federal CARES Act was signed into law on March 27, 2020 to provide direct and indirect financial support to individuals, businesses, state and local governments, and the healthcare system in response to COVID-19. While we anticipate that the support the CARES Act provides to our customers may indirectly benefit NW Holdings and NW Natural, we cannot measure this benefit. However, we do not anticipate the CARES Act to have a material financial effect on NW Holdings or NW Natural. As provided for in the CARES Act, we have delayed remittance of the employer portion of the Social Security payroll tax through September 30, 2020 and plan to continue delaying such remittance through the end of 2020.

We have taken additional actions in response to known issues arising from the trends related to the COVID-19 pandemic. For example, we have enhanced cybersecurity monitoring in response to reports that cybersecurity attackers are more active with much of the economy utilizing work from home protocols. Like others, we experienced some constraints on our ability to obtain PPE and disinfecting supplies, but currently believe that we have sufficient supplies to continue our work and continue to procure additional supplies and most efficiently utilize those supplies we have on hand. We have not experienced material disruptions in our supply chain for other goods and services to date, but are continuing to actively monitor, and have formulated and continue to evaluate contingency plans as necessary.

The timing of the onset of the COVID-19 pandemic and resulting economic disruption in the United States coincided with end of the Pacific Northwest peak winter heating season. The majority of our national gas utility volumes are delivered during the first and fourth quarters, and volumes naturally decline in the spring with a significant reduction of heating loads in the summer and into the fall. For the period ended September 30, 2020, we continued to see several effects of the COVID-19 pandemic, including a lower level of meter disconnections coinciding with NW Natural's suspension of disconnections, resulting in a slightly higher customer growth rate, estimated a higher level of uncollectible accounts, and experienced lost revenues from late fee charges associated with temporarily suspending meter disconnections for nonpayment. As of the date of this filing, our capital projects continued to move forward as planned.

The third quarter was the second full period under the effects of COVID-19, which included stay at home orders in our service territories, partial re-openings, and a phased approach to lifting restrictions. The current economic conditions are becoming more apparent; however, uncertainty still exists as the duration of the pandemic and the economic impact therefrom is still unknown. We remain vigilant in monitoring how the phased re-openings of the territories in which we operate progress and any reinstitution or possible reinstitution of restrictions, and we are actively monitoring the previously identified key metrics. While we are unable to predict with certainty the length, severity or impacts of the COVID-19 pandemic and economic disruptions on our business, we have the following expectations and beliefs currently:

- We continue to move forward with the majority of our capital projects and do not expect a material change in those activities during 2020.

- NW Natural has not seen a substantial reduction in overall sales volumes as of September 30, 2020 attributed to COVID-19; however, we have seen slightly lower usage from non-residential customers during the second and third quarters of 2020. Due to the seasonality of our gas utility business, we may see more substantial declines in volumes in the future, particularly during our peak heating season, depending on the longevity of the pandemic as well as the level of success our communities have in re-opening efforts. However, volumes do not translate directly to earnings as the majority of our NGD margin is not dependent on volumes.

- In March 2020, we voluntarily and temporarily stopped charging late fees and disconnecting customers for nonpayment, resulting in approximately $1.1 million of lower revenues for the first nine months of 2020.

- NW Natural's customer growth rate is affected by both new meter connections and when existing customers close their accounts and disconnect their meters. Customer growth from construction and conversions remained strong during 2020, and we experienced a lower level of customer losses as we suspended customer disconnections when the pandemic began. This lower level of disconnections contributed to a higher-than-normal customer growth rate of 1.9% for the 12 months ended September 30, 2020, compared to a growth rate of 1.6% for the same period in the prior year. We are closely monitoring our approximately 70,000 commercial and industrial natural gas meters, as a substantial decline in these meters could materially affect margin in late 2020 and the following periods. A disconnection may occur if circumstances require businesses, such as restaurants, retailers, and those in the hospitality sector, to temporarily or permanently close. When we cease temporarily suspending disconnections, we may experience a higher level of disconnections. We don't anticipate significant residential meter disconnections.

- NW Natural had not seen a significant reduction in new meter connections as of September 30, 2020. However, a significant recession or prolonged economic slowdown could result in a decline in new meter connections, which could adversely affect margin in late 2020 and the following periods.

- During the first nine months of 2020, we increased our bad debt allowance by $1.1 million to $1.8 million. We may continue to see increases to uncollectible accounts for bill cycles in late 2020 if the effects of the pandemic continue into the winter heating season. Our allowance for Residential and Commercial uncollectible accounts estimate increased from 0.1% of gas sales to approximately 0.3% of gas sales for the period ended September 30, 2020.

We have applied for regulatory deferrals to recover certain COVID-19 related costs in all our jurisdictions such as bad debt expense, financing costs to secure liquidity, lost revenues related to late fees and reconnection fees, and other COVID-19 related costs, net of offsetting direct expense reductions associated with COVID-19. The OPUC has approved the regulatory deferral and issued other guidelines related to COVID-19 moratoriums and fees for NW Natural. See "Results of Operations—Regulatory Matters—*COVID-19 Process and Deferral Dockets*" below.

During the second quarter of 2020, the Governors of Oregon and Washington outlined frameworks with phased approaches to reopening and began to lift restrictions. The phased approach to lifting restrictions requires that the states in which we operate experience a declining number of COVID-19 cases, and have adequate hospital capacity, robust testing and sufficient supplies of PPE among other things. We are closely monitoring the re-openings, their impact on our local economies, and their effects on our business. Currently, we believe the key 2020 financial effects from COVID-19, will depend on the magnitude of volumes decline from either commercial and industrial sales meter losses or lower usage from customers that are not covered under a decoupling mechanism; lost revenues from lower late charges and reconnection fees, bad debt expense from uncollectible customer accounts, and other COVID-19 costs, regulatory recovery of certain financial effects through utility rates; and a significant reduction in new meters.

Given the evolving nature of the pandemic and resulting economic conditions, we are continually monitoring our business operations and the larger trends and developments to take additional measures we believe are warranted to continue providing safe and reliable service to our customers and communities while protecting our employees.

See the discussion in "*Results of Operations*" below for additional detail regarding all significant activity that occurred during the third quarter and nine months of 2020.

DIVIDENDS

Dividend highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,			
Per common share	2020	2019	2020	2019	QTD Change	YTD Change
Dividends paid	$ 0.4775	$ 0.4750	$ 1.4325	$ 1.4250	$ 0.0025	$ 0.0075

In October 2020, the Board of Directors of NW Holdings declared a quarterly dividend on NW Holdings common stock of $0.4800 per share. The dividend is payable on November 13, 2020 to shareholders of record on October 30, 2020, reflecting an annual indicated dividend rate of $1.92 per share.

RESULTS OF OPERATIONS

Regulatory Matters
For additional information, see Part II, Item 7 "Results of Operations—*Regulatory Matters"* in the 2019 Form 10-K.
Regulation and Rates
NATURAL GAS DISTRIBUTION. NW Natural's natural gas distribution business is subject to regulation by the OPUC and WUTC with respect to, among other matters, rates and terms of service, systems of accounts, and issuances of securities by NW Natural. In 2019, approximately 89% of NGD customers were located in Oregon, with the remaining 11% in Washington. Earnings and cash flows from natural gas distribution operations are largely determined by rates set in general rate cases and other proceedings in Oregon and Washington. They are also affected by weather, the local economies in Oregon and Washington, the pace of customer growth in the residential, commercial, and industrial markets, and NW Natural's ability to remain price competitive, control expenses, and obtain reasonable and timely regulatory recovery of its natural gas distribution-related costs, including operating expenses and investment costs in plant and other regulatory assets. See "*Most Recent Completed General Rate Cases"* below.

MIST INTERSTATE GAS STORAGE. NW Natural's interstate storage activity at Mist is subject to regulation by the OPUC, WUTC, and the Federal Energy Regulatory Commission (FERC) with respect to, among other matters, rates and terms of service. The OPUC also regulates the intrastate storage services at Mist, while FERC regulates the interstate storage services at Mist. The FERC uses a maximum cost of service model which allows for gas storage prices to be set at or below the cost of service as approved by each agency in their last regulatory filing. The OPUC Schedule 80 rates are tied to the FERC rates, and are updated whenever NW Natural modifies FERC maximum rates.

OTHER. In June 2018, NWN Gas Storage, a wholly-owned subsidiary of NW Holdings, entered into a Purchase and Sale Agreement for the sale of all of its ownership interests in Gill Ranch, a natural gas storage facility located near Fresno, California. The sale was approved by the CPUC in December 2019 and is subject to other customary closing conditions. See Note 17 for more information. The wholly owned regulated water businesses of NWN Water, a wholly owned subsidiary of NW Holdings, are subject to regulation by the utility commissions in the states in which they are located, which currently includes Oregon, Washington, Idaho, and Texas.

Most Recent Completed General Rate Cases
OREGON. On December 30, 2019, NW Natural filed a request for a general rate increase with the OPUC.
On March 12, 2020, NW Natural, the OPUC staff, the Oregon Citizens' Utility Board, and the Alliance of Western Energy Consumers, which comprise all of the parties to the rate case (Rate Case Parties), filed a settlement with the OPUC addressing cost of capital issues in the case (First Settlement). On July 31, 2020, NW Natural and the Rate Case Parties filed a joint stipulation with the OPUC addressing all remaining issues in the general rate case and incorporating the cost of capital components that were memorialized in the First Settlement (Comprehensive Settlement). On October 16, 2020, the OPUC issued an order approving the Comprehensive Settlement and concluding NW Natural's general rate case (Order).

The Order provides for a total revenue requirement increase of approximately $45 million over revenues from existing rates. The revenue requirement is based on the following assumptions:

- Capital structure of 50% common equity and 50% long-term debt;
- Return on equity of 9.4%;
- Cost of capital of 6.965%; and
- Average rate base of $1.44 billion or an increase of $242.1 million since the last rate case.

Under the terms of the Order, NW Natural is authorized to begin to recover NW Natural's forecasted tax expense associated with the Oregon Corporate Activity Tax (CAT) as a component of base rates. Beginning on the November 1, 2020 rate effective date, NW Natural expects to recover an additional $3.15 million in revenue requirement for the CAT. Under the terms of the Order, NW Natural is directed to adjust the amount recovered for the CAT in each annual PGA to reflect changes in gross revenue and cost of goods sold that occur as a result of the PGA. The Order also provides for certain adjustments if there are legislative, rulemaking, judicial, or policy decisions that would cause the calculation methodology used by NW Natural for the CAT to vary in a fundamental way. Additionally, the CAT deferred from January 2020 through June 2020 will be added to and amortized over the 2020-21 PGA gas year, and the CAT amounts deferred from July 2020 through the effective date of the rate case will be amortized over the 2021-22 PGA year.

In NW Natural's previous Oregon rate case in March 2019, the OPUC ordered specific terms by which excess deferred income taxes (EDIT) associated with the Tax Cuts and Jobs Act (TCJA) would be provided to customers directly or applied for the benefit of customers. The Order in the most recent Oregon rate case directs NW Natural to include a true-up credit to customers of approximately $1.0 million as a temporary rate adjustment to be amortized over the 2020-21 PGA year.

In addition, the Order approves the application of NW Natural’s decoupling calculation for the months of November and May to the month of April. The decoupling mechanism is intended to encourage customers to conserve energy without adversely affecting earnings due to reductions in sales volumes. The Order also provides for the credit of curtailment and entitlement revenues, less incremental costs arising from the violation giving rise to the revenues, to firm sales customers through the PGA. Previously, NW Natural retained these amounts, which generally are immaterial but constituted approximately $3.5 million in each of 2018 and 2019 due to the Enbridge event.

From November 1, 2018 through October 31, 2020, the OPUC authorized rates to customers based on an ROE of 9.4%, an overall rate of return of 7.317%, and a capital structure of 50% common equity and 50% long-term debt. In March 2019, the OPUC issued an order resolving the remaining matters of the rate case regarding recovery of NW Natural's pension balancing account and the return of tax reform benefits to customers. For additional information, see "Rate Mechanisms - *Pension Cost Deferral and Pension Balancing Account*" and "Rate Mechanism - *Tax Reform Deferral*" below.

WASHINGTON. Effective November 1, 2019, the WUTC authorized rates to customers based on an ROE of 9.4% and an overall rate of return of 7.161% with a capital structure of 49% common equity, 1% short-term debt, and 50% long-term debt. The WUTC also authorized the recovery of environmental remediation expenses allocable to Washington customers through an Environmental Cost Recovery Mechanism (ECRM) and directed NW Natural to provide federal tax reform benefits to customers. See "Rate Mechanisms - Environmental Cost Deferral and Recovery - *Washington ECRM*" and "Rate Mechanisms - T*ax Reform Deferral*" below.

From January 1, 2009, through October 31, 2019, the WUTC authorized rates to customers based on an ROE of 10.1% and an overall rate of return of 8.4% with a capital structure of 51% common equity, 5% short-term debt, and 44% long-term debt.

FERC. NW Natural is required under its Mist interstate storage certificate authority and rate approval orders to file every five years either a petition for rate approval or a cost and revenue study to change or justify maintaining the existing rates for its interstate storage services. On October 12, 2018, NW Natural filed a rate petition with FERC for revised cost-based maximum rates, which incorporated the new federal corporate income tax rate. The revised rates were effective beginning November 1, 2018.

NW Natural continuously evaluates the need for rate cases in its jurisdictions.

Rate Mechanisms

During 2020 and 2019, NW Natural's key approved rates and recovery mechanisms for each service area included:

	Oregon		Washington	
	2018 Rate Case	2020 Rate Case (effective 11/1/2020)	2009 Rate Case	2019 Rate Case (effective 11/1/2019)
Authorized Rate Structure:				
ROE	9.4%	9.4%	10.1%	9.4%
ROR	7.3%	7.0%	8.4%	7.2%
Debt/Equity Ratio	50%/50%	50%/50%	49%/51%	51%/49%
Key Regulatory Mechanisms:				
Purchased Gas Adjustment (PGA)	X	X	X	X
Gas Cost Incentive Sharing	X	X		
Decoupling	X	X		
Weather Normalization (WARM)	X	X		
Environmental Cost Recovery	X	X		X
Interstate Storage and Asset Management Sharing	X	X	X	X

PURCHASED GAS ADJUSTMENT. Rate changes are established for NW Natural each year under PGA mechanisms in Oregon and Washington to reflect changes in the expected cost of natural gas commodity purchases. The PGA filings include gas costs under spot purchases as well as contract supplies, gas cost hedges, gas costs from the withdrawal of storage inventories, the production of gas reserves, interstate pipeline demand costs, temporary rate adjustments, which amortize balances of deferred regulatory accounts, and the removal of temporary rate adjustments effective for the previous year.

Typically, each year NW Natural hedges gas prices on a portion of NW Natural's annual sales requirement based on normal weather, including both physical and financial hedges. NW Natural entered the 2019-20 gas year with its forecasted sales volumes hedged at 52% in financial swap and option contracts, including hedging of 56% for Oregon and 24% for Washington, and 19% in physical gas supplies, including hedging of 20% for Oregon and 14% for Washington.

As of September 30, 2020, NW Natural was hedged at approximately 68% for the 2020-21 gas year, with Oregon at 71% and Washington at 39%. NW Natural is also hedged between 1% and 39% for annual requirements over the subsequent five gas years, which consists of between 1% and 39% for Oregon and between 0% and 33% for Washington. Hedge levels are subject to change based on actual load volumes, which depend to a certain extent on weather, economic conditions, and estimated gas reserve production. Also, gas storage inventory levels may increase or decrease with storage expansion, changes in storage contracts with third parties, variations in the heat content of the gas, and/or storage recall by NW Natural.

In September 2020, NW Natural filed its annual PGA and received OPUC and WUTC approval in October 2020. PGA rate changes were effective November 1, 2020. Rates and hedging approaches vary between states due to different rate structures and mechanisms.

Under the current PGA mechanism in Oregon, there is an incentive sharing provision whereby NW Natural is required to select each year an 80% deferral or a 90% deferral of higher or lower actual gas costs compared to estimated PGA prices, such that the impact on NW Natural's current earnings from the incentive sharing is either 20% or 10% of the difference between actual and estimated gas costs, respectively. For the 2020-21 and 2019-20 gas years, NW Natural selected the 90% deferral option. Under the Washington PGA mechanism, NW Natural defers 100% of the higher or lower actual gas costs, and those gas cost differences are passed on to customers through the annual PGA rate adjustment.

EARNINGS TEST REVIEW. NW Natural is subject to an annual earnings review in Oregon to determine if the NGD business is earning above its authorized ROE threshold. If NGD business earnings exceed a specific ROE level, then 33% of the amount above that level is required to be deferred or refunded to customers. Under this provision, if NW Natural selects the 80% deferral gas cost option, then NW Natural retains all earnings up to 150 basis points above the currently authorized ROE. If NW Natural selects the 90% deferral option, then it retains all earnings up to 100 basis points above the currently authorized ROE. For the 2018-19 and 2019-20 gas years, NW Natural selected the 90% deferral option. The ROE threshold is subject to adjustment annually based on movements in long-term interest rates. For calendar year 2019, the ROE threshold was 10.24%. NW Natural filed the 2019 earnings test on May 1, 2020 indicating no customer refund adjustment and the filing was approved in July 2020.

GAS RESERVES. In 2011, the OPUC approved the Encana gas reserves transaction to provide long-term gas price protection for NGD business customers and determined costs under the agreement would be recovered on an ongoing basis through the annual PGA mechanism. Gas produced from NW Natural's interests is sold at then prevailing market prices, and revenues from such sales, net of associated operating and production costs and amortization, are included in cost of gas. The cost of gas, including a carrying cost for the rate base investment made under the original agreement, is included in NW Natural's annual Oregon PGA filing, which allows NW Natural to recover these costs through customer rates. The net investment under the original agreement earns a rate of return.

In 2014, NW Natural amended the original gas reserves agreement in response to Encana's sale of its interest in the Jonah field located in Wyoming to Jonah Energy. Under the amended agreement with Jonah Energy, NW Natural has the option to invest in additional wells on a well-by-well basis with drilling costs and resulting gas volumes shared at the amended proportionate working interest for each well in which NW Natural invests. Volumes produced from the additional wells drilled after the amended agreement are included in NW Natural's Oregon PGA at a fixed rate of $0.4725 per therm. NW Natural has not participated in additional wells since 2014.

DECOUPLING. In Oregon, NW Natural has a decoupling mechanism. Decoupling is intended to break the link between earnings and the quantity of gas consumed by customers, removing any financial incentive to discourage customers' efforts to conserve energy. The Oregon decoupling baseline usage per customer was reset in the 2020 Oregon general rate case. This mechanism employs a use-per-customer decoupling calculation, which adjusts margin revenues to account for the difference between actual and expected customer volumes. The margin adjustment resulting from differences between actual and expected volumes under the decoupling component is recorded to a deferral account, which is included in the annual PGA filing.

WARM. In Oregon, NW Natural has an approved weather normalization mechanism, which is applied to residential and small commercial customer bills. This mechanism is designed to help stabilize the collection of fixed costs by adjusting residential and small commercial customer billings based on temperature variances from average weather, with rate decreases when the weather is colder than average and rate increases when the weather is warmer than average. The mechanism is applied to bills from December through mid-May of each heating season. The Order in the Oregon general rate case approves of extending NW Natural's decoupling calculation for the months of November and May to the month of April. The mechanism adjusts the margin component of customers' rates to reflect average weather, which uses the 25-year average temperature for each day of the billing period. Daily average temperatures and 25-year average temperatures are based on a set point temperature of 59 degrees Fahrenheit for residential customers and 58 degrees Fahrenheit for commercial customers. The unbilled WARM amounts due to tariff caps and floors are deferred and earn a carrying charge until collected, or returned, in the PGA the following year. Residential and small commercial customers in Oregon are allowed to opt out of the weather normalization mechanism, and as of September 30, 2020, 8% of total eligible customers had opted out. NW Natural does not have a weather normalization mechanism approved for residential and commercial Washington customers, which account for about 12% of total customers. See "Business Segment—*Natural Gas Distribution"* below.

INDUSTRIAL TARIFFS. The OPUC and WUTC have approved tariffs covering NGD service to major industrial customers, which are intended to give NW Natural certainty in the level of gas supplies needed to serve this customer group. The approved terms include, among other things, an annual election period, special pricing provisions for out-of-cycle changes, and a requirement that industrial customers complete the term of their service election under NW Natural's annual PGA tariff.

ENVIRONMENTAL COST DEFERRAL AND RECOVERY. NW Natural has authorizations in Oregon and Washington to defer costs related to remediation of properties that are owned or were previously owned by NW Natural. In Oregon, a Site Remediation and Recovery Mechanism (SRRM) is currently in place to recover prudently incurred costs allocable to Oregon customers, subject to an earnings test. Effective beginning November 1, 2019, the WUTC authorized an Environmental Cost Recovery Mechanism (ECRM) for recovery of prudently incurred costs allocable to Washington customers.

Oregon SRRM
Under the Oregon SRRM collection process there are three types of deferred environmental remediation expense:
- **Pre-review** - This class of costs represents remediation spend that has not yet been deemed prudent by the OPUC. Carrying costs on these remediation expenses are recorded at NW Natural's authorized cost of capital. NW Natural anticipates the prudence review for annual costs and approval of the earnings test prescribed by the OPUC to occur by the third quarter of the following year.
- **Post-review** - This class of costs represents remediation spend that has been deemed prudent and allowed after applying the earnings test, but is not yet included in amortization. NW Natural earns a carrying cost on these amounts at a rate equal to the five-year treasury rate plus 100 basis points.
- **Amortization** - This class of costs represents amounts included in current customer rates for collection and is calculated as one-fifth of the post-review deferred balance. NW Natural earns a carrying cost equal to the amortization rate determined annually by the OPUC, which approximates a short-term borrowing rate. NW Natural included $5.1 million and $6.1 million of deferred remediation expense approved by the OPUC for collection during the 2019-20 and 2018-19 PGA years, respectively.

In addition, the SRRM also provides for the annual collection of $5.0 million from Oregon customers through a tariff rider. As it collects amounts from customers, NW Natural recognizes these collections as revenue net of any earnings test adjustments and separately amortizes an equal and offsetting amount of the deferred regulatory asset balance through the environmental remediation operating expense line shown separately in the operating expenses section of the consolidated statements of comprehensive income. For additional information, see Note 18 in the 2019 Form 10-K.

The SRRM earnings test is an annual review of adjusted NGD ROE compared to authorized NGD ROE. To apply the earnings test NW Natural must first determine what if any costs are subject to the test through the following calculation:

Annual spend
Less: $5.0 million base rate rider
Prior year carry-over(1)
$5.0 million insurance + interest on insurance
Total deferred annual spend subject to earnings test
Less: over-earnings adjustment, if any
Add: deferred interest on annual spend(2)
Total amount transferred to post-review

(1) Prior year carry-over results when the prior year amount transferred to post-review is negative. The negative amount is carried over to offset annual spend in the following year.
(2) Deferred interest is added to annual spend to the extent the spend is recoverable.

To the extent the NGD business earns at or below its authorized ROE as defined in the SRRM, the total amount transferred to post-review is recoverable through the SRRM. To the extent more than authorized ROE is earned in a year, the amount transferred to post-review would be reduced by those earnings that exceed its authorized ROE.
NW Natural concluded there was no earnings test adjustment for 2019 based on the environmental earnings test that was submitted in May 2020.

Washington ECRM
The ECRM established by the WUTC order effective November 1, 2019 permits NW Natural’s recovery of environmental remediation expenses allocable to Washington customers. These expenses represent 3.32% of costs associated with remediation of sites that historically served both Oregon and Washington customers. The order allows for recovery of past deferred and future prudently incurred remediation costs allocable to Washington through application of insurance proceeds and collections from customers. Prudently incurred costs that were deferred from the initial deferral authorization in February 2011

through June 2019 are to be fully offset with insurance proceeds, with any remaining insurance proceeds to be amortized over a 10.5 year period. On an annual basis NW Natural will file for a prudence determination and a request to recover remediation expenditures in excess of insurance amortizations in the following year's customer rates. After insurance proceeds are fully amortized, if in a particular year the request to collect deferred amounts exceeds one percent of Washington normalized revenues, then the excess will be collected over three years with interest. On October 29, 2020, NW Natural's first environmental cost recovery filing was approved by the WUTC covering the period from December 31, 2018 to December 31, 2019.

PENSION COST DEFERRAL AND PENSION BALANCING ACCOUNT. From 2011 through October 2018, the OPUC authorized a regulatory mechanism in which NW Natural deferred annual pension expenses above the amount set in rates, with recovery of these deferred amounts through the implementation of a balancing account, which included the expectation of higher and lower pension expenses in future years. During this period the mechanism permitted NW Natural to accrue interest on the account balance at the NGD business' authorized rate of return. The OPUC ordered the freezing of the account in October 2018 with pension expenses to be recovered through rates beginning November 1, 2018.

In March 2019, the OPUC issued an order outlining how the account would be recovered. As a result, the following items were recorded in the first quarter of 2019:
- Applied $7.1 million of TCJA benefits deferred from January 1, 2018 to October 31, 2018, as a reduction against the pension balancing account;
- Credited to customers' benefit $5.4 million of deferred income taxes as a reduction against the pension balancing account;
- Reduced the amount of the frozen balancing account by an additional $10.5 million; and
- Reduced the interest rate on the pension balancing account from NW Natural's authorized rate of return of 7.317% to 4.3%.

The items above resulted in the recovery of $12.5 million of deferred pension expenses by applying deferred tax benefits against the pension balancing account. Recognition of these items resulted in higher operations and maintenance expense and other income (expense), net with offsetting benefits recognized in operating revenues and income tax expense. Additional pension expenses of $10.5 million from the regulatory disallowance were also recognized in operations and maintenance expense and other income (expense), net. Deferred regulatory interest income of $3.8 million was also realized in other income (expense), net in 2019.

Commencing April 1, 2019, the OPUC also authorized the collection of the remainder of the pension balancing account over ten years in a customer tariff of $7.3 million per year. Deferred pension expense recoveries were $4.8 million for the nine months ended September 30, 2020.

TAX REFORM DEFERRAL. In December 2017, NW Natural filed applications with the OPUC and WUTC to defer the overall net benefit associated with the TCJA that was enacted on December 22, 2017. In February 2019, NW Natural and the other parties to the 2018 Oregon rate case agreed upon terms by which the deferred benefits would be returned to customers via a joint stipulation filed with the OPUC. In March 2019, the OPUC approved the terms in their entirety as follows:
- Applied $7.1 million of TCJA benefits deferred from January 1, 2018 to October 31, 2018, as a reduction against the pension balancing account and
- Credited to customers' benefit $5.4 million of deferred income taxes as a reduction against the pension balancing account.

Commencing April 1, 2019, the OPUC also ordered the following:
- Provide an annual credit to base rates of $3.4 million for excess deferred income taxes to all customers, subject to the average rate assumption method;
- Provide an additional annual credit of $3.0 million to sales service customers for five years; and
- An increase in rate base of $15.4 million, and corresponding increase to revenue requirement of $1.4 million.

If NW Natural files a general rate case within five years of the date of the March 2019 order, this revenue requirement may be adjusted as part of that general rate case. On December 30, 2019, NW Natural filed a general rate case with the OPUC, which is within five years from the date of the March 2019 order and the order in that rate case adjusted this revenue requirement. For more information, see "*Most Recent Completed General Rate Cases*" above.

On October 21, 2019, the WUTC issued an order dictating the means by which deferred tax reform benefits would be returned to customers beginning November 1, 2019. The order directs NW Natural to provide customers with a rate reduction of $2.1 million over one year to reflect the benefit of the lower federal corporate income tax rate accumulating from January 1, 2018 through October 31, 2019, and provides an additional annual rate reduction initially set at approximately $0.5 million to reflect a benefit from the remeasurement of deferred tax liabilities of approximately $15.0 million.

INTERSTATE STORAGE AND ASSET MANAGEMENT SHARING. On an annual basis, NW Natural credits amounts to Oregon and Washington customers as part of a regulatory incentive sharing mechanism related to net revenues earned from Mist gas storage and asset management activities. Previously, amounts were credited to Oregon customers in June. Starting in 2021, Oregon customers will receive this credit in February per the 2020 Oregon rate case order. Credits are given to customers in Washington as reductions in rates through the annual PGA filing in November.

During the second quarter of 2020, NW Natural received regulatory approval to refund an interstate storage and asset management sharing credit of approximately $17.0 million to Oregon customers, which was primarily reflected in Oregon customers' June bills. Bill credits to Oregon and Washington customers in 2019 were approximately $16.3 million and $1.2 million, respectively.

Regulatory Proceeding Updates

During 2020, NW Natural was involved in the regulatory activities discussed below. For additional information, see Part II, Item 7 "Results of Operations —*Regulatory Matters"* in the 2019 Form 10-K.

COVID-19 PROCESS AND DEFERRAL DOCKETS. During 2020, our regulated utilities, other utilities, stakeholders, and public utility commissions have been working to determine the best way to continue protecting utility customers during and after the pandemic. For our Oregon and Washington utilities, the commissions have outlined key considerations including, but not limited to, the following: the appropriate proactive notification processes for late accounts, enhanced financial assistance programs, and determined the timing of reinstituting disconnections. In September 2020, the OPUC issued an order authorizing OPUC staff to execute a term sheet with NW Natural and other parties to the proceeding, which includes provisions for lifting moratoriums on disconnections for nonpayment and late fees; extending timeframes for repayments and deferred payment plans; establishing timelines for reinstitution of service disconnection and reconnection fees; and allowing for deferred accounting of COVID-19 related costs. The term sheet also directs NW Natural to: work with the parties to provide bill payment assistance, petition the Oregon legislature for bill payment assistance funding, explore the applicability of decoupling charges for a period of time, and participate in an investigation and discussion surrounding low income customers and social and environmental justice. The OPUC directed its staff to enter into a stipulation effecting the term sheet and to submit that stipulation to the OPUC for approval. The stipulation incorporating the term sheet was approved by the OPUC on November 3, 2020. A term sheet was approved by the WUTC in October 2020 that provides guidance on key items such as the timing of lifting moratoriums on disconnections, resuming collection process, and bill assistance and payment plans. The WUTC is considering deferred accounting treatment of COVID-19 related costs in a separate proceeding.

In addition, prior to the development of the term sheets, our regulated utilities filed applications in their respective jurisdictions requesting authorization to defer certain financial impacts associated with COVID-19. The subsequent development of the term sheets for Oregon and Washington outline the types of costs that may be deferred including, but not limited to, the following: personal protective equipment, cleaning supplies and services, bad debt expense, financing costs to secure liquidity, and certain lost revenue, net of offsetting direct expense reductions associated with COVID-19. As of September 30, 2020, we estimated that approximately $4.4 million of the financial effects related to COVID-19 could be recoverable.

As a result of the OPUC's approval of the term sheet in Oregon in September 2020, we recorded a regulatory asset of approximately $3.1 million for the Oregon allocated portion of incurred costs associated with COVID-19 that, as outlined in the term sheet, are recoverable. We expect to recognize and recover an additional $1.0 million related to forgone late fee revenue approved by the OPUC in a future period when the amounts are billed to customers. The OPUC issued a deferral order in line with the term sheet on October 27, 2020.

The following table outlines some of the key items approved by the respective Commissions:

	Oregon	Washington
Reinstituting Disconnections for Nonpayment:		
Residential(1)	April 15, 2021	April 30, 2021
Small Commercial(1)	December 1, 2020	April 30, 2021
Large Commercial/Industrial	As of November 3, 2020	As of October 20, 2020
Resuming Residential Reconnection Fee Charges	October 1, 2022	October 27, 2021
Reinstituting Late Fees for Nonpayment:		
Residential	October 1, 2022	October 27, 2021
Small Commercial	December 1, 2020	October 27, 2021
Large Commercial/Industrial	As of November 3, 2020	As of October 20, 2020
Extended Time Payment Arrangements:		
Residential	Up to 24 months	Up to 18 months
Small Commercial	Up to 6 months	Up to 12 months
Arrearage Forgiveness Program	1% of Retail Revenues	1% of Retail Revenues

(1) For Washington customers, the disconnections date of April 30, 2021 will be reassessed in February 2021 based on the determination of the economic conditions at that time.

RENEWABLE NATURAL GAS. On June 19, 2019, the Oregon legislature passed Senate Bill 98 (SB98), which enables natural gas utilities to procure or develop renewable natural gas (RNG) on behalf of their Oregon customers. RNG is produced from organic materials like food, agricultural and forestry waste, wastewater, or landfills. Methane is captured from these organic materials as they decompose and is conditioned to pipeline quality, so it can be added into the existing natural gas system, reducing net greenhouse gas emissions. The bill was signed into law by the governor in July 2019, and subsequently, the OPUC opened a docket in August 2019 regarding the rules for the bill. After working with parties, the OPUC adopted final rules in July 2020.

SB98 and the rules outline the following parameters for the RNG program including: setting voluntary goals for adding as much as 30% renewable natural gas into the state's pipeline system by 2050; enabling gas utilities to invest in and own the cleaning and conditioning equipment required to bring raw biogas and landfill gas up to pipeline quality, as well as the facilities to connect to the local gas distribution system; and allowing up to 5% of a utility's revenue requirement to be used to cover the incremental cost of investments in renewable natural gas infrastructure.

Further, the new law supports all forms of renewable natural gas including renewable hydrogen, which is made from excess wind, solar and hydro power. Renewable hydrogen can be used for the transportation system, industrial use, or blended into the natural gas pipeline system.

CORPORATE ACTIVITY TAX. In 2019, the State of Oregon enacted a Corporate Activity Tax (CAT) that is applicable to all businesses with annual Oregon gross revenue in excess of $1 million. The CAT is in addition to the state's corporate income tax and imposes a 0.57% tax on certain Oregon gross receipts less a reduction for a portion of cost of goods sold or labor. The CAT legislation became effective September 29, 2019 and applies to calendar years beginning January 1, 2020. Under the terms of the Order in NW Natural's 2020 Oregon general rate case, NW Natural is authorized to begin to recover NW Natural's forecasted tax expense associated with the CAT as a component of base rates. Under the terms of the Order, NW Natural is directed to adjust the amount recovered for the CAT in each annual PGA to reflect changes in gross revenue and cost of goods sold that occur as a result of the PGA.

WATER UTILITIES. In 2020, NW Holdings, through its water subsidiaries, continued acquiring water utilities. The following notable transactions received regulatory approval and were closed during 2020:

- **Suncadia Water Company, LLC and Suncadia Environmental, LLC** — NWN Water of Washington received regulatory approval for the purchase of Suncadia Water in January 2020. Suncadia Environmental is not currently subject to the WUTC's jurisdiction. The transaction closed in January 2020.
- **T&W Water Service Company** — NWN Water of Texas received regulatory approval from the Public Utility Commission of Texas for the T&W Water Service Company acquisition in February 2020 and subsequently the transaction closed in March 2020.

OREGON EXECUTIVE ORDER. On March 10, 2020, the governor of Oregon issued an executive order establishing greenhouse gas (GHG) emissions reduction goals of at least 45% below 1990 emission levels by 2035 and at least 80% below 1990 emission levels by 2050 and directing state agencies and commissions to facilitate such GHG emission goals. Although the order does not specifically direct actions of natural gas distribution businesses, the OPUC is directed to prioritize proceedings and activities that advance decarbonization in the utility sector, mitigate energy burden experienced by utility customers and ensure system reliability and resource adequacy. The executive order also directs other agencies to cap and reduce GHG emissions from transportation fuels and all other liquid and gaseous fuels, including natural gas, adopt building energy efficiency goals for new building construction, reduce methane gas emissions from landfills and food waste, and submit a proposal for adoption of state goals for carbon sequestration and storage by Oregon's forest, wetlands and agricultural lands. As an executive order, any implementation is reliant on state agency rule-making. The scope and content of any state commission or agency rules, as well as the time of implementation of any such rules, adopt and implement any such rules, has not been determined. The executive order and any resulting rules and agencies' jurisdiction and authority remain subject to legal challenge from a variety of stakeholders, including a coalition of business and trade groups who filed suit in late July 2020 alleging that the executive order exceeds the Governor's authority.

Business Segment - Natural Gas Distribution (NGD)

NGD margin results are primarily affected by customer growth, revenues from rate-base additions, and, to a certain extent, by changes in delivered volumes due to weather and customers' gas usage patterns. In Oregon, NW Natural has a conservation tariff (also called the decoupling mechanism), which adjusts margin up or down each month through a deferred regulatory accounting adjustment designed to offset changes resulting from increases or decreases in average use by residential and commercial customers. NW Natural also has a weather normalization tariff in Oregon, WARM, which adjusts customer bills up or down to offset changes in margin resulting from above- or below-average temperatures during the winter heating season. Both mechanisms are designed to reduce, but not eliminate, the volatility of customer bills and natural gas distribution earnings. For additional information, see Part II, Item 7 "Results of Operations—Regulatory Matters—*Rate Mechanisms"* in NW Natural's 2019 Form 10-K. In addition to NW Natural's local gas distribution business, the NGD segment also includes the portion of the Mist underground storage facility used to serve NGD customers, the North Mist gas storage expansion, and NWN Gas Reserves, which is a wholly owned subsidiary of Energy Corp.

The NGD business is primarily seasonal in nature due to higher gas usage by residential and commercial customers during the cold winter heating months. Other categories of customers experience seasonality in their usage but to a lesser extent. Seasonality affects the comparability of the results of operations of the NGD business across quarters but not across years.

NGD segment highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,			
In thousands, except EPS data	2020	2019	2020	2019	QTD Change	YTD Change
NGD net income (loss)	$ (22,120)	$ (19,570)	$ 19,476	$ 22,848	$ (2,550)	$ (3,372)
Diluted EPS - NGD segment	$ (0.72)	$ (0.64)	$ 0.64	$ 0.77	$ (0.08)	$ (0.13)
Gas sold and delivered (in therms)	154,436	168,023	782,566	829,808	(13,587)	(47,242)
NGD margin[1]	$ 55,542	$ 55,903	$ 289,337	$ 289,539	$ (361)	$ (202)

[1] See Natural Gas Distribution Margin Table below for additional detail.

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. The primary factors contributing to the $2.6 million, or $0.08 per share increase in NGD net loss were as follows:

- a $1.0 million increase in NGD operations and maintenance expenses mainly as a result of higher compensation costs and contractor and professional service expenses, partially offset by cost savings measures enacted to mitigate the unrecoverable financial implications of COVID-19 and deferring to a regulatory asset a portion of COVID-19 expenses for our Oregon utility operations;
- a $2.6 million increase in depreciation expense due to NGD plant additions; and
- a $0.4 million decrease in NGD margin primarily due to lower revenues from late fees, as we suspended late fees during the COVID-19 pandemic, and lower usage from industrial and large commercial customers, partially offset by contributions from new rates in Washington and customer growth; partially offset by
- a $1.7 million decrease in interest expense related to deferring to a regulatory asset a portion of interest on financings undertaken in March 2020 as a precautionary measure to strengthen our liquidity position as the pandemic unfolded.

For the three months ended September 30, 2020, total NGD volumes sold and delivered decreased 8% over the same period in 2019.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. The primary factors contributing to the $3.4 million, or $0.13 per share, decrease in NGD net income were as follows:

- a $0.2 million decrease in NGD margin due to:
  - a $7.1 million decrease due to revenues recognized in 2019 associated with recoveries of NW Natural's pension balancing account, which were entirely offset by pension expenses within operations and maintenance expense and other income (expense), net in the first quarter of 2019;
  - a $4.7 million decrease in overruns, entitlements and late fees, in part due to the temporary suspension of late fees during the COVID-19 pandemic;
  - a $2.3 million decrease driven by 15% warmer than average weather in the first nine months of 2020 compared to average weather in the prior period partially offset by a benefit from gas cost incentive sharing; and
  - a $0.3 million decrease due to other items that were not individually significant; partially offset by
  - a $7.4 million increase from revenue generated from NW Natural's North Mist storage contract which commenced service in May 2019 and is included within other regulated services within NGD margin; and
  - a $6.8 million increase due to new customer rates, primarily from the 2019 Washington rate case that went into effect on November 1, 2019 and customer growth.

In addition to the decrease in margin, NGD net income for 2020 reflects:

- an $8.0 million increase in depreciation expense due to NGD plant additions, including the North Mist gas storage facility;
- a $7.8 million increase in other NGD operating and maintenance expenses due primarily to increases from compensation and non payroll expenses;
- a $3.8 million decrease in deferred regulatory interest income in other income (expense), net, primarily related to interest income recognized in 2019 associated with the 2019 recoveries of the pension balancing account;
- a $2.8 million decrease due to the regulatory amortization of the remaining pension balancing account deferral, which began in April 2019 and is ongoing;
- a $1.9 million increase in general taxes due to property, plant, and equipment additions, as we continued to invest in our gas utility system; and
- a $1.8 million higher income tax reflecting a non-recurring tax benefit associated with the March 2019 Oregon order, partially offset by the ongoing amortization of TCJA benefits.

The decreases in net income above are partially offset by the following:

- a benefit of $12.5 million from pension expenses recognized in 2019 associated with recoveries of NW Natural's pension balancing account which did not recur in 2020. Approximately $4.6 million was recorded operations and maintenance expense and $7.9 million was recorded in other income (expense), net; and
- a benefit of $10.5 million from a 2019 regulatory pension disallowance which did not recur in 2020. Approximately $3.9 million was recorded in operations and maintenance expense and $6.6 million was recorded in other income (expense), net.

See "Results of Operations - Regulatory Matters - *Regulatory Proceeding Updates*" above and Note 9 for more information regarding the pension balancing account.

For the nine months ended September 30, 2020, total NGD volumes sold and delivered decreased 6% over the same period in 2019 primarily due to 15% warmer than average weather in the first nine months of 2020 compared to average weather in the prior period.

NATURAL GAS DISTRIBUTION MARGIN TABLE. The following table summarizes the composition of NGD gas volumes, revenues, and cost of sales:

	Three Months Ended September 30,		Nine Months Ended September 30,		Favorable/ (Unfavorable)	
In thousands, except degree day and customer data	2020	2019	2020	2019	QTD Change	YTD Change
NGD volumes (therms):						
Residential and commercial sales	54,124	60,427	440,811	480,987	(6,303)	(40,176)
Industrial sales and transportation	100,312	107,596	341,755	348,821	(7,284)	(7,066)
Total NGD volumes sold and delivered	154,436	168,023	782,566	829,808	(13,587)	(47,242)
Operating Revenues						
Residential and commercial sales	$ 66,384	$ 65,206	$ 431,187	$ 419,502	$ 1,178	$ 11,685
Industrial sales and transportation	12,334	12,280	42,195	40,511	54	1,684
Other distribution revenues	639	430	1,607	12,678	209	(11,071)
Other regulated services	4,404	5,147	14,251	7,397	(743)	6,854
Total operating revenues	83,761	83,063	489,240	480,088	698	9,152
Less: Cost of gas	23,797	22,659	173,657	163,335	(1,138)	(10,322)
Less: Environmental remediation expense	867	967	6,494	7,258	100	764
Less: Revenue taxes	3,555	3,534	19,752	19,956	(21)	204
NGD margin	$ 55,542	$ 55,903	$ 289,337	$ 289,539	$ (361)	$ (202)
Margin:[1]						
Residential and commercial sales	$ 43,751	$ 42,859	$ 250,750	$ 246,680	$ 892	$ 4,070
Industrial sales and transportation	6,807	7,309	22,410	23,488	(502)	(1,078)
Miscellaneous revenues	114	521	1,417	4,412	(407)	(2,995)
Gain (loss) from gas cost incentive sharing	(33)	150	310	(696)	(183)	1,006
Other margin adjustments[2]	500	(82)	203	8,262	582	(8,059)
Distribution margin	$ 51,139	$ 50,757	$ 275,090	$ 282,146	$ 382	$ (7,056)
Other regulated services	4,403	5,146	14,247	7,393	(743)	6,854
NGD Margin	$ 55,542	$ 55,903	$ 289,337	$ 289,539	$ (361)	$ (202)
Degree days[3]						
Average[4]	9	9	1,659	1,646	—	13
Actual	2	28	1,406	1,638	NM	(14)%
Percent colder (warmer) than average weather[5]	NM	NM	(15)%	— %		

	As of September 30,			
NGD Meters - end of period:	2020	2019	Change	Growth[6]
Residential meters	700,062	685,556	14,506	2.1%
Commercial meters	68,767	68,892	(125)	(0.2)%
Industrial meters	988	1,010	(22)	(2.2)%
Total number of meters	769,817	755,458	14,359	1.9%

(1) Amounts reported as margin for each category of meters are operating revenues, which are net of revenue taxes, less cost of gas and environmental remediation expense, subject to earnings test considerations, as applicable.

(2) Other margin adjustments include net revenue recoveries of $6.6 million during the nine months ended September 30, 2019 associated with the decline of the U.S. federal corporate income tax rate.

(3) Heating degree days are units of measure reflecting temperature-sensitive consumption of natural gas, calculated by subtracting the average of a day's high and low temperatures from 59 degrees Fahrenheit.

(4) Average weather represents the 25-year average of heating degree days. Average weather is calculated over the period May 31, 1992 through May 30, 2017, as determined in NW Natural's 2018 Oregon general rate case.

(5) NM indicates that the calculated value is not meaningful.

(6) The 1.9% represents a higher-than-normal growth rate due to the temporary suspension of customer disconnections when the pandemic began.

Residential and Commercial Sales
Residential and commercial sales highlights include:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	QTD Change	YTD Change
Volumes (therms):						
Residential sales	32,040	32,088	280,075	295,106	(48)	(15,031)
Commercial sales	22,084	28,339	160,736	185,881	(6,255)	(25,145)
Total volumes	54,124	60,427	440,811	480,987	(6,303)	(40,176)
Operating revenues:						
Residential sales	$ 44,433	$ 41,989	$ 298,214	$ 285,432	$ 2,444	$ 12,782
Commercial sales	21,951	23,217	132,973	134,070	(1,266)	(1,097)
Total operating revenues	$ 66,384	$ 65,206	$ 431,187	$ 419,502	$ 1,178	$ 11,685
NGD margin:						
Residential:						
Sales	$ 31,291	$ 30,526	$ 179,354	$ 181,790	$ 765	$ (2,436)
Alternative revenue:						
Weather normalization	—	—	6,434	(3,459)	—	9,893
Decoupling	(603)	(896)	(4,404)	(1,922)	293	(2,482)
Amortization of alternative revenue	77	164	669	1,537	(87)	(868)
Total residential NGD margin	30,765	29,794	182,053	177,946	971	4,107
Commercial:						
Sales	12,065	14,940	66,108	81,016	(2,875)	(14,908)
Alternative revenue:						
Weather normalization	—	—	1,926	(1,192)	—	3,118
Decoupling	915	(728)	622	(3,186)	1,643	3,808
Amortization of alternative revenue	6	(1,147)	41	(7,904)	1,153	7,945
Total commercial NGD margin	12,986	13,065	68,697	68,734	(79)	(37)
Total NGD margin	$ 43,751	$ 42,859	$ 250,750	$ 246,680	$ 892	$ 4,070

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Residential and commercial margin increased $0.9 million primarily due an increase in residential operating revenues from customer growth and new rates in Washington.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Residential and commercial margin increased $4.1 million. The increase was primarily driven by new customer rates in Washington that took effect on November 1, 2019.

Industrial Sales and Transportation

Industrial sales and transportation highlights include:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	QTD Change	YTD Change
Volumes (therms):						
Industrial - firm sales	7,523	9,277	24,598	26,623	(1,754)	(2,025)
Industrial - firm transportation	33,886	37,123	122,945	127,678	(3,237)	(4,733)
Industrial - interruptible sales	8,982	9,064	34,347	34,081	(82)	266
Industrial - interruptible transportation	49,921	52,132	159,865	160,439	(2,211)	(574)
Total volumes	100,312	107,596	341,755	348,821	(7,284)	(7,066)
NGD margin:						
Industrial - firm and interruptible sales	$ 2,456	$ 2,777	$ 8,279	$ 8,853	$ (321)	$ (574)
Industrial - firm and interruptible transportation	4,351	4,532	14,131	14,635	(181)	(504)
Industrial - sales and transportation	$ 6,807	$ 7,309	$ 22,410	$ 23,488	$ (502)	$ (1,078)

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Sales and transportation margin decreased by $0.5 million primarily due to a decrease in volumes of 7.3 million therms, or 7% principally related to lower usage by forest products customers.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Industrial sales and transportation margin decreased by $1.1 million compared to the prior period due primarily to prior period fee revenues from interruptible customers as a result of system restrictions that did not occur to the same extent in the current period. Volumes decreased by 7.1 million therms, or 2% due primarily to lower usage from a few customers.

Cost of Gas

Cost of gas highlights include:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	QTD Change	YTD Change
Cost of gas	$ 23,797	$ 22,659	$ 173,657	$ 163,335	$ 1,138	$ 10,322
Volumes sold (therms)[1]	70,629	78,768	499,756	541,691	(8,139)	(41,935)
Average cost of gas (cents per therm)	$ 0.34	$ 0.29	$ 0.35	$ 0.30	$ 0.05	$ 0.05
Gain (loss) from gas cost incentive sharing[2]	$ (33)	$ 150	$ 310	$ (696)	$ (183)	$ 1,006

(1) This calculation excludes volumes delivered to industrial transportation customers.

(2) For additional information regarding NW Natural's gas cost incentive sharing mechanism, see Part II, Item 7 "Results of Operations—Regulatory Matters—Rate Mechanisms—*Gas Reserves*" in NW Natural's 2019 Form 10-K.

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Cost of gas increased $1.1 million, or 5%, primarily due to a 17% increase in average cost of gas consistent with higher natural gas prices within the PGA, partially offset by a 10% decrease in volumes sold.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Cost of gas increased $10.3 million, or 6%, primarily due to customer growth and a 17% increase in average cost of gas consistent with higher gas costs in the PGA, partially offset by an 8% decrease in volumes sold driven primarily by 15% warmer than average weather during the first nine months of 2020 as compared to average weather in the prior period.

Other Regulated Services
Other regulated services highlights include:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	QTD Change	YTD Change
North Mist storage services	$ 4,866	$ 5,088	$ 14,599	$ 7,221	$ (222)	$ 7,378
Other services	(463)	58	(352)	172	(521)	(524)
Total other regulated services	$ 4,403	$ 5,146	$ 14,247	$ 7,393	$ (743)	$ 6,854

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Other regulated services margin decreased $0.7 million primarily due to a decrease from other regulatory adjustments that were not individually significant. See Note 6 for information regarding North Mist expansion lease accounting.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Other regulated services margin increased $6.9 million primarily due to the commencement of storage services at the North Mist expansion facility in May 2019. See Note 6 for information regarding North Mist expansion lease accounting.

Other
Other activities aggregated and reported as other at NW Natural include the non-NGD storage activity at Mist as well as asset management services and the appliance retail center operations. Other activities aggregated and reported as other at NW Holdings include NWN Energy's equity investment in Trail West Holding, LLC (TWH); NNG Financial's investment in Kelso-Beaver Pipeline (KB Pipeline); and NWN Water, which owns and continues to pursue investments in the water sector. See Note 4 for further discussion of our business segment and other, as well as our direct and indirect wholly-owned subsidiaries.

On August 6, 2020, NWN Energy completed the sale to an unrelated third party of its interest in TWH. See Note 13 for further details.

The following table presents the results of activities aggregated and reported as other for both NW Holdings and NW Natural:

In thousands, except EPS data	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	QTD Change	YTD Change
NW Natural other - net income	$ 1,900	$ 1,982	$ 4,771	$ 6,513	$ (82)	$ (1,742)
Other NW Holdings activity	1,543	(918)	220	(2,398)	2,461	2,618
NW Holdings other - net income	$ 3,443	$ 1,064	$ 4,991	$ 4,115	$ 2,379	$ 876
Diluted EPS - NW Holdings - other	$ 0.11	$ 0.03	$ 0.16	$ 0.14	$ 0.08	$ 0.02

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Overall, other net income remained flat at NW Natural. Other net income at NW Holdings increased $2.4 million primarily reflecting higher earnings from our water and wastewater utilities.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Other net income increased $0.9 million at NW Holdings and decreased $1.7 million at NW Natural. The decrease at NW Natural was primarily due to lower earnings from non-NGD gas storage operations at Mist as a result of less favorable market conditions. The increase at NW Holdings was driven by higher earnings from water and wastewater utilities and lower expenses at the holding company, partially offset by the decline in other for NW Natural.

Consolidated Operations

Operations and Maintenance

Operations and maintenance highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,		QTD	YTD
In thousands	2020	2019	2020	2019	Change	Change
NW Natural	$ 38,657	$ 37,710	$ 126,111	$ 125,436	$ 947	$ 675
Other NW Holdings operations and maintenance	2,695	3,176	8,145	6,418	(481)	1,727
NW Holdings	$ 41,352	$ 40,886	$ 134,256	$ 131,854	$ 466	$ 2,402

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Operations and maintenance expense increased by $0.5 million and $0.9 million at NW Holdings and NW Natural, respectively. The increase at NW Natural was primarily due to higher compensation costs and contractor and professional service expenses. The decrease at Other NW Holdings was due to lower holding company costs, partially offset by higher expenses related to operating additional water and wastewater utilities.

NW Natural deferred to a regulatory asset certain operations and maintenance costs, net of direct savings, totaling $1.5 million during the third quarter of 2020. These deferred expenses were primarily incurred during the second quarter of 2020.

During the third quarter of 2020, management implemented temporary cost savings initiatives to mitigate the effects of the unrecoverable financial implications of COVID-19. These initiatives resulted in approximately $2 million of operations and maintenance expense savings that are not expected to be repeated in future years.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Operations and maintenance expense increased by $2.4 million at NW Holdings and increased by $0.7 million at NW Natural. The increase at NW Natural was driven by the following:

- a $7.8 million increase related to higher compensation costs, contractor and professional service expenses, and moving costs, as we moved to a new headquarter and operations center, partially offset by temporary cost savings measures implemented to mitigate the financial implications of COVID-19 that are not expected to be recovered through our regulated rates; and
- a $1.0 million increase due to regulatory amortization of the pension balancing account, which began in April 2019 and is ongoing; partially offset by
- a $4.6 million decrease from 2019 pension expenses (service cost component) recognized due to the recovery of amounts in NW Natural's pension balancing account, which were primarily offset within NGD margin and income tax benefits and which did not recur in 2020; and
- a $3.9 million decrease from a 2019 regulatory pension disallowance (service cost component) as a result of the March 2019 OPUC order in the Oregon general rate case and which did not recur in 2020.

The $1.7 million increase in other NW Holdings operations and maintenance expense primarily reflects operating expenses from water and wastewater companies that have been acquired since the prior period.

Bad debt expense as a percent of revenues was 0.3% for the first nine months of 2020 and 0.1% for the same period in 2019. The provision for uncollectible customer accounts was evaluated for its current expected credit losses following NW Holdings' and NW Natural's standard review process. For the period ended September 30, 2020, the provision was also evaluated for conditions and circumstances present due to the COVID-19 pandemic. See Note 2 for additional information.

See "Results of Operations - Regulatory Matters - *Regulatory Proceeding Updates*" above and Note 9 for more information regarding the pension balancing account.

Depreciation and Amortization

Depreciation and amortization highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,		QTD	YTD
In thousands	2020	2019	2020	2019	Change	Change
NW Natural	$ 25,681	$ 23,074	$ 74,857	$ 66,821	$ 2,607	$ 8,036
Other NW Holdings depreciation and amortization	253	301	1,588	513	(48)	1,075
NW Holdings	$ 25,934	$ 23,375	$ 76,445	$ 67,334	$ 2,559	$ 9,111

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Depreciation and amortization expense increased $2.6 million at NW Holdings and $2.6 million at NW Natural primarily due to NGD plant additions.
NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Depreciation and amortization expense increased $9.1 million and $8.0 million at NW Holdings and NW Natural, respectively, primarily due to NGD plant additions and the North Mist gas storage facility that commenced operations and began depreciating in May 2019. Higher depreciation and amortization expense at NW Holdings is due to water and wastewater acquisitions.

Other Income (Expense), Net
Other income (expense), net highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,		QTD	YTD
In thousands	2020	2019	2020	2019	Change	Change
NW Natural other income (expense), net	$ (4,002)	$ (2,323)	$ (10,744)	$ (18,905)	$ (1,679)	$ 8,161
Other NW Holdings activity	715	56	842	123	659	719
NW Holdings other income (expense), net	$ (3,287)	$ (2,267)	$ (9,902)	$ (18,782)	$ (1,020)	$ 8,880

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Other income (expense), net decreased $1.0 million at NW Holdings and $1.7 million at NW Natural. The decreases were primarily driven by slightly higher pension costs (non-service cost component) and lower non-pension regulatory interest.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Other income (expense), net increased $8.9 million and $8.2 million at NW Holdings and NW Natural, respectively. The increase was primarily due to the following factors:
- a $7.9 million increase from higher 2019 pension expenses (non-service cost component) recognized due to the recovery of amounts in NW Natural's pension balancing account, which were primarily offset within NGD margin and income tax benefits and which did not recur in 2020;
- a $6.6 million increase from the 2019 regulatory pension disallowance (non-service cost component) as a result of the March 2019 OPUC order in the Oregon general rate case, which did not recur in 2020; partially offset by
- a $3.8 million decrease in regulatory interest income primarily related to the 2019 realization of the equity interest component of financing costs accrued on the pension balancing account as recovery of the deferral began in March 2019; and,
- a $1.8 million decrease due to the regulatory amortization of the remaining pension balancing account deferral, which began in April 2019 and is ongoing.

See "Results of Operations - Regulatory Matters - *Regulatory Proceeding Updates*" above and Note 9 for more information regarding the pension balancing account.

Interest Expense, Net
Interest expense, net highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,		QTD	YTD
In thousands	2020	2019	2020	2019	Change	Change
NW Natural	$ 8,806	$ 10,459	$ 30,518	$ 30,979	$ (1,653)	$ (461)
Other NW Holdings interest expense, net	359	489	1,821	828	(130)	993
NW Holdings	$ 9,165	$ 10,948	$ 32,339	$ 31,807	$ (1,783)	$ 532

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Interest expense, net decreased $1.8 million and $1.7 million at NW Holdings and NW Natural, respectively, primarily due to deferring to a regulatory asset $1.6 million of interest on financings undertaken in March 2020 as a precautionary measure to strengthen our liquidity position as the pandemic unfolded. The interest expense deferred in the third quarter primarily related to interest incurred in the second quarter of 2020. The remaining decrease is primarily related to lower interest on commercial paper balances.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019.
Interest expense, net increased $0.5 million and decreased $0.5 million at NW Holdings and NW Natural, respectively. The decrease at NW Natural is primarily due to $1.3 million lower interest on commercial paper and was partially offset by a $0.6 million increase in interest on long-term debt balances. The increase at NW Holdings includes the decrease at NW Natural as

well as higher interest expense at NW Holdings due to various financings undertaken as a precautionary measure during the COVID-19 pandemic, primarily $0.8 million on outstanding credit agreement balances during the current period.

Income Tax Expense

Income tax expense highlights include:

	Three Months Ended September 30,		Nine Months Ended September 30,		QTD	YTD
In thousands	2020	2019	2020	2019	Change	Change
NW Holdings income tax expense (benefit)	$ (5,363)	$ (4,343)	$ 7,092	$ 4,957	$ (1,020)	$ 2,135
NW Natural income tax expense (benefit)	$ (6,057)	$ (4,013)	$ 6,942	$ 5,820	$ (2,044)	$ 1,122

THREE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Income tax benefit increased $1.0 million at NW Holdings and $2.0 million at NW Natural, respectively, due to a higher pre-tax loss for the third quarter of 2020 compared to the prior year.

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Income tax expense increased $2.1 million at NW Holdings and $1.1 million at NW Natural, respectively. The increase in income tax expense is primarily due to the 2019 tax implications of the March 2019 OPUC order, including the return of deferred TCJA benefits to customers and the regulatory pension disallowance.
See "Results of Operations - Regulatory Matters - *Regulatory Proceeding Updates*" above, Note 9, and Note 10 for information regarding the application of excess deferred income tax benefits.

Pending Sale of Gill Ranch Storage

On June 20, 2018, NWN Gas Storage, a wholly owned subsidiary of NW Holdings, entered into a Purchase and Sale Agreement (the Sale Agreement) that provides for the sale by NWN Gas Storage of all of its membership interests in Gill Ranch. Gill Ranch owns a 75% interest in the natural gas storage facility located near Fresno, California known as the Gill Ranch Gas Storage Facility. PG&E owns the remaining 25% interest in the Gill Ranch Facility.

In the Sale Agreement, NWN Gas Storage makes representations and warranties concerning, among other things, Gill Ranch, the Gill Ranch Facility and Gill Ranch's business and contractual relationships, and agrees to cause Gill Ranch to conduct its business and maintain its properties in the ordinary course, consistent with material agreements and past practice.

The Sale Agreement provides for an initial cash purchase price of $25.0 million (subject to a working capital adjustment), plus potential additional payments to NWN Gas Storage of up to $26.5 million in the aggregate if Gill Ranch achieves certain economic performance levels for the first three full gas storage years (April 1 of one year through March 31 of the following year) occurring after the closing and the remaining portion of the gas storage year during which the closing occurs.

The decision approving the transaction was issued by the CPUC in December, 2019 and the transaction is subject to other customary closing conditions and covenants, including the requirement that all of the representations and warranties be true and correct as of the closing date except, as would not, in the case of certain representations and warranties, be reasonably expected to have a material adverse effect on Gill Ranch. The Sale Agreement, as amended, is subject to termination by either party if the transaction has not closed by November 20, 2020. We continue to strive to close this transaction.

On January 29, 2019, PG&E filed voluntary petitions for relief under chapter 11 bankruptcy. On June 20, 2020, PG&E's plan of reorganization was confirmed by the Bankruptcy Court. The effective date of the plan of reorganization was July 1, 2020, and as a result, has been substantially consummated.

The results of Gill Ranch Storage have been determined to be discontinued operations and are presented separately, net of tax, from the results of continuing operations of NW Holdings for all periods presented. See Note 17 for more information on the Sale Agreement and the results of our discontinued operations.

The CPUC regulates Gill Ranch under a market-based rate model which allows for the price of storage services to be set by the marketplace. The CPUC also regulates the issuance of securities, system of accounts, and regulates intrastate storage services. The Geologic Energy Management Division of the California Department of Conservation regulations for gas storage wells were finalized in June 2018, and the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) proposed new federal regulations for underground natural gas storage facilities, which were finalized during 2019 and increased costs for all storage providers. NW Holdings will continue to monitor and assess additional new regulations until the sale is complete.

Short-term liquidity for Gill Ranch is supported by cash balances, internal cash flow from operations, equity contributions from its parent company, and, if necessary, additional external financing.

FINANCIAL CONDITION

Capital Structure

NW Holdings' long-term goal is to maintain a strong and balanced consolidated capital structure. NW Natural targets a regulatory capital structure of 50% common equity and 50% long-term debt, which is consistent with approved regulatory allocations in Oregon, which has an allocation of 50% common equity and 50% long-term debt without recognition of short-term debt, and Washington, which has an allocation of 50% long-term debt, 1% short-term debt, and 49% common equity.

When additional capital is required, debt or equity securities are issued depending on both the target capital structure and market conditions. These sources of capital are also used to fund long-term debt retirements and short-term commercial paper maturities. See "Liquidity and Capital Resources" below and Note 8. Achieving our target capital structure and maintaining sufficient liquidity to meet operating requirements is necessary to maintain attractive credit ratings and provide access to the capital markets at reasonable costs.

NW Holdings' consolidated capital structure was as follows:

	September 30,		December 31,
	2020	2019	2019
Common equity	47.2 %	48.4 %	49.6 %
Long-term debt (including current maturities)	52.8	51.6	50.4
Total	100.0 %	100.0 %	100.0 %

NW Natural's consolidated capital structure was as follows:

	September 30,		December 31,
	2020	2019	2019
Common equity	46.8 %	48.1 %	49.3 %
Long-term debt (including current maturities)	53.2	51.9	50.7
Total	100.0 %	100.0 %	100.0 %

Including short-term debt balances, as of September 30, 2020 and 2019, and December 31, 2019, NW Holdings' consolidated capital structure included common equity of 42.0%, 46.6% and 45.7%; long-term debt of 42.3%, 44.6% and 42.5%; and short-term debt including current maturities of long-term debt of 15.7%, 8.8% and 11.8%, respectively. As of September 30, 2020 and 2019, and December 31, 2019, NW Natural's consolidated capital structure included common equity of 43.0%, 46.8%, and 45.9%; long-term debt of 45.8%, 45.0% and 42.9%; and short-term debt including current maturities of long-term debt of 11.2%, 8.2%, and 11.2%, respectively.

Liquidity and Capital Resources

At September 30, 2020 and 2019, NW Holdings had approximately $35.9 million and $10.5 million, and NW Natural had approximately $27.1 million and $6.3 million of cash and cash equivalents, respectively. In order to maintain sufficient liquidity during periods when capital markets are volatile, NW Holdings and NW Natural may elect to maintain higher cash balances and add short-term borrowing capacity. NW Holdings and NW Natural may also pre-fund their respective capital expenditures when long-term fixed rate environments are attractive.

As the COVID-19 pandemic developed, in early to mid-March, markets displayed significant volatility. In response to that volatility and possible implications for the availability of access to the capital markets, NW Natural and NW Holdings undertook a number of measures to increase cash on hand to ensure ample liquidity. On March 20, 2020, NW Natural borrowed $122.0 million under its multi-year credit facility, which was not backing commercial paper. As of September 30, 2020, the credit facility was paid back in full. Similarly, on March 20, 2020, NW Holdings borrowed $35.0 million under its multi-year credit facility, of which $27.0 million had been paid back as of September 30, 2020. On March 23, 2020, NW Natural entered into a $150.0 million, 364-day term loan credit agreement, and borrowed the full amount on closing. On March 31, 2020, NW Natural issued and sold $150.0 million aggregate principal amount of 3.60% first mortgage bonds (FMBs). These actions were taken as a precaution to support sufficient cash on hand under a variety of financial sector circumstances that could develop. Including these borrowings, NW Holdings and NW Natural expect to have ample liquidity in the form of cash on hand and from operations and available credit capacity under credit facilities to support funding needs. In February 2020, NW Natural retired $75.0 million of FMBs with an interest rate of 5.37%.

NW Holdings
For NW Holdings, short-term liquidity is primarily provided by cash balances, dividends from its operating subsidiaries, in particular NW Natural, available cash from a multi-year credit facility, and short-term credit facilities. NW Holdings also has a universal shelf registration statement filed with the SEC for the issuance of debt and equity securities. NW Holding's long-term debt, if any, and equity issuances are primarily used to provide equity contributions to NW Holdings' operating subsidiaries for operating and capital expenditures and other corporate purposes. NW Holdings' issuance of securities is not subject to regulation by state public utility commissions, but the dividends from NW Natural to NW Holdings are subject to regulatory ring-fencing provisions. NW Holdings is a guarantor of its wholly owned subsidiary, NWN Water's $35.0 million two-year term loan agreement. See "Long-Term Debt" below for more information regarding NWN Water's debt.

As part of the ring-fencing conditions agreed upon with the OPUC and WUTC in connection with the holding company reorganization, NW Natural may not pay dividends or make distributions to NW Holdings if NW Natural's credit ratings and common equity ratio, defined as the ratio of equity to long-term debt, fall below specified levels. If NW Natural's long-term secured credit ratings are below A- for S&P and A3 for Moody's, dividends may be issued so long as NW Natural's common equity ratio is 45% or more. If NW Natural's long term secured credit ratings are below BBB for S&P and Baa2 for Moody's, dividends may be issued so long as NW Natural's common equity ratio is 46% or more. Dividends may not be issued if NW Natural's long-term secured credit ratings are BB+ or below for S&P or Ba1 or below for Moody's, or if NW Natural's common equity ratio is below 44%, where the ratio is measured using common equity and long-term debt excluding imputed debt or debt-like lease obligations. In each case, common equity ratios are determined based on a preceding or projected 13-month average. In addition, there are certain OPUC notice requirements for dividends in excess of 5% of NW Natural's retained earnings.

Additionally, if NW Natural's common equity (excluding goodwill and equity associated with non-regulated assets), on a preceding or projected 13-month average basis, is less than 46% of NW Natural's capital structure not including short-term debt, NW Natural is required to notify the OPUC, and if the common equity ratio falls below 44%, file a plan with the OPUC to restore its equity ratio to 44%. This condition is designed to ensure NW Natural continues to be adequately capitalized under the holding company structure. Under the WUTC order, the average common equity ratio must not exceed 56%.

Based on several factors, including current cash reserves, committed credit facilities, its ability to receive dividends from its operating subsidiaries, in particular NW Natural, and an expected ability to issue long-term debt and equity securities in the capital markets, NW Holdings believes its liquidity is sufficient to meet anticipated near-term cash requirements, including all contractual obligations, investing, and financing activities as discussed in "*Cash Flows"* below.

At September 30, 2020, NW Natural satisfied the ring-fencing provisions described above.

NW HOLDINGS DIVIDENDS. Quarterly dividends have been paid on common stock each year since NW Holdings' predecessor's stock was first issued to the public in 1951. Annual common stock dividend payments per share, adjusted for stock splits, have increased each year since 1956. The declarations and amount of future dividends to shareholders will depend upon earnings, cash flows, financial condition, NW Natural's ability to pay dividends to NW Holdings and other factors. The amount and timing of dividends payable on common stock is at the sole discretion of the NW Holdings Board of Directors.

Natural Gas Distribution Segment
For the NGD business segment, short-term borrowing requirements typically peak during colder winter months when the NGD business borrows money to cover the lag between natural gas purchases and bill collections from customers. Short-term liquidity for the NGD business is primarily provided by cash balances, internal cash flow from operations, proceeds from the sale of commercial paper notes, as well as available cash from multi-year credit facilities, short-term credit facilities, company-owned life insurance policies, the sale of long-term debt, and equity contributions from NW Holdings. NW Natural's long-term debt and contributions from NW Holdings are primarily used to finance NGD capital expenditures, refinance maturing debt, and provide temporary funding for other general corporate purposes of the NGD business.

Based on its current debt ratings (see "Credit Ratings" below), NW Natural has been able to issue commercial paper and long-term debt at attractive rates and generally has not needed to borrow or issue letters of credit from its back-up credit facility. In the event NW Natural is not able to issue new debt due to adverse market conditions or other reasons, NW Natural expects that near-term liquidity needs can be met using internal cash flows, issuing commercial paper, receiving equity contributions from NW Holdings, or, for the NGD segment, drawing upon a committed credit facility. NW Natural also has a universal shelf registration statement filed with the SEC for the issuance of secured and unsecured debt securities. As previously described, NW Natural drew on its credit facility, secured a term loan, and issued FMBs to ensure ample liquidity during market volatility resulting from the commencement of the COVID-19 pandemic.

In the event senior unsecured long-term debt ratings are downgraded, or outstanding derivative positions exceed a certain credit threshold, counterparties under derivative contracts could require NW Natural to post cash, a letter of credit, or other forms of collateral, which could expose NW Natural to additional cash requirements and may trigger increases in short-term borrowings while in a net loss position. NW Natural was not required to post collateral at September 30, 2020. If the credit risk-related contingent features underlying these contracts were triggered on September 30, 2020, assuming NW Natural's long-term debt ratings dropped to non-investment grade levels, we would not be required to post collateral with counterparties, including estimates for adequate assurance. See "*Credit Ratings*" below and Note 15.

Other items that may have a significant impact on NW Natural's liquidity and capital resources include pension contribution requirements and environmental expenditures. For additional information, see Part II, Item 7 "*Financial Condition*" in the 2019 Form 10-K.

SHORT-TERM DEBT. The primary source of short-term liquidity for NW Holdings is cash balances, dividends from its operating subsidiaries, in particular NW Natural, available cash from a multi-year credit facility, and short-term credit facilities it may enter into from time to time.

The primary source of short-term liquidity for NW Natural is from the sale of commercial paper and bank loans. NW Holdings and NW Natural have separate bank facilities, and NW Natural has a commercial paper program. In addition to issuing commercial paper or bank loans to meet working capital requirements, including seasonal requirements to finance gas purchases and accounts receivable, short-term debt may also be used to temporarily fund capital requirements. For NW Natural, commercial paper and bank loans are periodically refinanced through the sale of long-term debt or equity contributions from NW Holdings. Commercial paper, when outstanding, is sold through two commercial banks under an issuing and paying agency agreement and is supported by one or more unsecured revolving credit facilities. See “*Credit Agreements*” below.

On March 23, 2020, NW Natural entered into a $150.0 million 364-day term loan credit agreement, and borrowed the full amount thereunder, the proceeds of which are expected to be used for general corporate purposes and to provide additional liquidity. All principal and unpaid interest under the Term Loan is due and payable on March 22, 2021. NW Natural may prepay the principal and interest, and amounts prepaid may not be reborrowed. The Term Loan requires that NW Natural maintain credit ratings with Standard & Poor’s and Moody’s Investor Services. A change in NW Natural’s debt ratings may result in a change to the interest rate on the Term Loan but is not an event of default. The Term Loan requires NW Natural to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the banks to terminate their lending commitments and to accelerate the maturity of all amounts outstanding. NW Natural was in compliance with the covenant requiring the maintenance of an indebtedness to total capitalization ratio as of September 30, 2020 with a consolidated indebtedness to total capitalization ratio of 57.0%.

At September 30, 2020 and 2019, NW Holdings had short-term debt outstanding of $223.0 million and $65.6 million, respectively. At September 30, 2020 and 2019, NW Natural had short-term debt outstanding of $150.0 million and $45.5 million, respectively. The weighted average interest rate on short-term debt outstanding at September 30, 2020 was 0.89% and 0.75% at NW Holdings and NW Natural, respectively. There was no commercial paper outstanding at September 30, 2020.

Subsequent Event
On October 30, 2020, NW Natural repaid the $150.0 million 364-day term loan in full, which was funded by issuing short-term commercial paper.

Credit Agreements
NW Holdings
NW Holdings has a $100 million credit agreement, with a feature that allows it to request increases in the total commitment amount up to a maximum of $150 million. The maturity date of the agreement is October 2, 2023, with available extensions of commitments for two additional one-year periods, subject to lender approval.

All lenders under the agreement are major financial institutions with committed balances and investment grade credit ratings as of September 30, 2020 as follows:

In millions

Lender rating, by category		Loan Commitment
AA/Aa	$	100
Total	$	100

Based on credit market conditions, it is possible one or more lending commitments could be unavailable to NW Holdings if the lender defaulted due to lack of funds or insolvency; however, NW Holdings does not believe this risk to be imminent due to the lenders' strong investment-grade credit ratings. $73.0 million, $20.0 million and $24.0 million were drawn under this credit facility at September 30, 2020, September 30, 2019 and December 31, 2019, respectively.

The NW Holdings credit agreement permits the issuance of letters of credit in an aggregate amount of up to $40 million. The principal amount of borrowings under the credit agreement is due and payable on the maturity date. The credit agreement requires NW Holdings to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Holdings was in compliance with this covenant at September 30, 2020 and 2019, with consolidated indebtedness to total capitalization ratios of 58.0% and 53.4%, respectively.

The agreement also requires NW Holdings to maintain debt ratings (which are defined by a formula using NW Natural's credit ratings in the event NW Holdings does not have a credit rating) with Standard & Poor's (S&P) and Moody's Investors Service, Inc. (Moody's) and notify the lenders of any change in its senior unsecured debt ratings or senior secured debt ratings, as applicable, by such rating agencies. A change in NW Holdings' debt ratings by S&P or Moody's is not an event of default, nor is the maintenance of a specific minimum level of debt rating a condition of drawing upon the credit agreement. Rather, interest rates on any loans outstanding under the credit agreements are tied to debt ratings and therefore, a change in the debt rating would increase or decrease the cost of any loans under the credit agreements when ratings are changed. NW Holdings does not currently maintain ratings with S&P or Moody's.

NW Natural
NW Natural has a $300 million credit agreement, with a feature that allows it to request increases in the total commitment amount up to a maximum of $450 million. The maturity date of the agreement is October 2, 2023, with an available extension of commitments for two additional one-year periods, subject to lender approval.

All lenders under the agreement are major financial institutions with committed balances and investment grade credit ratings as of September 30, 2020 as follows:

In millions

Lender rating, by category	Loan Commitment
AA/Aa	$ 300
Total	$ 300

Based on credit market conditions, it is possible one or more lending commitments could be unavailable to NW Natural if the lender defaulted due to lack of funds or insolvency; however, NW Natural does not believe this risk to be imminent due to the lenders' strong investment-grade credit ratings. In addition, as of September 30, 2020, NW Natural did not have any outstanding balances drawn under this credit facility.

The NW Natural credit agreement permits the issuance of letters of credit in an aggregate amount of up to $60 million. The principal amount of borrowings under the credit agreement is due and payable on the maturity date. There were no outstanding balances under this credit agreement at September 30, 2020 and 2019. The credit agreement requires NW Natural to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Natural was in compliance with this covenant at September 30, 2020 and 2019, with consolidated indebtedness to total capitalization ratios of 57.0% and 53.2%, respectively.

The agreement also requires NW Natural to maintain credit ratings with S&P and Moody's and notify the lenders of any change in NW Natural's senior unsecured debt ratings or senior secured debt ratings, as applicable, by such rating agencies. A change in NW Natural's debt ratings by S&P or Moody's is not an event of default, nor is the maintenance of a specific minimum level of debt rating a condition of drawing upon the credit agreement. Rather, interest rates on any loans outstanding under the agreement are tied to debt ratings and therefore, a change in the debt rating would increase or decrease the cost of any loans under the credit agreement when ratings are changed. See "*Credit Ratings"* below.

CREDIT RATINGS. NW Holdings does not currently maintain ratings with S&P or Moody's. NW Natural's credit ratings are a factor of liquidity, potentially affecting access to the capital markets including the commercial paper market. NW Natural's credit ratings also have an impact on the cost of funds and the need to post collateral under derivative contracts. The following table summarizes NW Natural's current credit ratings:

	S&P	Moody's
Commercial paper (short-term debt)	A-1	P-2
Senior secured (long-term debt)	AA-	A2
Senior unsecured (long-term debt)	n/a	Baa1
Corporate credit rating	A+	n/a
Ratings outlook	Stable	Stable

The above credit ratings and ratings outlook are dependent upon a number of factors, both qualitative and quantitative, and are subject to change at any time. The disclosure of or reference to these credit ratings is not a recommendation to buy, sell or hold NW Holdings or NW Natural securities. Each rating should be evaluated independently of any other rating.

As part of the ring-fencing conditions agreed upon with the OPUC and WUTC in connection with the holding company reorganization, NW Holdings and NW Natural are required to maintain separate credit ratings, long-term debt ratings, and preferred stock ratings, if any.

LONG-TERM DEBT. In June 2019, NW Natural Water, a wholly-owned subsidiary of NW Holdings, entered into a two-year term loan agreement for $35.0 million. The loan carried an interest rate of 0.74% at September 30, 2020, which is based upon the two-month LIBOR rate. The loan matures in June of 2021 and is guaranteed by NW Holdings and requires NW Holdings to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Holdings was in compliance with this covenant at September 30, 2020, with a consolidated indebtedness to total capitalization ratio of 58.0%.

At September 30, 2020, NW Holdings and NW Natural had long-term debt outstanding of $955.4 million and $917.1 million, respectively, which included $7.6 million of unamortized debt issuance costs at NW Natural. NW Natural's long-term debt consists of first mortgage bonds (FMBs) with maturity dates ranging from 2021 through 2050, interest rates ranging from 2.82% to 9.05%, and a weighted average interest rate of 4.60%.

In February 2020, NW Natural retired $75.0 million of FMBs with an interest rate of 5.37%. No other long-term debt was retired during the nine months ended September 30, 2020. In March 2020, NW Natural issued $150.0 million of FMBs with an interest rate of 3.60%, due in 2050. Over the next twelve months, $10.0 million of FMBs with an interest rate of 9.05% will mature in August 2021 and $50.0 million of FMBs with an interest rate of 3.18% will mature in September 2021.

See Part II, Item 7, "Financial Condition—*Contractual Obligations*" in the 2019 Form 10-K for long-term debt maturing over the next five years.

BANKRUPTCY RING-FENCING RESTRICTIONS. As part of the ring-fencing conditions agreed upon with the OPUC and WUTC in connection with the holding company reorganization, NW Natural is required to have one director who is independent from NW Natural management and from NW Holdings and to issue one share of NW Natural preferred stock to an independent third party. NW Natural was in compliance with both of these ring-fencing provisions as of September 30, 2020. NW Natural may file a voluntary petition for bankruptcy only if approved unanimously by the Board of Directors of NW Natural, including the independent director, and by the holder of the preferred share.

Cash Flows

Operating Activities

Changes in operating cash flows are primarily affected by net income or loss, changes in working capital requirements, and other cash and non-cash adjustments to operating results.

Operating activity highlights include:

	Nine Months Ended September 30,		
In thousands	2020	2019	YTD Change
NW Holdings cash provided by operating activities	$ 148,540	$ 155,291	$ (6,751)
NW Natural cash provided by operating activities	$ 154,713	$ 154,464	$ 249

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. The significant factors contributing to the $6.8 million decrease in cash flows provided by operating activities at NW Holdings included a net decrease in net deferred gas costs as the actual costs during the 2019-20 winter season were in line with estimates embedded in the PGA as opposed to gas costs in the 2018-2019 winter season that were 14% above PGA estimates, partially offset by an increase in contributions made to the qualified defined benefit pension plan as noted below.

During the nine months ended September 30, 2020, NW Natural contributed $23.7 million to the NGD segment's qualified defined benefit pension plan, compared to $7.8 million for the same period in 2019. The amount and timing of future contributions will depend on market interest rates and investment returns on the plans' assets. For additional information, see Note 9.

Payables to affiliates in the current period was a contributing factor to the $0.2 million increase in cash flows provided by operating activities at NW Natural, partially offset by the above factors affecting the NW Holding's cash flows provided by operating activities.

NW Holdings and NW Natural have lease and purchase commitments relating to their operating activities that are financed with cash flows from operations. For additional information, see Part II, Item 7 "Financial Condition—*Contractual Obligations"* and Note 17 in the 2019 Form 10-K.

Investing Activities
Investing activity highlights include:

In thousands	Nine Months Ended September 30, 2020	2019	YTD Change
NW Holdings cash used in investing activities	$ (226,765)	$ (225,290)	$ (1,475)
NW Natural cash used in investing activities	$ (188,611)	$ (167,375)	$ (21,236)

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Cash used in investing activities increased $1.5 million at NW Holdings and increased $21.2 million at NW Natural. The increase at NW Natural was primarily due to higher capital expenditures related to system replacements and enhancements and information technology projects partially offset by lower spending on leasehold improvements and the sale of assets. NW Holdings' increase in cash used in investing activities includes the increase associated with NW Natural's capital expenditures, partially offset by lower spending on water and wastewater acquisitions during the first nine months of 2020.

NW Holdings' capital expenditures in 2020 are anticipated to be between $240 million and $280 million, of which between $230 million and $270 million are anticipated to occur at the NGD business. NW Holdings' largest subsidiary, NW Natural, expects to make a significant level of investments in its NGD segment in 2020 and through 2024. Over the five-year period from 2020 to 2024, the NGD segment is expected to invest $950 million to $1.1 billion in capital expenditures to support system reliability, customer growth, and operate effective technology for the business. NW Holdings' wholly owned water subsidiaries expect to invest in their facilities to support growth and upgrade their systems with $30 million to $40 million expected to be invested from 2020 to 2024. NW Holdings expects an immaterial amount of non-NGD capital investments for Gill Ranch and other activities in 2020 and through 2024.

Investments in our infrastructure during and after 2020 will depend largely on additional regulations, growth, and expansion opportunities.

Required funds for the investments are expected to be internally generated and/or financed with long-term debt or equity, as appropriate.

Financing Activities
Financing activity highlights include:

In thousands	Nine Months Ended September 30, 2020	2019	YTD Change
NW Holdings cash provided by financing activities	$ 104,503	$ 67,888	$ 36,615
NW Holdings proceeds from common stock issued	—	93,182	(93,182)
NW Holdings change in short-term debt & proceeds from term loan	73,900	(152,040)	225,940
NW Holdings change in long-term debt	75,000	165,000	(90,000)
NW Natural cash provided by financing activities	$ 55,112	$ 11,238	$ 43,874
NW Natural capital contribution from parent	—	93,182	(93,182)
NW Natural change in short-term debt & proceeds from term loan	24,900	(172,000)	196,900
NW Natural change in long-term debt	75,000	130,000	(55,000)

NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO SEPTEMBER 30, 2019. Cash provided by financing activities increased $36.6 million and $43.9 million at NW Holdings and NW Natural, respectively.

The increase in cash provided by financing activities at NW Natural was primarily driven by $196.9 million in higher borrowings on short-term debt instruments and long-term FMBs issued as a precaution to increase liquidity in response to the unfolding of the COVID-19 pandemic, partially offset by the retirement of $75 million in long-term debt during the first quarter of 2020 and the capital contribution from NW Holdings in the second quarter of 2019.

In addition to the increase at NW Natural, the increase in cash provided by financing activities at NW Holdings was primarily due to additional draws on NW Holdings' credit facility undertaken as a precaution to increase liquidity in response to the COVID-19 pandemic as well as to finance the water and wastewater utility acquisitions that closed during the first quarter of 2020, partially offset by a larger decrease in the change of long-term debt due to the $35 million two-year term loan issued in 2019.

Contingent Liabilities

Loss contingencies are recorded as liabilities when it is probable that a liability has been incurred and the amount of the loss is reasonably estimable in accordance with accounting standards for contingencies. See “*Application of Critical Accounting Policies and Estimates*” in the 2019 Form 10-K. At September 30, 2020, NW Natural's total estimated liability related to environmental sites is $122.6 million. See "Results of Operations—Regulatory Matters—Rate Mechanisms—*Environmental Costs*" in the 2019 Form 10-K and Note 16.

APPLICATION OF CRITICAL ACCOUNTING POLICIES AND ESTIMATES

In preparing financial statements in accordance with U.S. GAAP, management exercises judgment in the selection and application of accounting principles, including making estimates and assumptions that affect reported amounts of assets, liabilities, revenues, expenses, and related disclosures in the financial statements. Management considers critical accounting policies to be those which are most important to the representation of financial condition and results of operations and which require management's most difficult and subjective or complex judgments, including accounting estimates that could result in materially different amounts if reported under different conditions or if they used different assumptions. Our most critical estimates and judgments for both NW Holdings and NW Natural include accounting for:

- regulatory accounting;
- revenue recognition;
- derivative instruments and hedging activities;
- pensions and postretirement benefits;
- income taxes;
- environmental contingencies; and
- impairment of long-lived assets and goodwill.

There have been no material changes to the information provided in the 2019 Form 10-K with respect to the application of critical accounting policies and estimates. See Part II, Item 7, "*Application of Critical Accounting Policies and Estimates,*" in the 2019 Form 10-K. NW Holdings and NW Natural reviewed our critical accounting policies and estimates in light of the current COVID-19 pandemic and identified no significant changes to those policies and estimates were required. See Note 2 for discussion of the financial impacts due to COVID-19.

Management has discussed its current estimates and judgments used in the application of critical accounting policies with the Audit Committees of the Boards of NW Holdings and NW Natural. Within the context of critical accounting policies and estimates, management is not aware of any reasonably likely events or circumstances that would result in materially different amounts being reported. For a description of recent accounting pronouncements that could have an impact on financial condition, results of operations or cash flows, see Note 2.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

NW Holdings and NW Natural are exposed to various forms of market risk including commodity supply risk, commodity price risk, interest rate risk, foreign currency risk, credit risk and weather risk. This section describes NW Holdings' and NW Natural's exposure to these risks, as applicable. Management monitors and manages these financial exposures as an integral part of NW Holdings' and NW Natural's overall risk management program. No material changes have occurred related to disclosures about market risk for the nine months ended September 30, 2020. For additional information, see Part II, Item 1A, "*Risk Factors*" in this report and Part II, Item 7A, "*Quantitative and Qualitative Disclosures about Market Risk*" in the 2019 Form 10-K.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

NW Holdings and NW Natural management, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, completed an evaluation of the effectiveness of the design and operation of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)). Based upon this evaluation, the Chief Executive Officer and Chief Financial Officer of each registrant have concluded that, as of the end of the period covered by this report, disclosure controls and procedures were effective to ensure that information required to be disclosed by each such registrant and included in reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission (SEC) rules and forms and that such information is accumulated and communicated to management of each registrant, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in Internal Control Over Financial Reporting

NW Holdings and NW Natural management are responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f).

There have been no changes in NW Natural's or NW Holdings' internal control over financial reporting that occurred during the quarter ended September 30, 2020 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting for NW Holdings and NW Natural. The statements contained in Exhibit 31.1, Exhibit 31.2, Exhibit 31.3, and Exhibit 31.4 should be considered in light of, and read together with, the information set forth in this Item 4(b).

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Other than the proceedings disclosed in Note 16 and those proceedings disclosed and incorporated by reference in Part I, Item 3, "*Legal Proceedings*" in the 2019 Form 10-K, we have only nonmaterial litigation, or litigation that occurs in the ordinary course of our business.

ITEM 1A. RISK FACTORS

The following additional risk factors are provided to update and supplement the risk factors previously disclosed in Part I, Item 1A, "Risk Factors," of our 2019 Annual Report on Form 10-K and the information contained in this Quarterly Report on Form 10-Q and our other reports filed with the SEC.

PUBLIC HEALTH RISK. *The recent novel coronavirus (COVID-19) pandemic is widespread, severe and unpredictable. The continuation of this outbreak and the resulting economic conditions, or the emergence of other epidemic or pandemic crises, could materially and adversely affect NW Holdings' and NW Natural's business, results of operations, or financial condition.*

The novel coronavirus (COVID-19), which was declared a pandemic by the World Health Organization in March 2020, has resulted in widespread and severe global, national and local economic and societal disruptions. In late March, the Governors of Oregon and Washington issued "stay at home" executive orders requiring the closure of "non-essential" business and modifications to certain "essential" businesses. While most of NW Natural's services are considered "essential" under existing executive orders, there is no guarantee they will continue to be classified as such. Additionally, while we have undertaken emergency response command structures and protocols, they may not be sufficient to adequately mitigate the effects of COVID-19 on our operations. Although as of September 30, 2020, our financial condition and results of operations had not been materially impacted as a result of the COVID-19 outbreak, the situation is rapidly evolving and dynamic and could ultimately adversely affect our business by, among other things:

- disrupting our access to capital markets or increasing costs of capital affecting our liquidity in the future;
- reducing demand for natural gas, particularly from commercial and industrial customers that may be considered "non-essential" businesses under current or future executive orders or other governmental action, or that are suffering slow-downs or ultimately close completely due to COVID-19 effects;
- reducing customer growth and new meter additions due to less economic, construction or conversion activity;
- subjecting us to legislative or prolonged administrative action that limits our ability to collect on overdue accounts or disconnect gas service for nonpayment, beyond a period of time acceptable to us;
- increasing our operating costs for emergency supplies, personal protective equipment, cleaning services and supplies, remote technology and other specific needs during this crisis;
- impacting our capital expenditures if construction activities are deemed "non-essential" services and suspended or delayed;
- sickening or causing a mandatory quarantine of a large percentage of our workforce, or key workgroups with specialized skill sets, impairing our ability to perform key business functions or execute our business continuity plans;
- adversely affecting the asset values of NW Natural's defined benefit pension plan or causing a failure to maintain sustained growth in pension investments over time, increasing our contribution requirements;
- limiting or curtailing entirely, public utility commissions' ability to approve or authorize applications or other requests we may make with respect to our regulated businesses;
- impairing the functioning of our supply chain or ability to rely on third parties or business partners; and
- creating additional cybersecurity vulnerabilities due to heavy reliance on remote working in our business continuity model.

Additionally, the effects of COVID-19 could create prolonged unfavorable economic conditions, slowed economic growth, or an economic recession that may result in or be accompanied by unprecedented unemployment rates and declines in the value of homes and investment assets, adversely affecting the income and financial resources of many domestic households and businesses. It is unclear whether governmental responses to these conditions will lessen the severity or duration of any economic downturn. Our operational and financial results would likely be affected by such economic conditions. Less new housing construction, fewer conversions to natural gas, higher levels of residential foreclosures and vacancies, and personal and business bankruptcies or reduced spending could all negatively affect our financial condition and results of operations.

These and other impacts of COVID-19 or other global or regional health pandemics, epidemics or similar public health threats could also have the effect of heightening many of the other risks described in Part I, Item 1A, “Risk Factors,” of our 2019 Annual Report on Form 10-K and the other reports we file from time to time with the SEC. The ultimate impact of COVID-19 on our business cannot be predicted and will depend on factors beyond our knowledge or control, including the duration and severity of the outbreak and resulting economic downturn, actions taken to contain the outbreak and mitigate its public health effects, and the extent to which normal economic and operating conditions can resume and when they might do so. Any of these factors could have an adverse effect on our business, outlook, financial condition, and results of operations and cash flows, which could be significant.

ENVIRONMENTAL REGULATION COMPLIANCE RISK. *NW Holdings and NW Natural are subject to environmental regulations for our ongoing businesses, compliance with which could adversely affect our operations or financial results.*

NW Holdings and NW Natural are subject to laws, regulations and other legal requirements enacted or adopted by federal, state and local governmental authorities relating to protection of the environment, including those legal requirements that govern discharges of substances into the air and water, the management and disposal of hazardous substances and waste, groundwater quality and availability, plant and wildlife protection, and other aspects of environmental regulation. For example, our natural gas operations are subject to reporting requirements to the Environmental Protection Agency (EPA) and the Oregon Department of Environmental Quality (ODEQ) regarding greenhouse gas emissions. Additionally, on March 10, 2020, the governor of Oregon issued an executive order establishing greenhouse gas (GHG) emissions reduction goals of at least 45% below 1990 emission levels by 2035 and at least 80% below 1990 emission levels by 2050 and directing state agencies and commissions to facilitate such GHG emission goals. Although the order does not specifically direct actions of natural gas distribution businesses, the OPUC is directed to prioritize proceedings and activities that advance decarbonization in the utility sector, mitigate energy burden experienced by utility customers and ensure system reliability and resource adequacy. The executive order also directs other agencies to cap and reduce GHG emissions from transportation fuels and all other liquid and gaseous fuels, including natural gas, adopt building energy efficiency goals for new building construction, reduce methane gas emissions from landfills and food waste, and submit a proposal for adoption of state goals for carbon sequestration and storage by Oregon’s forest, wetlands and agricultural lands. At this time, we are unable to predict the impact, if any, of the executive order on NW Natural. As an executive order, any implementation is reliant on state agency rule-making. The scope and content of any state commission or agency rules, as well as the time to propose, adopt and implement any such rules, has not been determined. These and other current and future additional environmental regulations could result in increased compliance costs or additional operating restrictions, which may or may not be recoverable in customer rates or through insurance. If these costs are not recoverable, or if these regulations reduce the desirability or cost-competitiveness of natural gas, they could have an adverse effect on NW Holdings’ or NW Natural’s operations or financial condition.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table provides information about purchases of NW Holdings' equity securities that are registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, during the quarter ended September 30, 2020:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased[1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs[2]	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs[2]
Balance forward			2,124,528	$ 16,732,648
07/01/20-07/31/20	—	$ —	—	—
08/01/20-08/31/20	902	53.73	—	—
09/01/20-09/30/20	—	—	—	—
Total	902	53.73	2,124,528	$ 16,732,648

(1) During the quarter ended September 30, 2020, no shares of common stock were purchased on the open market to meet the requirements of NW Holdings' Dividend Reinvestment and Direct Stock Purchase Plan. However, 902 shares of NW Holdings common stock were purchased on the open market to meet the requirements of share-based compensation programs. During the quarter ended September 30, 2020, no shares of NW Holdings common stock were accepted as payment for stock option exercises pursuant to the NW Natural Restated Stock Option Plan.

(2) During the quarter ended September 30, 2020, no shares of NW Holdings common stock were repurchased pursuant to the Board-Approved share repurchase program. In May 2019, we received NW Holdings Board Approval to extend the repurchase program through May 2022. For more information on this program, refer to Note 5 in the 2019 Form 10-K, and the Form 8-K filed by NW Holdings and NW Natural on May 30, 2019.

ITEM 6. EXHIBITS

See the Exhibit Index below, which is incorporated by reference herein.

Table of Contents

NORTHWEST NATURAL GAS COMPANY
NORTHWEST NATURAL HOLDING COMPANY
Exhibit Index to Quarterly Report on Form 10-Q
For the Quarter Ended September 30, 2020

Exhibit Index

Exhibit Number	Document
10.1	Letter Agreement, dated August 14, 2020, between NW Natural Gas Storage, LLC and SENSA Holdings LLC, amending the Purchase and Sale Agreement, dated June 20, 2018 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed August 17, 2020, File No. 1-38681).
10.2	Letter Agreement, dated September 28, 2020, between NW Natural Gas Storage, LLC and SENSA Holdings LLC, amending the Purchase and Sale Agreement, dated June 20, 2018 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed September 29, 2020, File No. 1-38681).
31.1	Certification of Principal Executive Officer of Northwest Natural Gas Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer of Northwest Natural Gas Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.
31.3	Certification of Principal Executive Officer of Northwest Natural Holding Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.
31.4	Certification of Principal Financial Officer of Northwest Natural Holding Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.
*32.1	Certification of Principal Executive Officer and Principal Financial Officer of Northwest Natural Gas Company Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
*32.2	Certification of Principal Executive Officer and Principal Financial Officer of Northwest Natural Holding Company Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.	The following materials formatted in Inline Extensible Business Reporting Language (Inline XBRL): (i) Consolidated Statements of Income; (ii) Consolidated Balance Sheets; (iii) Consolidated Statements of Cash Flows; and (iv) Related notes. The instance document does not appear in the interactive data file because XBRL tags are embedded within the Inline XBRL document.
104.	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, formatted in Inline XBRL.

* Pursuant to Item 601(b)(32)(ii) of Regulation S-K, this certification is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, each Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized. The signature for each undersigned company shall be deemed to relate only to matters having reference to such company and its subsidiaries.

NORTHWEST NATURAL GAS COMPANY

(Registrant)

Dated: November 5, 2020

/s/ Brody J. Wilson

Brody J. Wilson
Principal Accounting Officer
Vice President, Treasurer, Chief Accounting Officer and Controller

NORTHWEST NATURAL HOLDING COMPANY

(Registrant)

Dated: November 5, 2020

/s/ Brody J. Wilson

Brody J. Wilson
Principal Accounting Officer
Vice President, Treasurer, Chief Accounting Officer and Controller

EXHIBIT 31.1

CERTIFICATION

I, David H. Anderson, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended September 30, 2020 of Northwest Natural Gas Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 5, 2020

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Frank H. Burkhartsmeyer, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended September 30, 2020 of Northwest Natural Gas Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 5, 2020

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

EXHIBIT 31.3

CERTIFICATION

I, David H. Anderson, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended September 30, 2020 of Northwest Natural Holding Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 5, 2020

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

EXHIBIT 31.4

CERTIFICATION

I, Frank H. Burkhartsmeyer, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended September 30, 2020 of Northwest Natural Holding Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 5, 2020

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

EXHIBIT 32.1

NORTHWEST NATURAL GAS COMPANY

Certificate Pursuant to Section 906
of Sarbanes – Oxley Act of 2002

Each of the undersigned, DAVID H. ANDERSON, Chief Executive Officer, and FRANK H. BURKHARTSMEYER, the Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY (the Company), DOES HEREBY CERTIFY that:

1. The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 (the Report) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, each of the undersigned has caused this instrument to be executed this 5th day of November 2020.

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Northwest Natural Gas Company and will be retained by Northwest Natural Gas Company and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

NORTHWEST NATURAL HOLDING COMPANY

Certificate Pursuant to Section 906
of Sarbanes – Oxley Act of 2002

Each of the undersigned, DAVID H. ANDERSON, Chief Executive Officer, and FRANK H. BURKHARTSMEYER, the Chief Financial Officer, of NORTHWEST NATURAL HOLDING COMPANY (the Company), DOES HEREBY CERTIFY that:

1. The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 (the Report) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, each of the undersigned has caused this instrument to be executed this 5th day of November 2020.

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Northwest Natural Holding Company and will be retained by Northwest Natural Holding Company and furnished to the Securities and Exchange Commission or its staff upon request.