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 March 31, 2021

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
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 — **82-4710680**	**Oregon** — **93-0256722**
(State or other jurisdiction of incorporation or organization) — (I.R.S. Employer Identification No.)	(State or other jurisdiction of incorporation or organization) — (I.R.S. Employer Identification No.)
250 SW Taylor Street	**250 SW Taylor Street**
Portland **Oregon** **97204**	**Portland** **Oregon** **97204**
(Address of principal executive offices) (Zip Code)	(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 April 26, 2021, 30,656,006 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 March 31, 2021

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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;
- matters related to climate change and our role in a low-carbon, renewable-energy future;
- renewable natural gas and hydrogen;
- our strategy to reduce greenhouse gas emissions;
- the policies and priorities of the new presidential administration;
- 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, and the impact of new legislation on, 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, as well as the timing, extent and impact of COVID-19 vaccine campaigns on our workforce and customers;
- 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 2020 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)

In thousands, except per share data	Three Months Ended March 31, 2021	Three Months Ended March 31, 2020
Operating revenues	$ 315,946	$ 285,151
Operating expenses:		
Cost of gas	112,210	108,538
Operations and maintenance	52,191	48,921
Environmental remediation	3,777	4,005
General taxes	11,369	9,895
Revenue taxes	12,664	11,743
Depreciation and amortization	28,097	24,675
Other operating expenses	932	928
Total operating expenses	221,240	208,705
Income from operations	94,706	76,446
Other income (expense), net	(3,542)	(3,575)
Interest expense, net	11,126	10,468
Income before income taxes	80,038	62,403
Income tax expense	20,521	14,127
Net income from continuing operations	59,517	48,276
Loss from discontinued operations, net of tax	—	(778)
Net income	59,517	47,498
Other comprehensive income:		
Amortization of non-qualified employee benefit plan liability, net of taxes of $80 and $58 for the three months ended March 31, 2021 and 2020, respectively	221	160
Comprehensive income	$ 59,738	$ 47,658
Average common shares outstanding:		
Basic	30,614	30,491
Diluted	30,633	30,535
Earnings from continuing operations per share of common stock:		
Basic	$ 1.94	$ 1.58
Diluted	1.94	1.58
Loss from discontinued operations per share of common stock:		
Basic	$ —	$ (0.02)
Diluted	—	(0.02)
Earnings per share of common stock:		
Basic	$ 1.94	$ 1.56
Diluted	1.94	1.56

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands	March 31, 2021	March 31, 2020	December 31, 2020
Assets:			
Current assets:			
Cash and cash equivalents	$ 17,907	$ 471,079	$ 30,168
Accounts receivable	105,226	78,083	88,083
Accrued unbilled revenue	41,907	41,871	57,949
Allowance for uncollectible accounts	(3,503)	(1,335)	(3,219)
Regulatory assets	47,789	37,815	31,745
Derivative instruments	19,914	2,257	13,678
Inventories	26,237	34,390	42,691
Gas reserves	10,659	14,351	11,409
Income taxes receivable	6,000	—	6,000
Other current assets	30,656	26,460	44,741
Discontinued operations - current assets (Note 17)	—	15,296	—
Total current assets	302,792	720,267	323,245
Non-current assets:			
Property, plant, and equipment	3,788,283	3,551,065	3,734,039
Less: Accumulated depreciation	1,091,903	1,050,850	1,079,269
Total property, plant, and equipment, net	2,696,380	2,500,215	2,654,770
Gas reserves	31,600	45,234	34,484
Regulatory assets	338,692	328,024	348,927
Derivative instruments	3,087	2,451	6,135
Other investments	47,434	61,928	49,259
Operating lease right of use asset	76,957	79,522	77,446
Assets under sales-type leases	142,586	146,937	143,759
Goodwill	69,330	69,220	69,225
Other non-current assets	49,767	47,729	49,129
Total non-current assets	3,455,833	3,281,260	3,433,134
Total assets	$ 3,758,625	$ 4,001,527	$ 3,756,379

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands, including share information	March 31, 2021	March 31, 2020	December 31, 2020
Liabilities and equity:			
Current liabilities:			
Short-term debt	$ 236,225	$ 550,000	$ 304,525
Current maturities of long-term debt	95,265	202	95,344
Accounts payable	88,591	86,766	97,966
Taxes accrued	23,550	23,837	13,812
Interest accrued	9,491	9,396	7,441
Regulatory liabilities	81,314	47,137	50,362
Derivative instruments	1,038	5,036	4,198
Operating lease liabilities	1,213	1,071	1,105
Other current liabilities	48,978	62,624	52,330
Discontinued operations - current liabilities (Note 17)	—	12,801	—
Total current liabilities	585,665	798,870	627,083
Long-term debt	860,654	953,962	860,081
Deferred credits and other non-current liabilities:			
Deferred tax liabilities	328,112	300,168	319,292
Regulatory liabilities	636,384	623,219	639,663
Pension and other postretirement benefit liabilities	210,811	224,490	217,287
Derivative instruments	1,272	939	2,852
Operating lease liabilities	80,414	79,105	80,621
Other non-current liabilities	118,989	119,033	120,767
Total deferred credits and other non-current liabilities	1,375,982	1,346,954	1,380,482
Commitments and contingencies (Note 16)			
Equity:			
Common stock - no par value; authorized 100,000 shares; issued and outstanding 30,655, 30,528, and 30,589 at March 31, 2021 and 2020, and December 31, 2020, respectively	568,066	561,264	565,112
Retained earnings	380,939	351,050	336,523
Accumulated other comprehensive loss	(12,681)	(10,573)	(12,902)
Total equity	936,324	901,741	888,733
Total liabilities and equity	$ 3,758,625	$ 4,001,527	$ 3,756,379

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 March 31,	
	2021	2020
Total shareholders' equity, beginning balances	$ 888,733	$ 865,999
Common stock:		
Beginning balances	565,112	558,282
Stock-based compensation	2,030	3,372
Shares issued pursuant to equity-based plans, net of shares withheld for taxes	924	(390)
Ending balances	568,066	561,264
Retained earnings:		
Beginning balances	336,523	318,450
Net income	59,517	47,498
Dividends on common stock	(15,101)	(14,898)
Ending balances	380,939	351,050
Accumulated other comprehensive income (loss):		
Beginning balances	(12,902)	(10,733)
Other comprehensive income	221	160
Ending balances	(12,681)	(10,573)
Total shareholders' equity, ending balances	$ 936,324	$ 901,741
Dividends per share of common stock	$ 0.4800	$ 0.4775

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Three Months Ended March 31,	
In thousands	2021	2020
Operating activities:		
Net income	$ 59,517	$ 47,498
Adjustments to reconcile net income to cash provided by operations:		
Depreciation and amortization	28,097	24,675
Regulatory amortization of gas reserves	3,634	4,087
Deferred income taxes	3,145	(3,422)
Qualified defined benefit pension plan expense	3,937	4,446
Contributions to qualified defined benefit pension plans	(4,540)	(3,160)
Deferred environmental expenditures, net	(4,270)	(3,981)
Amortization of environmental remediation	3,777	4,005
Other	(2,919)	6,499
Changes in assets and liabilities:		
Receivables, net	1,044	4,845
Inventories	16,454	9,571
Income and other taxes	22,975	21,911
Accounts payable	(2,329)	(23,430)
Deferred gas costs	(28,912)	8,239
Asset optimization revenue sharing	34,633	(1,532)
Decoupling mechanism	656	6,137
Other, net	2,166	(1,352)
Discontinued operations	—	(376)
Cash provided by operating activities	137,065	104,660
Investing activities:		
Capital expenditures	(65,702)	(57,446)
Acquisitions, net of cash acquired	(42)	(37,883)
Leasehold improvement expenditures	(54)	(6,325)
Proceeds from the sale of assets	1,960	284
Other	(37)	635
Discontinued operations	—	(694)
Cash used in investing activities	(63,875)	(101,429)
Financing activities:		
Long-term debt issued	—	150,000
Long-term debt retired	—	(75,000)
Proceeds from term loan due within one year	—	150,000
Repayments of commercial paper, maturities greater than 90 days	(100,000)	—
Change in other short-term debt, net	31,700	250,900
Cash dividend payments on common stock	(13,858)	(13,834)
Other	(974)	(2,069)
Cash (used in) provided by financing activities	(83,132)	459,997
Increase (decrease) in cash, cash equivalents and restricted cash	(9,942)	463,228
Cash, cash equivalents and restricted cash, beginning of period	35,454	12,636
Cash, cash equivalents and restricted cash, end of period	$ 25,512	$ 475,864
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalization	$ 8,976	$ 8,368
Income taxes paid (refunded), net	800	(256)

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

	Three Months Ended March 31,	
In thousands	2021	2020
Operating revenues	$ 312,350	$ 282,529
Operating expenses:		
Cost of gas	112,266	108,595
Operations and maintenance	49,187	46,256
Environmental remediation	3,777	4,005
General taxes	11,259	9,799
Revenue taxes	12,655	11,743
Depreciation and amortization	27,169	24,190
Other operating expenses	919	920
Total operating expenses	217,232	205,508
Income from operations	95,118	77,021
Other income (expense), net	(3,665)	(3,563)
Interest expense, net	10,790	9,861
Income before income taxes	80,663	63,597
Income tax expense	20,552	14,418
Net income	60,111	49,179
Other comprehensive income:		
Amortization of non-qualified employee benefit plan liability, net of taxes of $80 and $58 for the three months ended March 31, 2021 and 2020, respectively	221	160
Comprehensive income	$ 60,332	$ 49,339

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands	March 31, 2021	March 31, 2020	December 31, 2020
Assets:			
Current assets:			
Cash and cash equivalents	$ 10,418	$ 432,255	$ 10,453
Accounts receivable	96,878	77,340	80,035
Accrued unbilled revenue	41,817	41,809	57,890
Receivables from affiliates	1,669	2,718	660
Allowance for uncollectible accounts	(3,460)	(1,334)	(3,107)
Regulatory assets	47,789	37,815	31,745
Derivative instruments	19,914	2,257	13,678
Inventories	25,737	34,279	42,325
Gas reserves	10,659	14,351	11,409
Other current assets	30,086	26,290	37,909
Total current assets	281,507	667,780	282,997
Non-current assets:			
Property, plant, and equipment	3,736,431	3,509,049	3,683,776
Less: Accumulated depreciation	1,087,391	1,049,135	1,075,446
Total property, plant, and equipment, net	2,649,040	2,459,914	2,608,330
Gas reserves	31,600	45,234	34,484
Regulatory assets	338,652	328,024	348,887
Derivative instruments	3,087	2,451	6,135
Other investments	47,411	48,450	49,242
Operating lease right of use asset	76,857	79,383	77,328
Assets under sales-type leases	142,586	146,937	143,759
Other non-current assets	48,828	47,223	48,174
Total non-current assets	3,338,061	3,157,616	3,316,339
Total assets	$ 3,619,568	$ 3,825,396	$ 3,599,336

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

In thousands	March 31, 2021	March 31, 2020	December 31, 2020
Liabilities and equity:			
Current liabilities:			
Short-term debt	$ 175,225	$ 450,000	$ 231,525
Current maturities of long-term debt	59,971	—	59,955
Accounts payable	87,823	85,604	95,170
Payables to affiliates	29,744	21,353	13,820
Taxes accrued	13,865	11,621	13,724
Interest accrued	9,460	9,368	7,338
Regulatory liabilities	81,314	47,137	50,362
Derivative instruments	1,038	5,036	4,198
Operating lease liabilities	1,167	984	1,054
Other current liabilities	48,488	61,218	51,907
Total current liabilities	508,095	692,321	529,053
Long-term debt	857,365	917,146	857,265
Deferred credits and other non-current liabilities:			
Deferred tax liabilities	326,301	312,436	318,034
Regulatory liabilities	635,515	622,375	638,793
Pension and other postretirement benefit liabilities	210,811	224,490	217,287
Derivative instruments	1,272	939	2,852
Operating lease liabilities	80,358	79,052	80,559
Other non-current liabilities	118,286	118,898	120,309
Total deferred credits and other non-current liabilities	1,372,543	1,358,190	1,377,834
Commitments and contingencies (Note 16)			
Equity:			
Common stock	319,506	319,557	319,506
Retained earnings	574,740	548,755	528,580
Accumulated other comprehensive loss	(12,681)	(10,573)	(12,902)
Total equity	881,565	857,739	835,184
Total liabilities and equity	$ 3,619,568	$ 3,825,396	$ 3,599,336

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY (UNAUDITED)

In thousands	Three Months Ended March 31,	
	2021	2020
Total shareholder's equity, beginning balances	$ 835,184	$ 822,196
Common stock	319,506	319,557
Retained earnings:		
Beginning balances	528,580	513,372
Net income	60,111	49,179
Dividends on common stock	(13,951)	(13,796)
Ending balances	574,740	548,755
Accumulated other comprehensive income (loss):		
Beginning balances	(12,902)	(10,733)
Other comprehensive income	221	160
Ending balances	(12,681)	(10,573)
Total shareholder's equity, ending balances	$ 881,565	$ 857,739

See Notes to Unaudited Consolidated Financial Statements

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

In thousands	Three Months Ended March 31, 2021	2020
Operating activities:		
Net income	$ 60,111	$ 49,179
Adjustments to reconcile net income to cash provided by operations:		
Depreciation and amortization	27,169	24,190
Regulatory amortization of gas reserves	3,634	4,087
Deferred income taxes	2,592	(3,897)
Qualified defined benefit pension plan expense	3,937	4,446
Contributions to qualified defined benefit pension plans	(4,540)	(3,160)
Deferred environmental expenditures, net	(4,270)	(3,981)
Amortization of environmental remediation	3,777	4,005
Other	(3,599)	6,061
Changes in assets and liabilities:		
Receivables, net	421	2,798
Inventories	16,588	9,593
Income and other taxes	21,488	21,748
Accounts payable	(711)	(22,717)
Deferred gas costs	(28,912)	8,239
Asset optimization revenue sharing	34,633	(1,532)
Decoupling mechanism	656	6,137
Other, net	3,299	663
Cash provided by operating activities	136,273	105,859
Investing activities:		
Capital expenditures	(64,098)	(56,234)
Leasehold improvement expenditures	(54)	(6,325)
Proceeds from the sale of assets	1,960	284
Other	(37)	635
Cash used in investing activities	(62,229)	(61,640)
Financing activities:		
Long-term debt issued	—	150,000
Long-term debt retired	—	(75,000)
Proceeds from term loan due within one year	—	150,000
Repayments of commercial paper, maturities greater than 90 days	(100,000)	—
Change in other short-term debt, net	43,700	174,900
Cash dividend payments on common stock	(13,951)	(13,796)
Other	(1,509)	(2,190)
Cash (used in) provided by financing activities	(71,760)	383,914
Increase in cash, cash equivalents and restricted cash	2,284	428,133
Cash, cash equivalents and restricted cash, beginning of period	15,739	8,907
Cash, cash equivalents and restricted cash, end of period	$ 18,023	$ 437,040
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalization	$ 8,585	$ 7,795
Income taxes paid (refunded), net	2,880	950

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.

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 2020 Annual Report on Form 10-K (2020 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.

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. We concluded that the sale of Gill Ranch qualified as assets and liabilities held for sale and discontinued operations. As such, the results of Gill Ranch were 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. The sale closed on December 4, 2020. 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. Certain reclassifications have been made to conform prior period information to the current presentation. The reclassifications did not have a material effect on our consolidated financial statements.

2. SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies are described in Note 2 of the 2020 Form 10-K. There were no material changes to those accounting policies during the three months ended March 31, 2021 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		
	March 31,		December 31,
In thousands	2021	2020	2020
NW Natural:			
Current:			
Unrealized loss on derivatives(1)	$ 1,038	$ 4,845	$ 4,198
Gas costs	21,851	10,898	1,979
Environmental costs(2)	5,396	4,459	4,992
Decoupling(3)	4	610	361
Pension balancing(4)	7,131	6,794	7,131
Income taxes	2,273	3,576	3,484
Other(5)	10,096	6,633	9,600
Total current	$ 47,789	$ 37,815	$ 31,745
Non-current:			
Unrealized loss on derivatives(1)	$ 1,272	$ 939	$ 2,852
Pension balancing(4)	41,111	46,031	43,383
Income taxes	13,895	16,354	15,368
Pension and other postretirement benefit liabilities	165,598	168,676	170,812
Environmental costs(2)	84,977	82,491	90,623
Gas costs	11,242	350	3,925
Decoupling(3)	2	—	1,031
Other(5)	20,555	13,183	20,893
Total non-current	$ 338,652	$ 328,024	$ 348,887
Other (NW Holdings)	40	—	40
Total non-current - NW Holdings	$ 338,692	$ 328,024	$ 348,927

	Regulatory Liabilities		
	March 31,		December 31,
In thousands	2021	2020	2020
NW Natural:			
Current:			
Gas costs	$ 2,575	$ 4,046	$ 1,118
Unrealized gain on derivatives(1)	19,914	2,257	13,674
Decoupling(3)	10,134	11,203	11,793
Income taxes	8,217	7,522	8,217
Asset optimization revenue sharing	35,878	17,241	10,298
Other(5)	4,596	4,868	5,262
Total current	$ 81,314	$ 47,137	$ 50,362
Non-current:			
Gas costs	$ 634	$ 1,328	$ 314
Unrealized gain on derivatives(1)	3,087	2,451	6,135
Decoupling(3)	2,652	4,784	1,723
Income taxes(6)	182,511	192,644	189,587
Accrued asset removal costs(7)	434,489	408,212	427,960
Other(5)	12,142	12,956	13,074
Total non-current - NW Natural	$ 635,515	$ 622,375	$ 638,793
Other (NW Holdings)	869	844	870
Total non-current - NW Holdings	$ 636,384	$ 623,219	$ 639,663

(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) Balance represents deferred net periodic benefit costs as approved by the OPUC.
(5) Balances consist of deferrals and amortizations under approved regulatory mechanisms and typically earn a rate of return or carrying charge.
(6) Balance represents excess deferred income tax benefits subject to regulatory flow-through.
(7) Estimated costs of removal on certain regulated properties are collected through rates.

We believe all costs incurred and deferred at March 31, 2021 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.

Supplemental Cash Flow Information
Restricted cash is primarily comprised of funds from public purpose charges for programs that assist low-income customers with bill payments or energy efficiency. Prior period amounts have been reclassified to conform prior period information to the current presentation.

The following table provides a reconciliation of the cash, cash equivalents and restricted cash balances at NW Holdings as of March 31, 2021 and 2020 and December 31, 2020:

	March 31,		December 31,
In thousands	2021	2020	2020
Cash and cash equivalents	$ 17,907	$ 471,079	$ 30,168
Restricted cash included in other current assets	7,605	4,785	5,286
Cash, cash equivalents and restricted cash	$ 25,512	$ 475,864	$ 35,454

The following table provides a reconciliation of the cash, cash equivalents and restricted cash balances at NW Natural as of March 31, 2021 and 2020 and December 31, 2020:

	March 31,		December 31,
In thousands	2021	2020	2020
Cash and cash equivalents	$ 10,418	$ 432,255	$ 10,453
Restricted cash included in other current assets	7,605	4,785	5,286
Cash, cash equivalents and restricted cash	$ 18,023	$ 437,040	$ 15,739

Accounts Receivable and Allowance for Uncollectible Accounts
Accounts receivable consist primarily of amounts due for natural gas sales and transportation services to NGD customers, plus amounts due for gas storage services. NW Holdings and NW Natural establish allowances for uncollectible accounts (allowance) for trade receivables, including accrued unbilled revenue, based on the aging of receivables, collection experience of past due account balances including payment plans, and historical trends of write-offs as a percent of revenues. A specific allowance is established and recorded for large individual customer receivables when amounts are identified as unlikely to be partially or fully recovered. Inactive accounts are written-off against the allowance after they are 120 days past due or when deemed uncollectible. Differences between the estimated allowance and actual write-offs will occur based on a number of factors, including changes in economic conditions, customer creditworthiness, and natural gas prices. The allowance for uncollectible accounts is adjusted quarterly, as necessary, based on information currently available.

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. 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. Our provision calculation for residential accounts is estimated based on the factors noted above including a review of percentage of accounts with no payment received for 90 or more days. For commercial accounts, we have resumed normal collection processes and our provision is based on historical write-off trends and current information on delinquent accounts. 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, 2020	Three Months Ended March 31, 2021		As of March 31, 2021
In thousands	Beginning Balance	Provision recorded, net of adjustments	Write-offs recognized, net of recoveries	Ending Balance[1]
Allowance for uncollectible accounts:				
Residential	$ 2,153	$ 801	$ (156)	$ 2,798
Commercial	704	(171)	(144)	389
Industrial	142	(59)	3	86
Accrued unbilled and other	220	22	(12)	230
Total	$ 3,219	$ 593	$ (309)	$ 3,503

(1) Includes $2.6 million that was deferred to a regulatory asset for costs associated with COVID-19 that are recoverable in future rates.

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 uncollectability 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.

COVID-19 Impact
During 2020, our regulated utilities received approval in their respective jurisdictions 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. As of March 31, 2021, we deferred to a regulatory asset approximately $5.0 million for incurred costs associated with COVID-19 that we believe are recoverable.

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
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 ASU were effective beginning January 1, 2021. The amended presentation and disclosure guidance was applied retrospectively. The adoption did not materially affect the financial statements and disclosures of NW Holdings or NW Natural.

Recently Issued Accounting Pronouncements
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 ASU 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.

On January 7, 2021, the FASB issued ASU 2021-01, "Reference Rate Reform (Topic 848): Scope." The purpose of the amendment is to clarify guidance on reference rate reform activities, specifically related to accounting for derivative contracts and certain hedging relationships affected by changes in the interest rates used for discounting, margining, and contract price alignment (the "discounting transition"). The amendments in ASUs 2020-04 and 2021-01 are effective for all entities as of March

12, 2020 through December 31, 2022. We do not expect the ASUs to materially affect the financial statements and disclosures of NW Holdings or NW Natural.

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 March 31,	
In thousands, except per share data	2021	2020
Net income from continuing operations	$ 59,517	$ 48,276
Loss from discontinued operations, net of tax	—	(778)
Net income	$ 59,517	$ 47,498
Average common shares outstanding - basic	30,614	30,491
Additional shares for stock-based compensation plans (See Note 7)	19	44
Average common shares outstanding - diluted	30,633	30,535
Earnings from continuing operations per share of common stock:		
Basic	$ 1.94	$ 1.58
Diluted	$ 1.94	$ 1.58
Loss from discontinued operations per share of common stock:		
Basic	$ —	$ (0.02)
Diluted	$ —	$ (0.02)
Earnings per share of common stock:		
Basic	$ 1.94	$ 1.56
Diluted	$ 1.94	$ 1.56
Additional information:		
Anti-dilutive shares	12	3

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, NWN Gas Reserves, which is a wholly-owned subsidiary of Energy Corp, and NW Natural RNG Holding Company, LLC, a holding company established to invest in the development and procurement of renewable natural gas.

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.

	Three Months Ended March 31,				
In thousands	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2021					
Operating revenues	$ 301,338	$ 11,012	$ 312,350	$ 3,596	$ 315,946
Depreciation and amortization	26,913	256	27,169	928	28,097
Income (loss) from operations	86,487	8,631	95,118	(412)	94,706
Net income (loss) from continuing operations	53,925	6,186	60,111	(594)	59,517
Capital expenditures	63,992	106	64,098	1,604	65,702
Total assets at March 31, 2021	3,570,153	49,415	3,619,568	139,057	3,758,625
2020					
Operating revenues	$ 278,487	$ 4,042	$ 282,529	$ 2,622	$ 285,151
Depreciation and amortization	23,946	244	24,190	485	24,675
Income (loss) from operations	75,258	1,763	77,021	(575)	76,446
Net income (loss) from continuing operations	47,943	1,236	49,179	(903)	48,276
Capital expenditures	56,157	77	56,234	1,212	57,446
Total assets at March 31, 2020[1]	3,776,650	48,746	3,825,396	160,835	3,986,231
Total assets at December 31, 2020	3,549,868	49,468	3,599,336	157,043	3,756,379

(1) Total assets for NW Holdings exclude assets related to discontinued operations of $15.3 million as of March 31, 2020.

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:

	Three Months Ended March 31,	
In thousands	2021	2020
NGD margin calculation:		
NGD distribution revenues	$ 296,553	$ 273,561
Other regulated services	4,785	4,926
Total NGD operating revenues	301,338	278,487
Less: NGD cost of gas	112,266	108,595
Environmental remediation	3,777	4,005
Revenue taxes	12,655	11,743
NGD margin	$ 172,640	$ 154,144

5. REVENUE

The following tables present disaggregated revenue from continuing operations:

	Three Months Ended March 31,				
In thousands	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2021					
Natural gas sales	$ 296,083	$ —	$ 296,083	$ —	$ 296,083
Gas storage revenue, net	—	2,495	2,495	—	2,495
Asset management revenue, net	—	6,928	6,928	—	6,928
Appliance retail center revenue	—	1,589	1,589	—	1,589
Other revenue	415	—	415	3,596	4,011
Revenue from contracts with customers	296,498	11,012	307,510	3,596	311,106
Alternative revenue	453	—	453	—	453
Leasing revenue	4,387	—	4,387	—	4,387
Total operating revenues	$ 301,338	$ 11,012	$ 312,350	$ 3,596	$ 315,946
2020					
Natural gas sales	$ 274,004	$ —	$ 274,004	$ —	$ 274,004
Gas storage revenue, net	—	2,336	2,336	—	2,336
Asset management revenue, net	—	150	150	—	150
Appliance retail center revenue	—	1,556	1,556	—	1,556
Other revenue	337	—	337	2,622	2,959
Revenue from contracts with customers	274,341	4,042	278,383	2,622	281,005
Alternative revenue	(472)	—	(472)	—	(472)
Leasing revenue	4,618	—	4,618	—	4,618
Total operating revenues	$ 278,487	$ 4,042	$ 282,529	$ 2,622	$ 285,151

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 offsetting expense recognized in operating expense in the consolidated statements of comprehensive income. Revenue-based taxes are primarily franchise taxes, which are collected from 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 March 31, 2021, unrecognized revenue for the fixed component of the transaction price related to gas storage and asset management revenue was approximately $83.8 million. Of this amount, approximately $14.3 million will be recognized during the remainder of 2021, $19.4 million in 2022, $17.8 million in 2023, $14.0 million in 2024, $11.1 million in 2025 and $7.2 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 March 31,	
In thousands	2021	2020
Lease revenue		
Operating leases	$ 18	$ 28
Sales-type leases	4,369	4,590
Total lease revenue	$ 4,387	$ 4,618

Total future minimum lease payments to be received under non-cancellable leases at NW Natural at March 31, 2021 are as follows:

In thousands	Operating	Sales-Type	Total
Remainder of 2021	$ 55	$ 13,090	$ 13,145
2022	72	17,026	17,098
2023	64	16,557	16,621
2024	65	15,867	15,932
2025	60	15,306	15,366
Thereafter	229	251,724	251,953
Total lease revenue	$ 545	$ 329,570	$ 330,115
Less: imputed interest		186,352	
Total leases receivable		$ 143,218	

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 $4.4 million, $4.1 million and $4.3 million at March 31, 2021 and 2020 and December 31, 2020, 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 19 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 March 31,	
In thousands	2021	2020
NW Natural:		
Operating lease expense	$ 1,678	$ 1,202
Short-term lease expense	$ 220	$ 198
Other (NW Holdings):		
Operating lease expense	$ 18	$ 52
NW Holdings:		
Operating lease expense	$ 1,696	$ 1,254
Short-term lease expense	$ 220	$ 198

Supplemental balance sheet information related to operating leases as of March 31, 2021 is as follows:

In thousands	March 31,		December 31,
	2021	2020	2020
NW Natural:			
Operating lease right of use asset	$ 76,857	$ 79,383	$ 77,328
Operating lease liabilities - current liabilities	$ 1,167	$ 984	$ 1,054
Operating lease liabilities - non-current liabilities	80,358	79,052	80,559
Total operating lease liabilities	$ 81,525	$ 80,036	$ 81,613
Other (NW Holdings):			
Operating lease right of use asset	$ 100	$ 139	$ 118
Operating lease liabilities - current liabilities	$ 46	$ 87	$ 51
Operating lease liabilities - non-current liabilities	56	53	62
Total operating lease liabilities	$ 102	$ 140	$ 113
NW Holdings:			
Operating lease right of use asset	$ 76,957	$ 79,522	$ 77,446
Operating lease liabilities - current liabilities	$ 1,213	$ 1,071	$ 1,105
Operating lease liabilities - non-current liabilities	80,414	79,105	80,621
Total operating lease liabilities	$ 81,627	$ 80,176	$ 81,726

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

In thousands	March 31,		December 31,
	2021	2020	2020
Weighted-average remaining lease term (years)	18.9	19.7	19.2
Weighted-average discount rate	7.22 %	7.20 %	7.23 %

Commencement of Significant Lease
NW Natural commenced a 20-year operating lease agreement in March 2020 for a new corporate operations center in Portland, Oregon. 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 was $4.6 million, $0.6 million and $4.2 million as of March 31, 2021 and 2020 and December 31, 2020, respectively.

Maturities of operating lease liabilities at March 31, 2021 were as follows:

In thousands	NW Natural	Other (NW Holdings)	NW Holdings
Remainder of 2021	$ 5,161	$ 41	$ 5,202
2022	6,933	24	6,957
2023	6,986	6	6,992
2024	7,150	6	7,156
2025	7,185	6	7,191
Thereafter	123,784	24	123,808
Total lease payments	157,199	107	157,306
Less: imputed interest	75,674	5	75,679
Total lease obligations	81,525	102	81,627
Less: current obligations	1,167	46	1,213
Long-term lease obligations	$ 80,358	$ 56	$ 80,414

As of March 31, 2021, finance lease liabilities with maturities of less than one year were $0.3 million at NW Natural.

Supplemental cash flow information related to leases was as follows:

	Three Months Ended March 31,	
In thousands	2021	2020
NW Natural:		
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 1,669	$ 1,196
Finance cash flows from finance leases	$ 544	$ 155
Right of use assets obtained in exchange for lease obligations		
Operating leases	$ 154	$ 77,988
Finance leases	$ 74	$ 233
Other (NW Holdings):		
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 16	$ 52
NW Holdings:		
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 1,685	$ 1,248
Finance cash flows from finance leases	$ 544	$ 155
Right of use assets obtained in exchange for lease obligations		
Operating leases	$ 154	$ 77,988
Finance leases	$ 74	$ 233

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 $1.9 million, $0.7 million and $1.8 million at March 31, 2021 and 2020 and at December 31, 2020, 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 2020 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 three months ended March 31, 2021, the final performance factor under the 2019 LTIP was approved and 31,986 performance-based shares were granted under the 2019 LTIP for accounting purposes. As such, NW Natural and other subsidiaries began recognizing compensation expense. In February 2020 and 2021, 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 2022 and 2023, respectively, there is not a mutual understanding of the awards' key terms and conditions between NW Holdings and the participants as of March 31, 2021, and therefore, no expense was recognized for the 2020 and 2021 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 2020 and 2021 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 2020 and 2021 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 peer group companies over the performance period of three years for each respective award. If the targets were achieved for the 2020 and 2021 awards, NW Holdings would grant for accounting purposes 31,830 and 56,335 shares in the first quarters of 2022 and 2023, respectively.

As of March 31, 2021, there was $0.4 million of unrecognized compensation cost associated with the 2019 LTIP grants, which is expected to be recognized through 2021.

Restricted Stock Units
During the three months ended March 31, 2021, 38,160 RSUs were granted under the LTIP with a weighted-average grant date fair value of $49.16 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 March 31, 2021, there was $4.5 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.

Restated Stock Option Plan
The Restated Stock Option Plan (Restated SOP) was terminated with respect to new grants in 2012; however, options granted before the Restated SOP was terminated remained outstanding until the earlier of their expiration, forfeiture, or exercise. Options were exercisable for shares of NW Holdings common stock. As of March 31, 2021 there were no options exercisable or outstanding.

8. DEBT

Short-Term Debt
At March 31, 2021, NW Holdings and NW Natural had short-term debt outstanding of $236.2 million and $175.2 million, respectively. NW Holdings' short-term debt consisted of $61.0 million in revolving credit agreement loans at NW Holdings and $175.2 million of commercial paper outstanding at NW Natural. The weighted average interest rate on the revolving credit agreement at March 31, 2021 was 1.19% at NW Holdings. The weighted average interest rate of commercial paper outstanding at March 31, 2021 was 0.43% at NW Natural. At March 31, 2021, NW Natural's commercial paper had a maximum remaining maturity of 76 days and an average remaining maturity of 20 days.

Long-Term Debt
At March 31, 2021, NW Holdings and NW Natural had long-term debt outstanding of $955.9 million and $917.3 million, respectively, which included $7.4 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 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 0.66% at March 31, 2021, 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 March 31, 2021, with a consolidated indebtedness to total capitalization ratio of 56.0%.

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 2020 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		
	March 31,		December 31,
In thousands	2021	2020	2020
Gross long-term debt	$ 963,283	$ 961,718	$ 962,905
Unamortized debt issuance costs	(7,364)	(7,554)	(7,480)
Carrying amount	$ 955,919	$ 954,164	$ 955,425
Estimated fair value[(1)]	$ 1,053,036	$ 1,038,691	$ 1,136,311

(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		
	March 31,		December 31,
In thousands	2021	2020	2020
Gross long-term debt	$ 924,700	$ 924,700	$ 924,700
Unamortized debt issuance costs	(7,364)	(7,554)	(7,480)
Carrying amount	$ 917,336	$ 917,146	$ 917,220
Estimated fair value[1]	$ 1,014,527	$ 1,001,058	$ 1,097,348

[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 March 31,			
	Pension Benefits		Other Postretirement Benefits	
In thousands	2021	2020	2021	2020
Service cost	$ 1,714	$ 1,657	$ 55	$ 64
Interest cost	3,343	4,011	165	223
Expected return on plan assets	(6,099)	(5,496)	—	—
Amortization of prior service credit	—	—	(117)	(117)
Amortization of net actuarial loss	5,501	4,778	131	143
Net periodic benefit cost	4,459	4,950	234	313
Amount allocated to construction	(726)	(668)	(21)	(23)
Net periodic benefit cost charged to expense	3,733	4,282	213	290
Amortization of regulatory balancing account	2,801	2,801	—	—
Net amount charged to expense	$ 6,534	$ 7,083	$ 213	$ 290

Net periodic benefit costs are reduced by amounts capitalized to NGD plant. In addition, net periodic benefit costs were recorded to a regulatory balancing account as approved by the OPUC and amortized accordingly.

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 March 31,	
In thousands	2021	2020
Beginning balance	$ (12,902)	$ (10,733)
Amounts reclassified from AOCL:		
Amortization of actuarial losses	301	218
Total reclassifications before tax	301	218
Tax benefit	(80)	(58)
Total reclassifications for the period	221	160
Ending balance	$ (12,681)	$ (10,573)

Employer Contributions to Company-Sponsored Defined Benefit Pension Plans
For the three months ended March 31, 2021, NW Natural made cash contributions totaling $4.5 million to qualified defined benefit pension plans. NW Natural expects further plan contributions of $15.6 million during the remainder of 2021.

The American Rescue Plan, which was signed into law on March 11, 2021, includes a provision for pension relief that extends the amortization period for required contributions from 7 to 15 years and provides for the stabilization of interest rates used to calculate future required contributions. We are currently evaluating the impact of this law on our business.

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 $2.6 million and $2.5 million for the three months ended March 31, 2021 and 2020, respectively.

See Note 10 in the 2020 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.

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

	Three Months Ended March 31,			
	NW Holdings		NW Natural	
In thousands	2021	2020	2021	2020
Income tax at statutory rate (federal)	$ 16,808	$ 13,105	$ 16,939	$ 13,355
State income tax	7,308	3,677	7,325	3,737
Increase (decrease):				
Differences required to be flowed-through by regulatory commissions	(3,605)	(2,525)	(3,605)	(2,525)
Other, net	10	(130)	(107)	(149)
Total provision for income taxes on continuing operations	$ 20,521	$ 14,127	$ 20,552	$ 14,418
Effective income tax rate for continuing operations	25.6 %	22.8 %	25.5 %	22.8 %

The NW Holdings and NW Natural effective income tax rates for the three months ended March 31, 2021 compared to the same period in 2020 changed primarily as a result of the Oregon Corporate Activity Tax (CAT), changes in pre-tax income, and regulatory amortization of deferred Tax Cuts and Jobs Act benefits. See Note 11 in the 2020 Form 10-K for more detail on income taxes and effective tax rates.

The IRS Compliance Assurance Process (CAP) examination of the 2019 tax year was completed during the first quarter of 2021. There were no material changes to the return as filed. The 2020 and 2021 tax years are subject to examination under CAP.

11. PROPERTY, PLANT, AND EQUIPMENT

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

	March 31,		December 31,
In thousands	2021	2020	2020
NW Natural:			
NGD plant in service	$ 3,594,226	$ 3,344,345	$ 3,548,543
NGD work in progress	70,766	95,566	63,901
Less: Accumulated depreciation	1,067,502	1,030,234	1,055,809
NGD plant, net	2,597,490	2,409,677	2,556,635
Other plant in service	66,314	64,314	66,300
Other construction work in progress	5,125	4,824	5,032
Less: Accumulated depreciation	19,889	18,901	19,637
Other plant, net	51,550	50,237	51,695
Total property, plant, and equipment, net	$ 2,649,040	$ 2,459,914	$ 2,608,330
Other (NW Holdings):			
Other plant in service	$ 51,852	$ 42,016	$ 50,263
Less: Accumulated depreciation	4,512	1,715	3,823
Other plant, net	$ 47,340	$ 40,301	$ 46,440
NW Holdings:			
Total property, plant, and equipment, net	$ 2,696,380	$ 2,500,215	$ 2,654,770
NW Natural:			
Capital expenditures in accrued liabilities	$ 20,969	$ 33,999	$ 25,129
NW Holdings:			
Capital expenditures in accrued liabilities	$ 21,118	$ 33,999	$ 25,129

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 primarily include non-utility gas storage assets at the Mist facility and other 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 March 31, 2021. 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 2020 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:

	March 31,		December 31,
In thousands	2021	2020	2020
Gas reserves, current	$ 10,659	$ 14,351	$ 11,409
Gas reserves, non-current	176,648	172,956	175,898
Less: Accumulated amortization	145,048	127,722	141,414
Total gas reserves[1]	42,259	59,585	45,893
Less: Deferred taxes on gas reserves	9,831	14,522	10,572
Net investment in gas reserves	$ 32,428	$ 45,063	$ 35,321

(1) The net investment in additional wells included in total gas reserves was $2.8 million, $3.6 million and $3.0 million at March 31, 2021 and 2020 and December 31, 2020, 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

Investment in Life Insurance Policies
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 2020 Form 10-K.

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 March 31, 2020. See Note 14 in the 2020 Form 10-K.

14. BUSINESS COMBINATIONS

2021 Business Combinations
During the three months ended March 31, 2021, NWN Water completed one acquisition of a water system that qualified as a business combination. The aggregate fair value of the preliminary consideration transferred for this acquisition was not material and is not significant to NW Holdings' results of operations.

2020 Business Combinations
During 2020, NWN Water and its subsidiaries completed two significant acquisitions qualifying as business combinations. The aggregate fair value of the total cash consideration transferred for these acquisitions was $38.1 million, most of which was 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 which were acquired by NWN Water of Washington on January 31, 2020, and
- T&W Water Service Company which 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. 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.

Final goodwill of $18.2 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.

Other Business Combinations
During 2020, NWN Water completed three additional acquisitions, comprised of four 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.

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 $69.3 million as of March 31, 2021 and $69.2 million as of March 31, 2020 and December 31, 2020. The goodwill balance remained flat due to insignificant 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:

	March 31,		December 31,
In thousands	2021	2020	2020
Natural gas (in therms):			
Financial	597,495	487,420	784,400
Physical	187,595	369,450	457,593
Foreign exchange	$ 5,954	$ 9,885	$ 5,896

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 2020-21 and 2019-20 gas years with forecasted sales volumes hedged at 53% and 52% in financial swap and option contracts, and 17% and 19% in physical gas supplies, respectively. Hedge contracts entered into prior to the PGA filing in September 2020 were included in the PGA for the 2020-21 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 March 31,			
	2021		2020	
In thousands	Natural gas commodity	Foreign exchange	Natural gas commodity	Foreign exchange
Benefit (expense) to cost of gas	$ 20,482	$ 77	$ (5,343)	$ (466)
Operating expense	(27)	—	(2,433)	—
Amounts deferred to regulatory accounts on balance sheet	(20,459)	(77)	7,405	466
Total loss in pre-tax earnings	$ (4)	$ —	$ (371)	$ —

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 net gains of $5.1 million for the three months ended March 31, 2021 from the settlement of natural gas financial derivative contracts, whereas, net losses of $2.1 million were realized for the three months ended March 31, 2020. 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 March 31, 2021 or 2020. 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 2021 or 2020. 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 March 31, 2021, assuming current gas prices and a credit rating downgrade to a speculative level, we could have been required to post an insignificant amount in 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 $21.3 million at March 31, 2021 and unrealized losses of $0.2 million at March 31, 2020. If netted by counterparty, NW Natural's physical and financial derivative position would result in an asset of $21.2 million and a liability of $0.5 million as of March 31, 2021, an asset of $3.0 million and a liability of $4.3 million as of March 31, 2020, and an asset of $14.1 million and a liability of $1.3 million as of December 31, 2020.

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 2020 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 March 31, 2021. Using significant other observable or Level 2 inputs, the net fair value was an asset of $20.7 million, a liability of $1.3 million, and an asset of $12.8 million as of March 31, 2021 and 2020, and December 31, 2020, respectively. No Level 3 inputs were used in our derivative valuations during the three months ended March 31, 2021 and 2020. See Note 2 in the 2020 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		
	March 31,		December 31,	March 31,		December 31,
In thousands	2021	2020	2020	2021	2020	2020
Portland Harbor site:						
Gasco/Siltronic Sediments	$ 7,026	$ 11,829	$ 7,596	$ 42,374	$ 42,837	$ 43,725
Other Portland Harbor	2,175	2,554	1,942	6,954	6,574	7,020
Gasco/Siltronic Upland site	13,135	12,822	14,887	39,302	42,833	40,250
Front Street site	1,258	10,704	3,816	1,132	—	1,107
Oregon Steel Mills	—	—	—	179	179	179
Total	$ 23,594	$ 37,909	$ 28,241	$ 89,941	$ 92,423	$ 92,281

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 $49.4 million to $350 million. NW Natural has recorded a liability of $49.4 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.

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. Construction of the remedy began in early July 2020 and was completed in October 2020. NW Natural has recognized an additional liability of $2.4 million for long term monitoring, regulatory and permitting issues, and post-construction work.

OREGON STEEL MILLS SITE. Refer to "*Legal Proceedings"* below.

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. 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 2020 Form 10-K for a description of SRRM and ECRM collection processes.

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

	March 31,		December 31,
In thousands	2021	2020	2020
Deferred costs and interest [1]	$ 46,409	$ 37,586	$ 44,516
Accrued site liabilities [2]	113,456	129,977	120,352
Insurance proceeds and interest	(69,492)	(80,613)	(69,253)
Total regulatory asset deferral[1]	$ 90,373	$ 86,950	$ 95,615
Current regulatory assets[3]	5,396	4,459	4,992
Long-term regulatory assets[3]	84,977	82,491	90,623

(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 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. Amounts excluded from regulatory assets were $0.1 million at March 31, 2021, $0.4 million at March 31, 2020, and $0.2 million at December 31, 2020,
(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 2020 Form 10-K.

For additional information regarding other commitments and contingencies, see Note 17 in the 2020 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 provided 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.

On December 4, 2020, NWN Gas Storage closed the sale of all of the membership interests in Gill Ranch and received payment of the initial cash purchase price of $13.5 million less the $1.0 million deposit previously paid. Furthermore, additional payments to NWN Gas Storage may be made subject to a maximum amount of $15.0 million in the aggregate (subject to a working capital adjustment) based on the economic performance of Gill Ranch for each full gas storage year (April 1 of one year through March 31 of the following year) occurring after the closing and the remaining portion of the 2020-2021 gas storage year and will continue until such time as the maximum amount has been paid. The fair value of this arrangement at the closing date was zero based on a discounted cash flow forecast. Subsequent changes in the fair value will be recorded in earnings. The completion of the sale resulted in an after-tax gain of $5.9 million for the year ended December 31, 2020.

As a result of the disposition of the membership interests in Gill Ranch, there were no assets or liabilities classified as held for sale at March 31, 2021 or December 31, 2020 and there was no activity in the consolidated statement of comprehensive income for the three months ended March 31, 2021. The assets and liabilities of the discontinued operations classified as held for sale in the consolidated balance sheet at March 31, 2020 include the following:

	NW Holdings Discontinued Operations
In thousands	March 31, 2020
Assets:	
Accounts receivable	$ 514
Inventories	689
Other current assets	386
Property, plant, and equipment, net	13,342
Operating lease right of use asset	118
Other non-current assets	247
Total discontinued operations assets - current assets [1]	$ 15,296
Liabilities:	
Accounts payable	$ 717
Other current liabilities	553
Operating lease liabilities	110
Other non-current liabilities	11,421
Total discontinued operations liabilities - current liabilities [1]	$ 12,801

(1) The total assets and liabilities of Gill Ranch were classified as current because it was probable that the sale would be completed within one year.

The following table presents the operating results of Gill Ranch and is presented net of tax on the consolidated statements of comprehensive income:

	NW Holdings Discontinued Operations	
In thousands, except per share data	Three Months Ended March 31, 2020	
Revenues	$	908
Expenses:		
Operations and maintenance		1,580
General taxes		47
Depreciation and amortization		106
Other expenses and interest		231
Total expenses		1,964
Loss from discontinued operations before income taxes		(1,056)
Income tax benefit		(278)
Loss from discontinued operations, net of tax	$	(778)
Loss from discontinued operations per share of common stock:		
Basic	$	(0.02)
Diluted	$	(0.02)

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 months ended March 31, 2021 and 2020 of NW Holdings, the substantial majority of which consist of the operating results of NW Natural. 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 month period is not necessarily indicative of expected fiscal year results. Therefore, this discussion should be read in conjunction with NW Holdings' and NW Natural's 2020 Annual Report on Form 10-K, as applicable (2020 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, the NGD-portion of NW Natural's Mist storage facility in Oregon, and NW Natural RNG Holding Company, LLC. 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.

In addition, NW Holdings reported discontinued operations results related to the sale of Gill Ranch Storage, LLC (Gill Ranch). NW Natural Gas Storage, LLC (NWN Gas Storage), an indirect wholly-owned subsidiary of NW Holdings, entered into a Purchase and Sale Agreement during the second quarter of 2018 that provided for the sale of all 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. The sale was completed on December 4, 2020. See Note 17 for information on discontinued operations.

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

Our core mission is to provide safe, reliable and affordable essential utility services in an environmentally responsible way to better the lives of the public we serve. See *"2021 Outlook"* in the 2020 Form 10-K for more information. Current operational highlights include:

- Reported net income of $1.94 per share (diluted) for the first quarter of 2021, compared to net income of $1.56 per share (diluted) in the prior year;
- Continued to provide customers with essential natural gas and water utility services during a cold weather event in the Pacific Northwest in February;
- Added over 11,000 meters during the past twelve months for a growth rate of 1.4% at March 31, 2021; and
- Continued our focus on our water utility strategy with an additional closed acquisition of a water system in the first quarter of 2021 and three signed agreements to acquire small utilities near existing service territories.

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

	Three Months Ended March 31,				
	2021		2020		YTD
In thousands, except per share data	Amount	Per Share	Amount	Per Share	Change
Net income from continuing operations	$ 59,517	$ 1.94	$ 48,276	$ 1.58	$ 11,241
Loss from discontinued operations, net of tax	—	—	(778)	(0.02)	778
Consolidated net income	$ 59,517	$ 1.94	$ 47,498	$ 1.56	$ 12,019

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

	Three Months Ended March 31,		
	2021	2020	YTD
In thousands	Amount	Amount	Change
Consolidated net income	$ 60,111	$ 49,179	$ 10,932
Natural gas distribution margin	$ 172,640	$ 154,144	$ 18,496

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020.

Consolidated net income increased $10.9 million at NW Natural primarily due to the following factors:

- an $18.5 million increase in NGD segment margin driven by the 2020 Oregon rate case and residential customer growth; and
- a $6.9 million increase in asset management revenue primarily due to the 2021 cold weather event discussed below; partially offset by
- a $6.1 million increase in income tax expense primarily due to an increase in pretax income and the Oregon Corporate Activity Tax;
- a $3.0 million increase in depreciation expense due to property, plant, and equipment additions as we continued to invest in our natural gas and water utility systems;
- a $2.9 million increase in operating and maintenance expenses due to higher compensation costs, lease expense, and professional service expenses;
- a $1.5 million increase in general taxes primarily due to higher assessed property values; and
- a $0.9 million increase in interest expense primarily on long-term debt.

Net income from continuing operations increased $11.2 million at NW Holdings primarily due to the following factors:

- a $10.9 million increase in consolidated net income at NW Natural as discussed above; and
- a $0.3 million increase in other net income primarily reflecting lower holding company expenses.

2021 COLD WEATHER EVENT. In February 2021, Portland, Oregon and the surrounding region, like much of the country, experienced a severe winter storm with several days of colder temperatures resulting in elevated natural gas demand and significantly higher spot prices. Additional market gas purchases and other expenses resulted in approximately $29 million of higher commodity costs, of which approximately $27 million was deferred to a regulatory asset for recovery in future rates. The result was approximately $2 million of lower natural gas utility margin in the first quarter of 2021. The higher commodity costs were offset by approximately $39 million of asset management revenue, of which approximately $33 million was deferred to a regulatory liability for the benefit of customers.

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. 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 2020, 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.

For employees whose role requires them to work in the field or onsite, we are following CDC, OSHA, and state specific requirements. 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. In addition, NW Natural implemented work-from-home plans for employees wherever possible that remain in place as we take a measured approach to reopening our headquarters and operations center.

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 several key metrics. While we are unable to predict the length, severity or impacts of the COVID-19 pandemic and economic disruptions on our business, the potential for a resurgence or mutation of the virus, or timing, widespread availability and efficacy of vaccine implementation, we have the following expectations and beliefs currently:

- Both NW Natural and NW Natural Water expect their capital projects in 2021 to move forward as planned.
- 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 the first quarter of 2021 and commercial customer counts remained steady. A slow economic recovery could result in a decline in new meter connections, which could adversely affect margin in 2021 and the following periods. In addition, 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 2021 and the following periods. We don't anticipate significant residential meter disconnections.
- NW Natural has seen lower utility margin from a reduction in overall sales volumes during the first quarter of 2021 and 2020 attributed to COVID-19. While we are substantially through our peak heating season this spring, we may still see declines in volumes, depending on the level of reopenings and resiliency of businesses in the communities in which we serve through the remainder of 2021. However, volumes do not translate directly to earnings as the majority of our NGD margin is not dependent on volumes.
- While we have begun to return to normal business practices for our commercial and industrial customers, our residential customers' return to normal practices has been extended based on the timing, availability and efficacy of vaccine rollout and timing of economic recovery. Therefore, the recognition of late and disconnection fee revenue may be delayed beyond our current expectations.
- As the pandemic continued into the 2020-2021 winter heating season, certain customers were faced with seasonally higher natural gas usage and bills. This could have a financial strain on our customers and impact their ability to pay their bills in a timely manner thus potentially increasing our working capital needs.
- While we deferred to a regulatory asset certain COVID-related financial impacts as agreed upon with regulators, ultimate recovery of these costs and prudence review will be determined through a separate proceeding and may be subject to modification as a result of those proceedings.

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 first quarter of 2021.

DIVIDENDS

Dividend highlights include:

	Three Months Ended March 31,		
Per common share	2021	2020	YTD Change
Dividends paid	$ 0.4800	$ 0.4775	$ 0.0025

In April 2021, 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 May 14, 2021 to shareholders of record on April 30, 2021, 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 2020 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. At March 31, 2021, approximately 88% of NGD customers were located in Oregon, with the remaining 12% 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. 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 include Oregon, Washington, Idaho, and Texas.

Most Recent Completed General Rate Cases
OREGON. On October 16, 2020, the OPUC issued an order concluding NW Natural's general rate case filed in December 2019 (Order). The Order provided for a total revenue requirement increase of approximately $45 million over revenues from pre-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 was authorized to begin to recover the expense associated with the Oregon Corporate Activity Tax (CAT) as a component of base rates. See "*Corporate Activity Tax*" below.

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.

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.

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*" below.

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.

Regulatory Proceeding Updates

2021 WASHINGTON RATE CASE. On December 18, 2020, NW Natural filed a request for a general rate increase with the WUTC. The filing includes a requested increase in annual revenue requirements over two years, consisting of an 8.0% or $6.3 million increase in the first year beginning November 1, 2021 (Year One), and a 3.7% or $3.2 million increase in the second year beginning November 1, 2022 (Year Two). NW Natural is also requesting a $2.2 million, or 3%, offset to rates in the first year via suspension of amortization of a regulatory asset associated with NW Natural's energy efficiency programs and via application of proceeds from the sale of real property in Portland, Oregon, which would reduce the Year One rate increase to approximately 5%.

The requested increase is intended to recover operating costs and investments made in the distribution system, underground storage facility, operations facilities, including improvements to the resource facility in Vancouver, Washington, and upgrades of critical information technology, including NW Natural's enterprise resource planning system, and is based upon the following assumptions or requests:

- Capital structure of 50% long-term debt, 1% short-term debt, and 49% common equity;
- Return on equity of 9.4%;
- Cost of capital of 6.913%; and
- Average rate base of $194.7 million, an increase of $20.9 million since the last rate case for capital expenditures already expended at the time of filing, with an additional expected $31.2 million increase in Year One, and an additional expected $21.4 million increase in Year Two, with the increases in Year One and Year Two relating to expected capital expenditures in those years.

On May 4, 2021, the parties amended the schedule for the rate case docket and notified the WUTC that they are working toward a settlement in principle and have made substantial progress. The notice indicates that the parties will inform the WUTC if and when they reach settlement in principle and request a suspension of the docket to document the settlement at that time. If the parties fail to reach settlement, we expect the docket to continue under the modified schedule. NW Natural has requested that the new rates take effect November 1, 2021.

Rate Mechanisms

During 2021 and 2020, 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)	2019 Rate Case (effective 11/1/2019)
Authorized Rate Structure:			
ROE	9.4%	9.4%	9.4%
ROR	7.3%	7.0%	7.2%
Debt/Equity Ratio	50%/50%	50%/50%	51%/49%
Key Regulatory Mechanisms:			
Purchased Gas Adjustment (PGA)	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

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.

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 2020-21 gas year with its forecasted sales volumes hedged at 40% in financial swap and option contracts, including hedging of 38% in Oregon and 58% in Washington. The percentage of total forecasted sales volume hedged was approximately 41% for Oregon and approximately 58% for Washington.

NW Natural is also hedged between 1% and 43% for annual requirements over the subsequent five gas years, which consists of between 1% and 41% in Oregon and between 0% and 58% in 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 may 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 2019-20 and 2020-21 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 2019-20 and 2020-21 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 2020, the ROE threshold was 10.40%. NW Natural filed the 2020 earnings test in April 2021 indicating no customer refund adjustment. NW Natural does not expect a customer refund adjustment for 2021 based on results.

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. The Order in the 2020 Oregon general rate case also approved of extending NW Natural's decoupling calculation for the months of November and May to the month of April. 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 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 collections of any 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 March 31, 2021, 8% of total eligible customers had opted out. NW Natural does not have a weather normalization mechanism approved for 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 $4.2 million and $5.1 million of deferred remediation expense approved by the OPUC for collection during the 2020-21 and 2019-20 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 2020 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 2020 based on the environmental earnings test that was submitted in April 2021.

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.

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 received 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 first quarter of 2021, NW Natural refunded an interstate storage and asset management sharing credit of approximately $9.1 million to Oregon customers, which was primarily reflected in Oregon customers' February bills. Bill credits to Oregon and Washington customers in 2020 were approximately $17.0 million and $0.7 million, respectively.

Regulatory Proceeding Updates

During 2021, 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 2020 Form 10-K.

COVID-19 PROCESS AND DEFERRAL DOCKETS. During 2020, our regulated utilities, other utilities, stakeholders, and public utility commissions worked together to determine the best way to continue protecting utility customers during and after the pandemic. 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 stipulation incorporating the term sheet was approved by the OPUC in November 2020. A term sheet was approved by the WUTC in October 2020 that provides similar guidance on key items such as the timing of lifting moratoriums on disconnections, resuming the collection process, and bill assistance and payment plans.

Additionally, both Oregon and Washington approved our applications in 2020 to defer certain COVID-19 related costs. Costs that may be recoverable include, but are 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 March 31, 2021, we estimate that approximately $6.8 million of the financial effects related to COVID-19 could be recoverable and deferred to a regulatory asset approximately $5.0 million for incurred costs. In addition, we expect to recognize revenue in a future period for an additional $1.8 million related to forgone late fee revenue.

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

	Oregon	Washington
Reinstituting Disconnections for Nonpayment:		
Residential	June 30, 2021 *	July 31, 2021 *
Small Commercial	December 1, 2020	July 31, 2021 *
Large Commercial/Industrial	November 3, 2020	October 20, 2020
Resuming Residential Reconnection Fee Charges	October 1, 2022 *	January 27, 2022 *
Reinstituting Late Fees for Nonpayment:		
Residential	October 1, 2022 *	January 27, 2022 *
Small Commercial	December 1, 2020	January 27, 2022 *
Large Commercial/Industrial	November 3, 2020	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

* Jurisdiction retains discretion to re-evaluate date based on ongoing pandemic and economic conditions.

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 or 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.

In its first RNG contract under SB98, NW Natural began a partnership with BioCarbN, a developer and operator of sustainable infrastructure projects, to convert methane into RNG. Under this partnership, NW Natural has the ability to invest up to an estimated $38 million in four separate RNG development projects that will access biogas derived from water treatment at Tyson Foods' processing plants, subject to approval by all parties. In December 2020, NW Natural exercised its option for the first development project in Nebraska, initiating investment in an estimated $8 million project, which is expected to begin producing RNG in late 2021.

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 the expense associated with the CAT as a component of base rates. NW Natural is also 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.

WATER UTILITIES. In the first three months of 2021, NW Holdings, through its water subsidiaries, continued to acquire water utilities. While COVID-19 has restricted certain activities, we continue to pursue water acquisitions and expect to return to normal business development activities as the pandemic eases and travel and commerce return to previous levels. For our acquired water utilities, we've begun to assess the need for general rate cases, and in 2020, we filed general rate cases for three water utilities to support infrastructure investments for safety and reliability. One of those rate cases was concluded with an order from the commission with new rates effective in February 2021.

OREGON EXECUTIVE ORDER. On March 10, 2020, the governor of Oregon issued an executive order (EO) establishing 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 directed state agencies and commissions to facilitate such GHG emission goals targeting a variety of sources and industries. Although the EO 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 EO 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. These agencies and commissions are currently engaged in various stages of their rulemaking processes and are currently expected to complete those processes in the next 12 months. NW Natural is actively engaged with Oregon state regulatory entities and holds a seat on the Oregon Department of Environmental Quality rules advisory committee, which is considering the cap and reduce rules.

INTEGRATED RESOURCE PLAN (IRP). NW Natural generally files a full IRP biennially for Oregon and Washington with the OPUC and WUTC, respectively. NW Natural jointly filed its 2018 IRP for both Oregon and Washington in August 2018, and received both a letter of compliance from the WUTC and acknowledgment by the OPUC in February 2019. The 2018 IRP included analysis of different scenarios, examining several potential future states and the corresponding least cost, least risk resource acquisition strategies. In addition to these strategies, the 2018 IRP published an emissions forecast for each of these potential futures. NW Natural filed an update to the 2018 IRP in March 2021.

The development of an IRP filing is an extensive and complex process that engages multiple stakeholders in an effort to build a robust and commonly understood analysis. The final product is intended to provide a long-term outlook of the supply-side and demand-side resource requirements for reliable and low cost natural gas service. The IRP examines and analyses uncertainties in the planning process, including potential changes in governmental and regulatory policies. As a result of the EO issued by the governor of Oregon, new regulations and requirements are currently being developed in the state of Oregon, which have the potential to impact long-term resource decisions. In order to reflect the outcomes of the EO proceedings, the time to file NW Natural's next full IRP was extended to July 2022 as approved by the OPUC and WUTC.

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 2020 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, NWN Gas Reserves, which is a wholly owned subsidiary of Energy Corp., and NW Natural RNG Holding Company, LLC.

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 March 31,		
In thousands, except EPS data	2021	2020	YTD Change
NGD net income	$ 53,925	$ 47,943	$ 5,982
Diluted EPS - NGD segment	$ 1.76	$ 1.57	$ 0.19
Gas sold and delivered (in therms)	431,120	420,917	10,203
NGD margin[1]	$ 172,640	$ 154,144	$ 18,496

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

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. The primary factors contributing to the $6.0 million, or $0.19 per share, increase in NGD net income were as follows:

- an $18.5 million increase in NGD margin due to:
  - a $21.3 million increase due to new customer rates, primarily from the 2020 Oregon rate case that went into effect on November 1, 2020, and customer growth; partially offset by
  - a $2.7 million decrease driven by additional market gas purchases and other expenses during the 2021 cold weather event. The event resulted in approximately $29 million of higher commodity costs, of which approximately $27 million was deferred to a regulatory asset for recovery in future rates.
  - a $0.7 million decrease in overruns, entitlements and late fees, in part due to the temporary suspension of late fees during the COVID-19 pandemic; and
  - a $0.2 million decrease from revenue generated from NW Natural's North Mist storage contract which is included within other regulated services within NGD margin.

In addition to the increase in margin, NGD net income for 2021 reflects:

- a $3.0 million increase in depreciation expense due to NGD plant additions as we continued to invest in our gas utility system;
- a $2.8 million increase in other NGD operating and maintenance expenses due primarily to higher compensation costs, lease expense, and professional service expenses;
- a $1.5 million increase in general taxes due to higher assessed property values;
- a $0.9 million increase in interest expense driven by $1.0 million higher interest on long-term debt and $0.6 million lower AFUDC debt interest income, partially offset by $0.6 million lower commercial paper and credit line interest; and
- a $4.6 million higher income tax reflecting higher pretax income and Oregon Corporate Activity Tax; partially offset by the ongoing amortization of TCJA benefits.

For the three months ended March 31, 2021, total NGD volumes sold and delivered increased 2% over the same period in 2020 primarily due to 5% warmer than average weather in the first three months of 2021 compared to 9% warmer than 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:

In thousands, except degree day and customer data	Three Months Ended March 31, 2021	Three Months Ended March 31, 2020	Favorable/ (Unfavorable) YTD Change
NGD volumes (therms)			
Residential and commercial sales	297,822	286,872	10,950
Industrial sales and transportation	133,298	134,045	(747)
Total NGD volumes sold and delivered	431,120	420,917	10,203
Operating Revenues			
Residential and commercial sales	$ 278,584	$ 255,404	$ 23,180
Industrial sales and transportation	17,379	17,194	185
Other distribution revenues	590	963	(373)
Other regulated services	4,785	4,926	(141)
Total operating revenues	301,338	278,487	22,851
Less: Cost of gas	112,266	108,595	(3,671)
Less: Environmental remediation expense	3,777	4,005	228
Less: Revenue taxes	12,655	11,743	(912)
NGD margin	$ 172,640	$ 154,144	$ 18,496
Margin[1]			
Residential and commercial sales	$ 160,772	$ 139,144	$ 21,628
Industrial sales and transportation	8,754	8,582	172
Gain (loss) from gas cost incentive sharing	(2,263)	448	(2,711)
Other margin	595	1,044	(449)
Other regulated services	4,782	4,926	(144)
NGD Margin	$ 172,640	$ 154,144	$ 18,496
Degree days[2]			
Average[3]	1,326	1,342	(16)
Actual	1,261	1,215	4 %
Percent warmer than average weather	(5)%	(9)%	

	As of March 31, 2021	As of March 31, 2020	Change	Growth
NGD Meters - end of period:				
Residential meters	708,041	695,836	12,205	1.8%
Commercial meters	68,938	70,027	(1,089)	(1.6)%
Industrial meters	987	1,000	(13)	(1.3)%
Total number of meters	777,966	766,863	11,103	1.4%

(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) 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.

(3) Average weather represents the 25-year average of heating degree days. Beginning November 1, 2020, average weather is calculated over the period June 1, 1994 through May 31, 2019, as determined in NW Natural’s 2020 Oregon general rate case. From November 1, 2018 through October 31, 2020, average weather was calculated over the period May 31, 1992 through May 30, 2017, as determined in NW Natural's 2018 Oregon general rate case.

Residential and Commercial Sales
Residential and commercial sales highlights include:

	Three Months Ended March 31,		
In thousands	2021	2020	YTD Change
Volumes (therms)			
Residential sales	194,491	182,909	11,582
Commercial sales	103,331	103,963	(632)
Total volumes	297,822	286,872	10,950
Operating revenues			
Residential sales	$ 195,802	$ 176,945	$ 18,857
Commercial sales	82,782	78,459	4,323
Total operating revenues	$ 278,584	$ 255,404	$ 23,180
NGD margin			
Residential:			
Sales	$ 117,605	$ 101,375	$ 16,230
Alternative revenue	278	543	(265)
Total residential NGD margin	117,883	101,918	15,965
Commercial:			
Sales	42,714	38,241	4,473
Alternative revenue	175	(1,015)	1,190
Total commercial NGD margin	42,889	37,226	5,663
Total NGD margin	$ 160,772	$ 139,144	$ 21,628

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Residential and commercial margin increased $21.6 million. The increase was primarily driven by new customer rates in Oregon that took effect on November 1, 2020 and 1.8% growth in residential meters.

Industrial Sales and Transportation
Industrial sales and transportation highlights include:

	Three Months Ended March 31,		
In thousands	2021	2020	YTD Change
Volumes (therms)			
Industrial - firm and interruptible sales	26,243	24,802	1,441
Industrial - firm and interruptible transportation	107,055	109,243	(2,188)
Total volumes - sales and transportation	133,298	134,045	(747)
NGD margin			
Industrial - firm and interruptible sales	$ 3,557	$ 3,317	$ 240
Industrial - firm and interruptible transportation	5,197	5,265	(68)
Total margin - sales and transportation	$ 8,754	$ 8,582	$ 172

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Industrial sales and transportation margin increased by $0.2 million compared to the prior period primarily driven by new rates in Oregon that took effect on November 1, 2020. Volumes decreased by 0.7 million therms, or 1%, due primarily to lower usage from a small number of industrial customers.

Cost of Gas
Cost of gas highlights include:

	Three Months Ended March 31,		
In thousands	2021	2020	YTD Change
Cost of gas	$ 112,266	$ 108,595	$ 3,671
Volumes sold (therms)(1)	324,065	311,674	12,391
Average cost of gas (cents per therm)	$ 0.35	$ 0.35	$ —
Gain (loss) from gas cost incentive sharing(2)	$ (2,263)	$ 448	$ (2,711)

(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 2020 Form 10-K.

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Cost of gas increased $3.7 million, or 3%, primarily due to a $2.7 million higher loss from cost of gas incentive sharing, driven by costs related to the 2021 cold weather event that were not deferred for future recovery. The event resulted in approximately $29 million of higher commodity costs, of which approximately $27 million was deferred to a regulatory asset. The remaining increase in cost of gas is primarily the result of a 4% increase in volumes sold driven by 5% warmer than average weather during the first three months of 2021 as compared to 9% warmer than average weather in the prior period.

Other Regulated Services Margin
Other regulated services margin highlights include:

	Three Months Ended March 31,		
In thousands	2021	2020	YTD Change
North Mist storage services	$ 4,716	$ 4,866	$ (150)
Other services	66	60	6
Total other regulated services	$ 4,782	$ 4,926	$ (144)

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Other regulated services margin decreased $0.1 million as the North Mist expansion facility has been in service for more than one year and did not experience any significant fluctuations in storage service revenue. 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) through August 6, 2020; 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. See Note 13 for information on our TWH investment.

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

	Three Months Ended March 31,		
In thousands, except EPS data	2021	2020	YTD Change
NW Natural other - net income	$ 6,186	$ 1,236	$ 4,950
Other NW Holdings activity	(594)	(903)	309
NW Holdings other - net income	$ 5,592	$ 333	$ 5,259
Diluted EPS - NW Holdings - other	$ 0.18	$ 0.01	$ 0.17

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Other net income increased $5.3 million at NW Holdings and $5.0 million at NW Natural. The increase at NW Natural was primarily due to $6.9 million of higher asset management revenue related to the 2021 cold weather event, partially offset by $1.7 million of income tax expense associated with the higher revenue. The increase at NW Holdings was driven by the increase at NW Natural and lower expenses at the holding company.

Consolidated Operations
Operations and Maintenance
Operations and maintenance highlights include:

	Three Months Ended March 31,		YTD
In thousands	2021	2020	Change
NW Natural	$ 49,187	$ 46,256	$ 2,931
Other NW Holdings operations and maintenance	3,004	2,665	339
NW Holdings	$ 52,191	$ 48,921	$ 3,270

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Operations and maintenance expense increased $3.3 million at NW Holdings and $2.9 million at NW Natural. The increase at NW Natural was driven by the following:

- a $1.9 million increase related to higher compensation costs;
- a $0.9 million increase in lease expense as we moved to a new headquarters and operations center in March 2020; and
- a $0.8 million increase in professional service expenses related to information technology, legal fees and advertisement campaigns.

The $0.3 million increase in other NW Holdings operations and maintenance expense primarily reflects operating expenses from water and wastewater companies.

Depreciation and Amortization
Depreciation and amortization highlights include:

	Three Months Ended March 31,		YTD
In thousands	2021	2020	Change
NW Natural	$ 27,169	$ 24,190	$ 2,979
Other NW Holdings depreciation and amortization	928	485	443
NW Holdings	$ 28,097	$ 24,675	$ 3,422

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Depreciation and amortization expense increased $3.4 million and $3.0 million at NW Holdings and NW Natural, respectively, primarily due to property, plant and equipment additions as we continued to invest in our natural gas and water utility systems.

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

	Three Months Ended March 31,		YTD
In thousands	2021	2020	Change
NW Natural other income (expense), net	$ (3,665)	$ (3,563)	$ (102)
Other NW Holdings activity	123	(12)	135
NW Holdings other income (expense), net	$ (3,542)	$ (3,575)	$ 33

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Other income (expense), net was primarily flat compared to the prior year at both NW Holdings and NW Natural. Other income (expense), net primarily consists of pension and other postretirement non-service costs, gains from company-owned life insurance, and donations.

Interest Expense, Net
Interest expense, net highlights include:

	Three Months Ended March 31,		YTD
In thousands	2021	2020	Change
NW Natural	$ 10,790	$ 9,861	$ 929
Other NW Holdings interest expense, net	336	607	(271)
NW Holdings	$ 11,126	$ 10,468	$ 658

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Interest expense, net increased $0.7 million and $0.9 million at NW Holdings and NW Natural, respectively. The increase at NW Natural is primarily due to a $1.0 million increase in interest on long-term debt and $0.6 million lower AFUDC debt interest income, partially offset by $0.6 million of lower interest on commercial paper and credit line. The increase at NW Holdings includes the increase at NW Natural, partially offset by lower interest expense at NW Holdings.

Income Tax Expense
Income tax expense highlights include:

	Three Months Ended March 31,		YTD
In thousands	2021	2020	Change
NW Natural income tax expense	$ 20,552	$ 14,418	$ 6,134
NW Holdings income tax expense	$ 20,521	$ 14,127	$ 6,394

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Income tax expense increased $6.1 million at NW Natural and $6.4 million at NW Holdings, respectively. The increase in income tax expense is primarily due to higher pre-tax income and the Oregon Corporate Activity Tax, partially offset by the ongoing amortization of TCJA benefits.

Discontinued Operations
On June 20, 2018, NWN Gas Storage, a wholly owned subsidiary of NW Holdings, entered into a Purchase and Sale Agreement (the 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.

On December 4, 2020, NWN Gas Storage closed the sale of all the memberships interests in Gill Ranch and received payment of the initial cash purchase price of $13.5 million less the $1.0 million deposit previously paid. Furthermore, additional payments to NWN Gas Storage may be made subject to a maximum amount of $15.0 million in the aggregate (subject to a working capital adjustment) based on the economic performance of Gill Ranch each full gas storage year (April 1 of one year through March 31 of the following year) occurring after the closing and the remaining portion of the 2020-2021 gas storage year and will continue until such time as the maximum amount has been paid. The fair value of this arrangement at the closing date was zero based on a discounted cash flow forecast. Subsequent changes in the fair value will be recorded in earnings. The completion of the sale resulted in an after-tax gain of $5.9 million for the year ended December 31, 2020.

The results of Gill Ranch Storage have been determined to be discontinued operations until the date of sale 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 Agreement and the results of our discontinued operations.

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:

	March 31,		December 31,
	2021	2020	2020
Common equity	49.5 %	48.6 %	48.2 %
Long-term debt (including current maturities)	50.5	51.4	51.8
Total	100.0 %	100.0 %	100.0 %

NW Natural's consolidated capital structure was as follows:

	March 31,		December 31,
	2021	2020	2020
Common equity	49.0 %	48.3 %	47.7 %
Long-term debt (including current maturities)	51.0	51.7	52.3
Total	100.0 %	100.0 %	100.0 %

Including short-term debt balances, as of March 31, 2021 and 2020, and December 31, 2020, NW Holdings' consolidated capital structure included common equity of 44.0%, 37.5% and 41.4%; long-term debt of 40.4%, 39.6% and 40.0%; and short-term debt including current maturities of long-term debt of 15.6%, 22.9% and 18.6%, respectively. As of March 31, 2021 and 2020, and December 31, 2020, NW Natural's consolidated capital structure included common equity of 44.7%, 38.6%, and 42.1%; long-term debt of 43.4%, 41.2% and 43.2%; and short-term debt including current maturities of long-term debt of 11.9%, 20.2%, and 14.7%, respectively.

Liquidity and Capital Resources
At March 31, 2021 and 2020, NW Holdings had approximately $17.9 million and $471.1 million, and NW Natural had approximately $10.4 million and $432.3 million of cash and cash equivalents, respectively. As the COVID-19 pandemic developed in March 2020, 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. 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. 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.

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 guarantees the debt of its wholly-owned subsidiary, NWN Water. See "Long-Term Debt" below for more information regarding NWN Water 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 March 31, 2021, 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.

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 March 31, 2021. If the credit risk-related contingent features underlying these contracts were triggered on March 31, 2021, 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 2020 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, available cash from a multi-year credit facility, and short-term credit facilities. 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.

At March 31, 2021 and 2020, NW Holdings had short-term debt outstanding of $236.2 million and $550.0 million, respectively. At March 31, 2021 and 2020, NW Natural had short-term debt outstanding of $175.2 million and $450.0 million, respectively. NW Holdings' short-term debt at March 31, 2021 consisted of $61.0 million in revolving credit agreement loans at NW Holdings and $175.2 million of commercial paper outstanding at NW Natural. The weighted average interest rate on the revolving credit agreement at March 31, 2021 was 1.19% at NW Holdings. The weighted average interest rate of commercial paper outstanding at March 31, 2021 was 0.43% at NW Natural.

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 March 31, 2021 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. At March 31, 2021, March 31, 2020 and December 31, 2020, $61.0 million, $100.0 million and $73.0 million were drawn under this credit facility, 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 March 31, 2021 and 2020, with consolidated indebtedness to total capitalization ratios of 56.0% and 62.5%, 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 March 31, 2021 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. At March 31, 2021 and December 31, 2020, NW Natural did not have any outstanding balances drawn under this credit facility. At March 31, 2020, $227.0 million was 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. 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 March 31, 2021 and 2020, with consolidated indebtedness to total capitalization ratios of 55.3% and 61.4%, 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 0.66% at March 31, 2021, 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 March 31, 2021, with a consolidated indebtedness to total capitalization ratio of 56.0%.

At March 31, 2021, NW Holdings and NW Natural had long-term debt outstanding of $955.9 million and $917.3 million, respectively, which included $7.4 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%.

No long-term debt was retired during the three months ended March 31, 2021. 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 2020 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 March 31, 2021. 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:

	Three Months Ended March 31,		
In thousands	2021	2020	YTD Change
NW Natural cash provided by operating activities	$ 136,273	$ 105,859	$ 30,414
NW Holdings cash provided by operating activities	$ 137,065	$ 104,660	$ 32,405

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. The significant factors contributing to the $32.4 million increase in cash flows provided by operating activities at NW Holdings, were as follows:
- an increase of $36.2 million in the regulatory incentive sharing mechanism related to revenues earned from Mist gas storage and asset management activities primarily related to the 2021 cold weather event;
- a decrease of $21.1 million in accounts payable primarily driven by higher payments in the first quarter of 2020 related to gas purchases and the new corporate operations center; and
- an increase of $12.0 million in net income; partially offset by
- a net increase in net deferred gas costs of $37.2 million as the actual costs during the 2020-2021 winter season were 33% above the PGA estimates due to the 2021 cold weather event as opposed to gas costs in the 2019-2020 winter season that were 8% below estimates embedded in the PGA.

During the three months ended March 31, 2021, NW Natural contributed $4.5 million to the NGD segment's qualified defined benefit pension plan, compared to $3.2 million for the same period in 2020. 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.

The American Rescue Plan, which was signed into law on March 11, 2021, includes a provision for pension relief that extends the amortization period for required contributions from 7 to 15 years and provides for the stabilization of interest rates used to calculate future required contributions. We are currently evaluating the impact of this law on our business.

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 2020 Form 10-K.

Investing Activities
Investing activity highlights include:

In thousands	Three Months Ended March 31, 2021	2020	YTD Change
NW Natural cash used in investing activities	$ (62,229)	$ (61,640)	$ (589)
NW Holdings cash used in investing activities	$ (63,875)	$ (101,429)	$ 37,554

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Cash used in investing activities decreased $37.6 million at NW Holdings and increased $0.6 million at NW Natural. NW Holdings' decrease in cash used in investing activities was primarily due to $37.9 million of cash used for water and waste water acquisitions, net of cash acquired, during the three months ended March 31, 2020. The increase at NW Natural is primarily due to an increase in capital expenditures of $7.9 million partially offset by decreased leasehold improvement expenditures of $6.3 million.

NW Natural capital expenditures in 2021 are anticipated to be in the range of $280 million to $320 million and for the five-year period from 2021 to 2025 are expected to range from $1.0 billion to $1.2 billion. NW Natural Water is expected to invest approximately $15 million in 2021 related to maintenance capital expenditures for water and wastewater utilities currently owned or under a purchase and sale agreement, and for the five-year period from 2021 to 2025, capital expenditures are expected to be approximately $40 million to $50 million. Investments in our infrastructure during and after 2021 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	Three Months Ended March 31, 2021	2020	YTD Change
NW Natural cash (used in) provided by financing activities	$ (71,760)	$ 383,914	$ (455,674)
Repayments of commercial paper, maturities greater than 90 days	(100,000)	—	(100,000)
NW Natural change in short-term debt & proceeds from term loan	43,700	324,900	(281,200)
NW Natural change in long-term debt	—	75,000	(75,000)
NW Holdings cash (used in) provided by financing activities	$ (83,132)	$ 459,997	$ (543,129)
Repayments of commercial paper, maturities greater than 90 days	(100,000)	—	$ (100,000)
NW Holdings change in short-term debt & proceeds from term loan	31,700	400,900	(369,200)
NW Holdings change in long-term debt	—	75,000	(75,000)

THREE MONTHS ENDED MARCH 31, 2021 COMPARED TO MARCH 31, 2020. Cash provided by financing activities decreased $543.1 million and $455.7 million at NW Holdings and NW Natural, respectively.

The decrease in cash provided by financing activities at NW Natural was driven by $381.2 million in lower borrowings of short-term debt instruments and proceeds from our March 2020 term loan as NW Natural increased liquidity as a precaution in response to the unfolding of the COVID-19 pandemic during March 2020 and the retirement of long-term debt of $75.0 million during the first quarter of 2020.

In addition to the decrease at NW Natural, the decrease 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.

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 2020 Form 10-K. At March 31, 2021, NW Natural's total estimated liability related to environmental sites is $113.5 million. See "Results of Operations—Regulatory Matters—Rate Mechanisms—*Environmental Costs*" in the 2020 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 to assess the potential outcomes and related accounting impacts 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 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 2020 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 2020 Form 10-K.

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 three months ended March 31, 2021. 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 2020 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 March 31, 2021 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 2020 Form 10-K, we have only nonmaterial litigation, or litigation that occurs in the ordinary course of our business.

ITEM 1A. RISK FACTORS

There were no material changes from the risk factors discussed in Part I, Item 1A, "Risk Factors" in the 2020 Form 10-K. In addition to the other information set forth in this report, you should carefully consider those risk factors, which could materially affect our business, financial condition, or results of operations.

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 March 31, 2021:

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
01/01/21-01/31/21	—	$ —	—	—
02/01/21-02/28/21	—	—	—	—
03/01/21-03/31/21	6,587	51.81	—	—
Total	6,587	$ 51.81	2,124,528	$ 16,732,648

(1) During the quarter ended March 31, 2021, 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, 6,587 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 March 31, 2021, 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 March 31, 2021, 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 2020 Form 10-K.

ITEM 6. EXHIBITS

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

NORTHWEST NATURAL GAS COMPANY
NORTHWEST NATURAL HOLDING COMPANY

Exhibit Index to Quarterly Report on Form 10-Q
For the Quarter Ended March 31, 2021

Exhibit Index

Exhibit Number	Document
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 March 31, 2021, 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: May 5, 2021

/s/ Brody J. Wilson

Brody J. Wilson

Principal Accounting Officer
Vice President, Treasurer, Chief Accounting Officer and Controller

NORTHWEST NATURAL HOLDING COMPANY

(Registrant)

Dated: May 5, 2021

/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 March 31, 2021 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: May 5, 2021

/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 March 31, 2021 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: May 5, 2021

/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 March 31, 2021 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: May 5, 2021

/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 March 31, 2021 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: May 5, 2021

/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 March 31, 2021 (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 May 2021.

/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 March 31, 2021 (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 May 2021.

/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.