INVESTOR PRESENTATION

March 2020 Meetings

NW Natural HOLDINGS™

INVESTOR INFORMATION

COMPANY INFORMATION

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FORWARD LOOKING STATEMENTS

This and other presentations made by NW Natural Holdings from time to time, may contain 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,” “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, objectives, goals, strategies, future events, projections, expectations, acquisitions and integration thereof, corporate organization including conversion to a holding company structure, storage, pipeline and other infrastructure investments, commodity costs and sourcing, competitive advantage, marketing success, service territory, customer service, customer and business growth, weather, customer preference, conversion potential, multifamily development, business risk, efficiency of business operations, regulatory recovery, business development and new business initiatives, water industry and investments, environmental remediation recoveries, gas storage markets and business opportunities, gas storage development, costs, timing or returns related thereto, financial positions and performance, economic and housing market trends and performance shareholder return and value, capital expenditures, liquidity, strategic goals, carbon emissions and savings, workforce trends, hedge efficacy, cash flows and adequacy thereof, return on equity, capital structure, return on invested capital, revenues and earnings and timing thereof, margins, net income, operations and maintenance expense, dividends, credit ratings and profile, debt and equity issuances, the regulatory environment, effects of regulatory disallowance, timing or effects of future regulatory proceedings or future regulatory approvals, regulatory prudence reviews or deferrals, effects of regulatory dockets or mechanisms, including, but not limited to, the Company’s rate case, tax reform, SRRM and the Company’s infrastructure investments, effects of legislation, including but not limited to tax reform, PHMSA regulations and carbon regulations, and other statements that are other than statements of historical facts.

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, so we 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 by reference to the factors described in 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 Disclosure about Market Risk” in the Company’s most recent Annual Report on Form 10-K, 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”, and Part II, Item 1A, “Risk Factors”, in the Company’s quarterly reports filed thereafter.

All forward-looking statements made in this presentation and all subsequent forward-looking statements, whether written or oral and whether made by or on behalf of the Company, are expressly qualified by these cautionary statements. Any forward-looking statement speaks only as of the date on which such statement is made, and 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.

LEADERSHIP



DAVID H. ANDERSON • President and Chief Executive Officer

Mr. Anderson is currently NW Holding's President and CEO effective October 2018 and NW Natural's President and CEO effective August 2016. Since he joined NW Natural in 2004, Mr. Anderson has served in various executive positions over Operations, Regulation and Financial Matters, as COO and CFO. Previously, Mr. Anderson held executive positions within TXU Corporate including Senior Vice President and Chief Accounting Officer. Mr. Anderson holds a BBA in Accounting from Texas Tech University and held a CPA (retired) and CGMA.



FRANK BURKHARTSMEYER • SVP and Chief Financial Officer

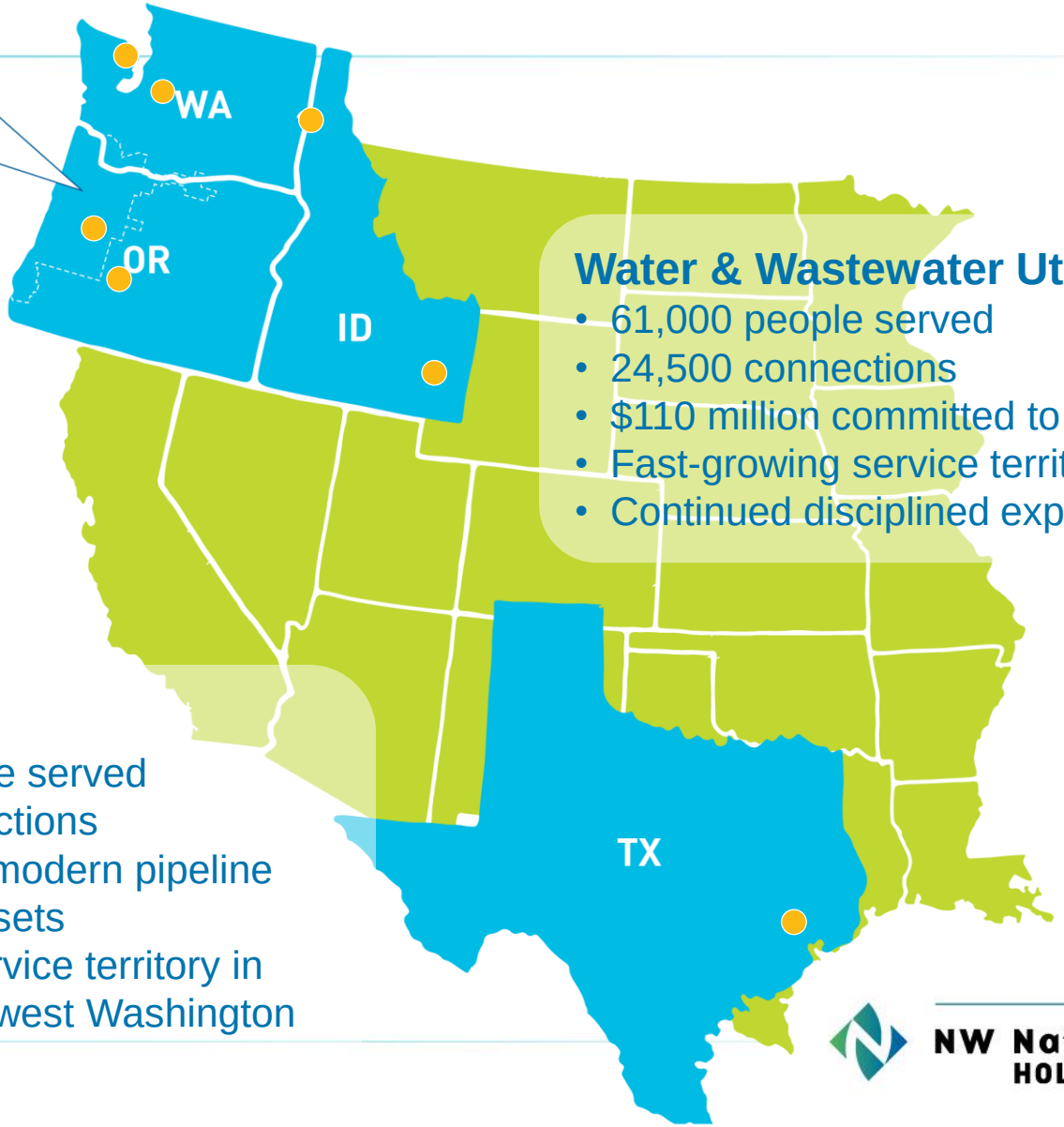
Mr. Burkhartsmeyer is currently NW Natural Holdings' Senior Vice President and CFO effective October 2018 and NW Natural's Senior Vice President and CFO effective May 2017. Previously, Mr. Burkhartsmeyer served as President and CEO of Avangrid Renewables and Senior Vice President of Finance at Iberdrola Renewables Holdings US and also held various positions at PPM Energy, ScottishPower and PacificCorp. Mr. Burkhartsmeyer has an MBA from the University of Oregon and a Bachelor of Arts in Liberal Arts from the University of Montana.

INTRODUCTION



NWN AT A GLANCE





Water & Wastewater Utilities

- 61,000 people served
- 24,500 connections
- $110 million committed to date
- Fast-growing service territories
- Continued disciplined expansion

Gas Utility

- 2.5 million people served
- 760,000+ connections
- 14,000 miles of modern pipeline
- $3.3 billion in assets
- Fast-growing service territory in Oregon & Southwest Washington

NW Natural HOLDINGS™

2019 KEY THEMES

- Reported strong earnings from customer growth, new rates, & North Mist beginning service
- Added nearly 12,500 natural gas meters over 12 months equating to a 1.7% growth rate
- Invested nearly $240 million in our gas utility system and infrastructure
- Scored first in the nation among large gas utilities (2019 J.D. Power Gas Utility Residential Customer Satisfaction Study)
- Completed NW Natural's first Washington general rate case in a decade
- Filed an Oregon general rate case in December 2019 to recover costs and investments that strengthen and reinforce the natural gas system, provide necessary system maintenance and operational resiliency, and technology upgrades
- Closed water and wastewater utility transactions, including largest to date
- Raised dividend for 64th consecutive year
- Good trajectory as strategic plan validated in both short and long term

Executing Strategic Plan

CONSERVATIVE CORPORATE STRATEGY

Stable gas and water utility margins through progressive regulation

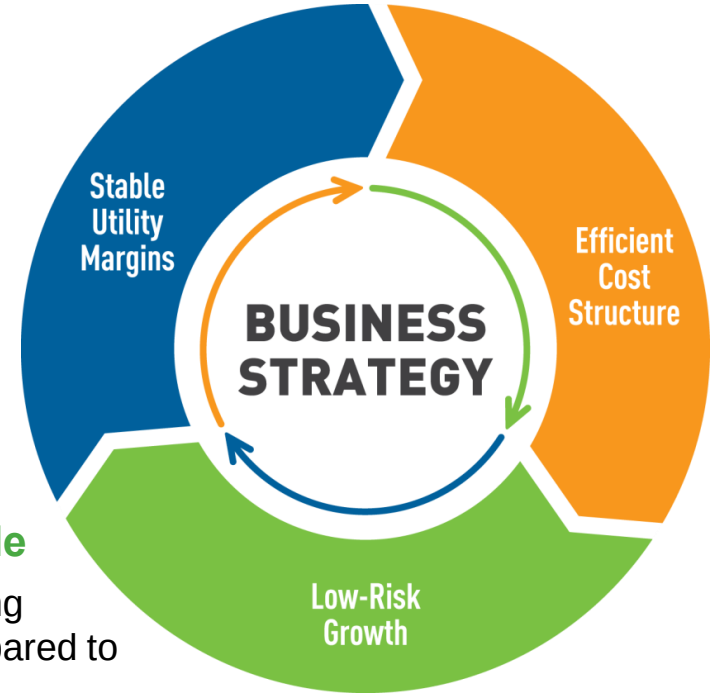
- Gas utility: weather, decoupling, and environmental cost recovery mechanisms in Oregon
- Constructive relationships with regulators and customer groups benefit both gas and water utilities

Excellent operations and efficient cost structure

- Commitment to safety, reliability, and high-quality service
- Continued focus on efficient business operations

Long-term growth opportunities that fit NWN's profile

- **GAS UTILITY**: strong cap-ex profile with attractive and growing service territory driving above-average customer growth compared to peers
- **MIST FACILITY**: high-value long-term contracts, asset management revenues, North Mist expansion
- **WATER & WASTEWATER**: long-term, disciplined strategy to acquire water utilities and wastewater businesses in a highly fragmented industry with ample infrastructure investment opportunities



NW Natural HOLDINGS™

STRATEGIES TO DRIVE SUCCESS



Low-Carbon Pathway

Effectively position our Company for a low-carbon future

- Target: 30% carbon emissions savings associated with current and new customers by 2035, from a 2015 baseline
- Build public policy coalitions to support this goal



Constructive Regulation

Further a successful regulatory agenda that serves the interests of customers, benefits the company, meets the duties of regulators and furthers stakeholders' missions



Enable Growth

Channel our organizational energies around revenue growth so we can succeed in an increasingly competitive and complex marketplace

- Simplify processes and leverage technology
- Examine our tariffs to meet new market demands and a low-carbon business model



Superior Customer Experience

Improve processes, deploy new technology and use metrics to continually improve and meet evolving customer expectations

Continue to drive operational priorities that ensure we are delivering safe, reliable and superior service



Workforce of the Future

Foster a culture of accountability, creativity and collaboration that is inclusive and supports opportunities for cross-functional effectiveness

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INVESTMENT HIGHLIGHTS

Growth targets over the next five years include:

Financial Targets

- EPS growth of 3% - 5%[1]
- Strong and growing dividend[2]

Gas Utility Growth

- Customer growth 1.7%+ per year
- Capital plan of $950 million - $1.1 billion
- Rate base growth of 4% - 6%[1]

Water Growth

- Long-term strategy, incremental earnings growth and diversity
- Deliberate and disciplined roll-up strategy
- Maintenance cap-ex plan $30 - $40 million[3]

1 EPS and rate base growth forecasted for period 2020 – 2024; EPS growth rate uses mid-point of 2019 guidance range as base year
2 Future dividends are subject to Board of Director discretion and approval
3 Water cap-ex plan is based on projected needs of water and wastewater utilities acquired as of 12/31/19

Stable and Growing Return Proposition


NATURAL GAS UTILITY

GAS UTILITY OVERVIEW

- More than 160 years of service in our communities
- Largest stand-alone local distribution company in the Pacific Northwest
- Serve 2.5 million people in more than 140 communities through more than 760,000 meters in Oregon and southwest Washington
- Consistently recognized for high-quality customer service by J.D. Power
- One of the safest, most modern distribution systems in the country



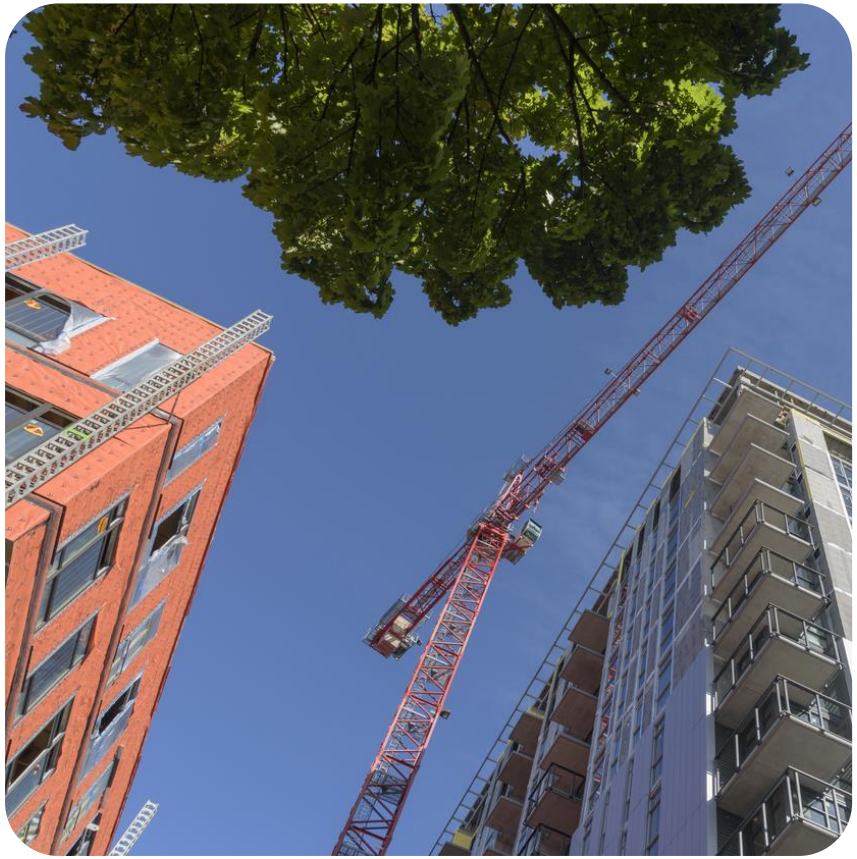
ATTRACTIVE ECONOMY

OREGON AMONG TOP IN NATION

#2 Household Income Growth
#8 Employment Growth
#8 Employee Earnings Growth

GROWING BUSINESSES

NIKE
Columbia Sportswear Company®
FLIR
adidas
intel
qorvo all around you
UNDER ARMOUR



Source: Household income growth from 2018 ACS via OEA; employment growth from BLS; and employee earnings growth from BLS

Serving Growing Communities

NW Natural®

SOPHISTICATED MARKETING

Affordable, Preferred, Growing

- Growing communities with healthy permitting levels
- Natural gas price advantage
  - Up to 70% advantage over electric or oil furnace
  - Up to 20% advantage over high-efficiency heat pumps
- Preferred by 9 out of 10 homeowners
- Strong trade ally network that rate NW Natural 9 out of 10 for satisfaction

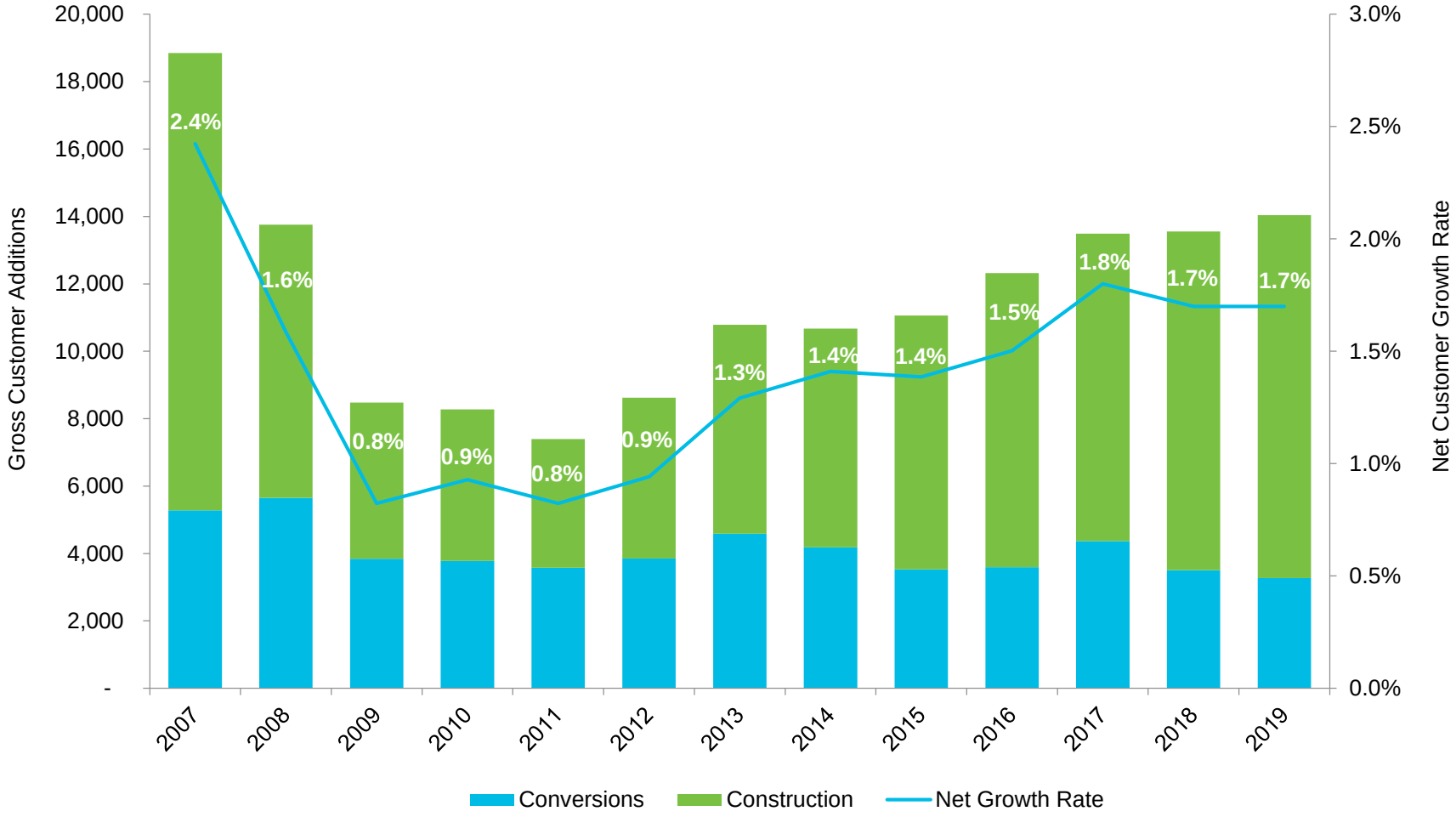
Significant Conversion Potential

- Serve approximately 63% of single-family homes in service territory
- 400,000 potential conversions
- Targeted marketing campaign using innovative, proprietary tool supporting strong conversion pipeline



NW Natural®

LEADING IN CUSTOMER GROWTH



INVESTING IN GAS SYSTEM

Customer growth
- New construction & conversions
- Main extensions

Safety & Reliability
- Recurring replacements
- Enhanced system reliability to support customer growth

Facilities
- Resource and operations center renovations

Technology
- Data center & cybersecurity
- Efficiencies & ERP
- Customer facing technology

The timing and amount of the core capital expenditures and projects for 2020 and the next five years could change based on regulation, growth, and cost estimates. Additional investments in our infrastructure during and after 2020 that are not incorporated in the estimates provided 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.

System Capital Expenditures*
(In millions)

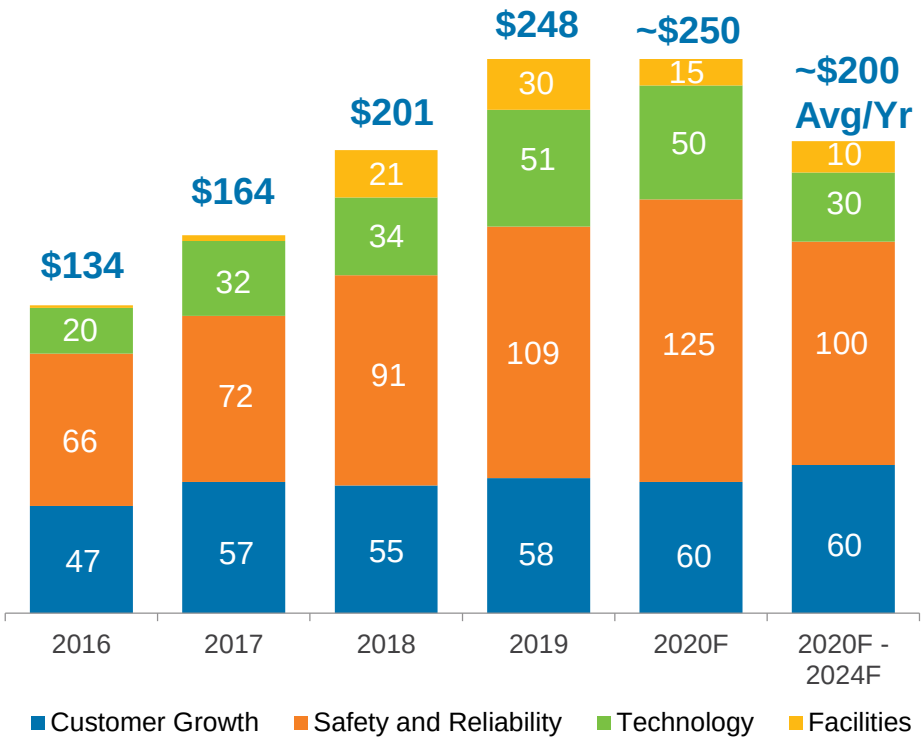


*Chart is based on accrual cap-ex figures and excludes North Mist Project

Five-Year Cap-Ex Approximately $1 Billion

PROGRESSIVE REGULATION

	OREGON	WASHINGTON
KEY MECHANISMS:		
Decoupling/WARM	✓	
Purchased Gas Adjustment	✓	✓
Environmental Cost	✓	✓
Incentive Sharing(1)	✓	
RATE CASE TEST YEAR	Forward	Historical(2)
RATE STRUCTURES:		
ROE	9.4%	9.4%
ROR	7.317%	7.161%
Equity Ratio	50%	49%
2019 Rate Base(3)	$1.4B	$0.2B

(1) In Oregon, NW Natural shares PGA gains and losses
(2) In 2019, SB 5116 was passed granting the WUTC authority to incorporate costs and capital up to 48 months after the rate effective date
(3) Oregon rate base includes gas reserves

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OREGON 2019 RATE CASE

- **December 2019 Request Filed –** ten month review process with new rates expected on November 1, 2020
- **Rate Base Growth –** Filed for $270 million increase in rate base related to capital that strengthens and reinforces the natural gas system, necessary system maintenance and operational resiliency, and technology upgrades
- **Cost Recovery –** higher costs associated with new union contract, facilities, inflationary increases in payroll and benefits, and technology expenses

	2018 Rate Case Outcome	2019 Rate Case Request
ROE	9.4%	10.0%
ROR	7.317%	7.298%
Equity/Debt Ratio	50 / 50	50 / 50
Rev. Requirement	+$24.8M	+$71.4M
Rate Base	$1.20B	$1.47B

GROUNDBREAKING RNG BILL

- Oregon law (SB 98) first-of-its-kind legislation that supports utilities purchasing renewable natural gas (RNG)
- Creates another path for RNG to become an increasing part of the Oregon's energy supply, one of the most effective ways to reduce emissions
- Allows natural gas utilities to acquire RNG
- Sets voluntary RNG portfolio targets for Oregon's natural gas utilities
- Allows up to 5% of a utility's revenue requirement to be used to cover the incremental cost of RNG
- Allows for investments related to RNG infrastructure, including production facilities, cleaning and conditioning equipment, and pipeline interconnections
- Potential revenue source for communities to turn their waste into energy

Oregon Senate Bill 98 supports RNG targets:	2030	2035	2050
	15%	20%	30%

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2020 SUSTAINABILITY INITIATIVES

Purchasing RNG

SB 98 Rulemaking

- Participating in OPUC rulemaking, expected to conclude by July 31, 2020

IRP

- Provides for NW Natural to procure RNG that is deemed cost effective using an evaluation methodology that considers social costs

RNG Interconnects

- Separately and ahead of SB 98, RNG projects being developed on our system
- Building interconnections for these projects

Washington HB 1257

- Law requires a voluntary tariff that allows us to procure RNG on behalf of customers and include RNG in gas supply portfolio
- Working on program

Up-Stream

- Developed proprietary program to analyze methane emissions from up-stream suppliers
- Current suppliers among most stringently regulated
- Completed pilot in 2019
- In 2020, will strive to procure natural gas from most responsible, lowest emitting producers

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WATER

STRATEGIC RATIONALE

The water and wastewater sector aligns well with NWN's conservative risk profile and offers diversification, stable cash flows, and substantial long-term investment opportunities

Conservative Business Profile

- Demand for water and wastewater is relatively inelastic
- Stable, predictable cash flows

Aligns with Core Competencies

- Aligns with our core competencies including:
  - Customer service
  - Developing and managing critical distribution infrastructure safely and reliably
  - Environmental stewardship
  - Constructive regulatory engagement

Supportive Regulatory Environment

- Existing constructive relationships with regulators that can be extended to water sector
- Federal and state agencies driving upgrades to water and wastewater infrastructure

Need for Substantial Investment

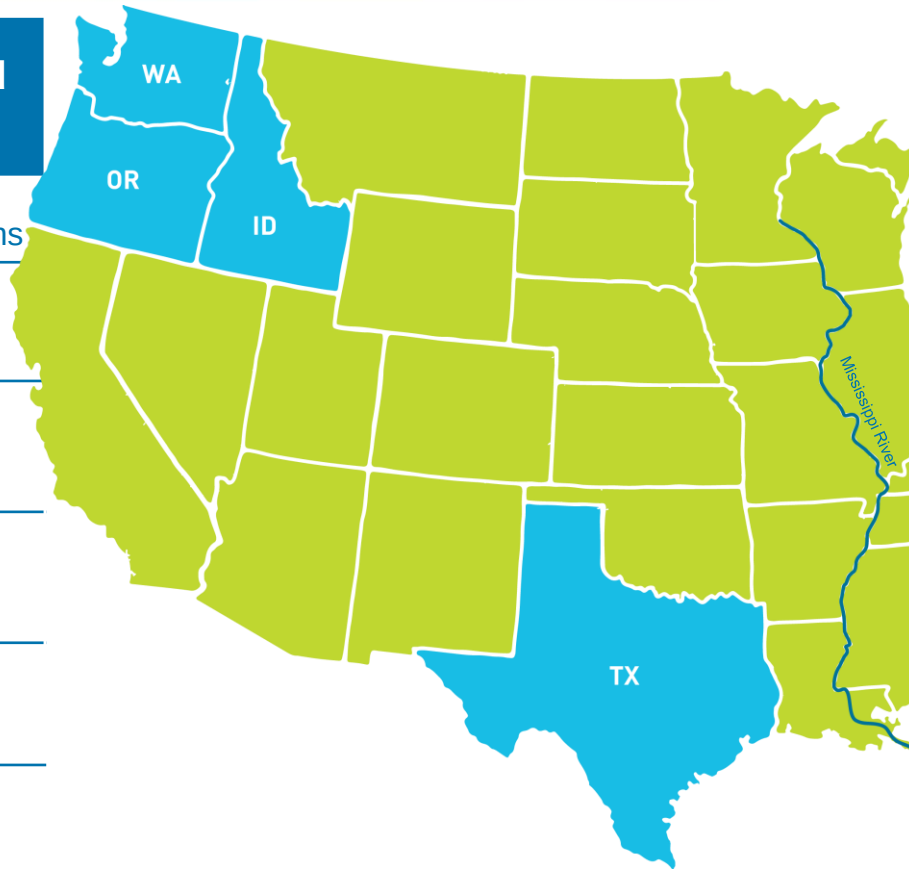
- EPA estimates over $775 billion in water and wastewater capital needs nationally through 2040
- Over long term, growing water business targeted to be an earnings driver and opportunity to deploy capital at attractive rates of return for infrastructure needs

Deliberate and Disciplined Acquisition Strategy

WATER & WASTEWATER OPPORTUNITIES

	All Water and Wastewater Systems		Privately Owned Systems	
	Systems	Connections	Systems	Connections
Pacific Northwest	4,700	5.6M	2,760	511,000
Texas	5,739	17.3M	2,400	400,000
West of Mississippi	36,500	77.3M	16,700	9.1M
United States	77,000	188.6M	30,160	20.5M

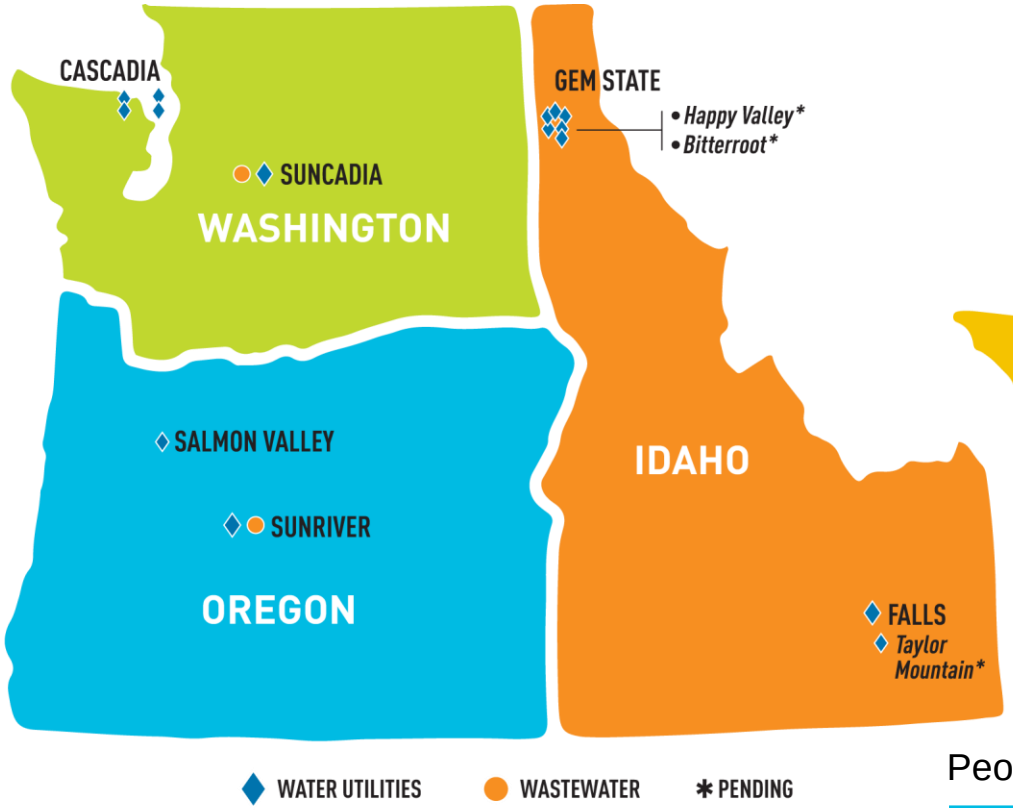
Numbers in table above represent permanent community water and wastewater systems
Source: Bluefield



Opportunities for Acquisitions in the West

NW Natural WATER™

EXPANDING FOOTPRINT



	Closed	Pending(2)	Total
People served(1)	60,700	1,300	62,000
Connections	24,500	500	25,000

(1) People served is based on estimated average household size for service territory
(2) Pending transactions are expected to close in 2020

NW Natural WATER™

FINANCIAL PERFORMANCE



FOCUS ON EARNINGS

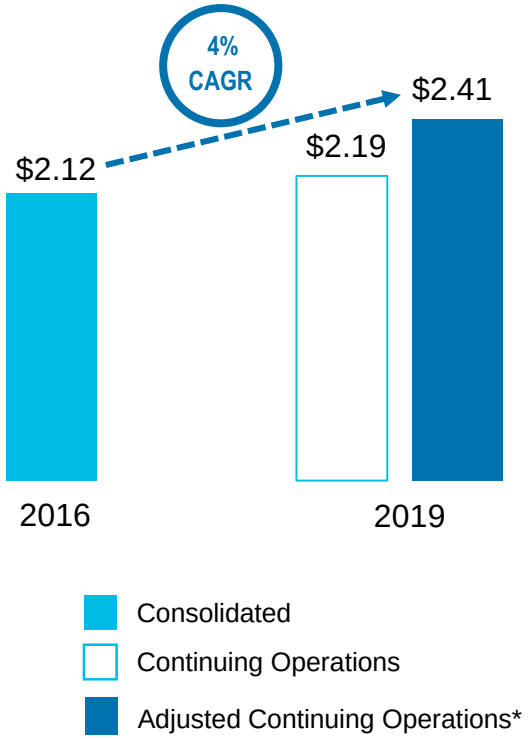
Executing on LT Strategy, Providing Growth

- Actions taken since 2016
  - ✓ Announced sale of Gill Ranch in June 2018
  - ✓ Completed successful rate cases in OR & WA
  - ✓ Added ~38,000 customers
  - ✓ Invested over $650 million in gas infrastructure
  - ✓ Brought North Mist online
  - ✓ Launched water utility strategy

2020 Year of Transition

- Continued customer growth and robust capital plan
- Higher costs related to union contract, payroll, facilities, and technology
- Led to rate case filing with new rates expected on Nov. 1, 2020 in Oregon

Earnings Per Share Growth



*Adjusted 2019 EPS from continuing operations excludes regulatory disallowance of $10.5 million pre-tax ($6.6 million after-tax or $0.22 per share) from GAAP net income from continuing operations of $65.3 million or $2.19 per share. See appendix for non-GAAP reconciliation.

STRONG LIQUIDITY

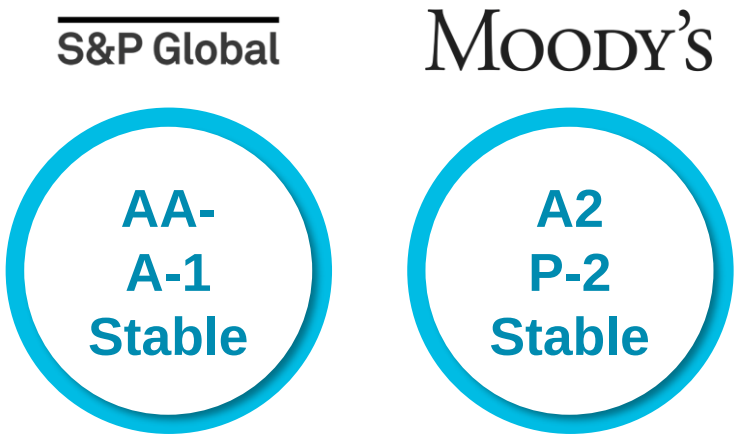
NW Holdings

- $100 million credit facility
- Expires in 2023
- Extension for two additional one-year periods
- Access to capital markets

NW Natural

- $300 million credit facility
- Expires in 2023
- Extension for two additional one-year periods
- Access to capital markets
- Solid credit ratings(1)

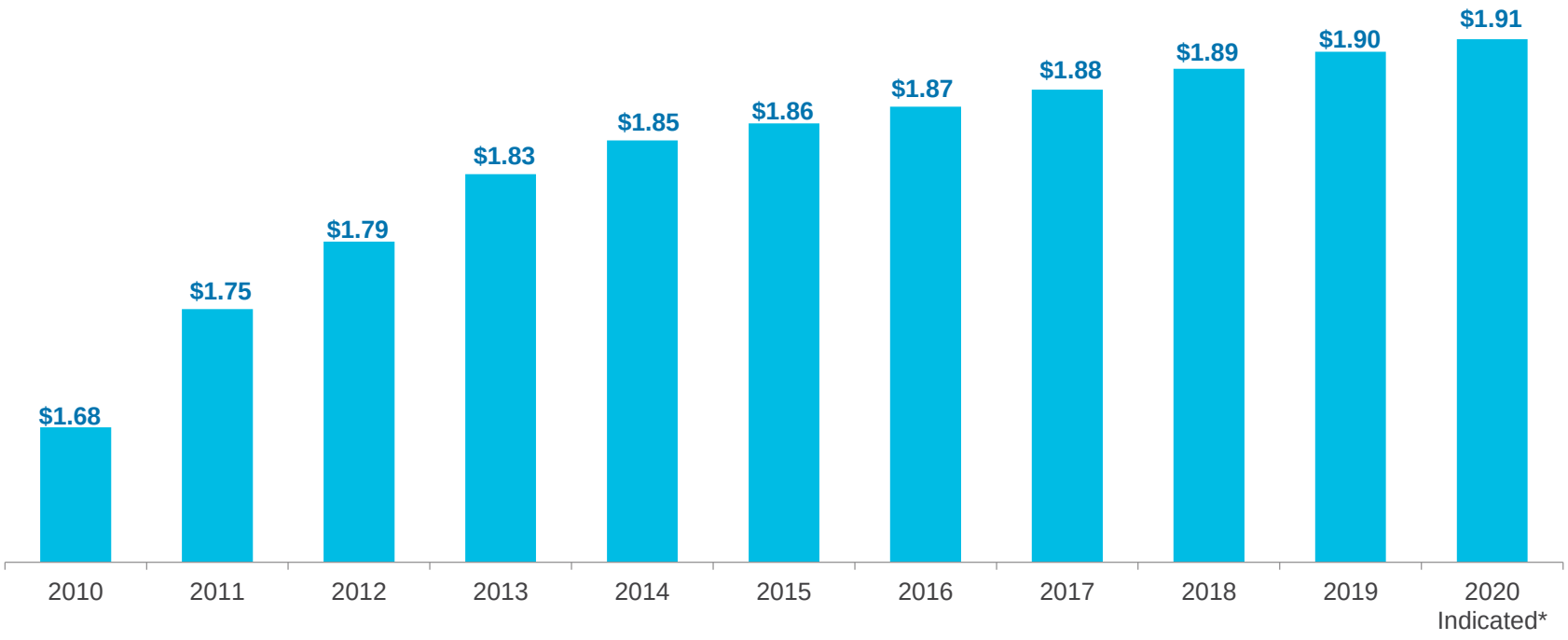
NW Natural Credit Ratings(1)



(1) The above credit ratings are dependent upon a number of factors, both qualitative and quantitative, and are subject to change at any time. The disclosure of these credit ratings is not a recommendation to buy, sell or hold NW Holdings securities. AA- and A2 are secured debt ratings and A-1 and P-2 are commercial paper ratings

NW Natural HOLDINGS™

64 YEARS OF GROWING DIVIDENDS



*Future dividends are subject to Board of Director discretion and approval

1 of only 3 Companies on NYSE with this Legacy

CONCLUSION



INVESTMENT THESIS

Stable and growing utility margins driven by targets over the next five years projections including:

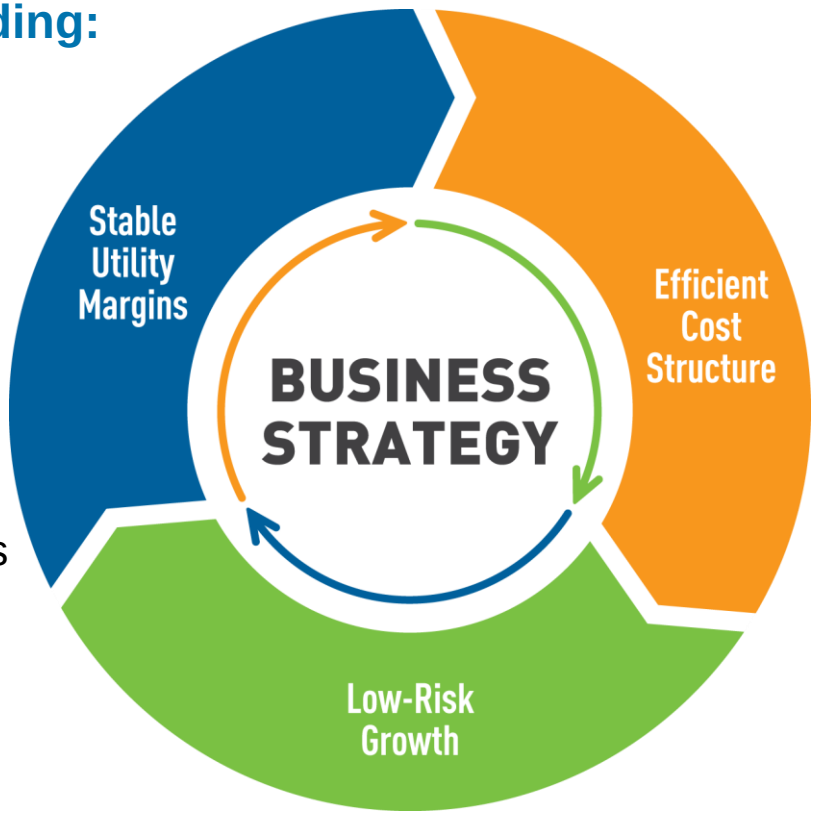
- EPS growth of 3% – 5%
- Gas utility customer growth 1.7%+
- Gas utility cap-ex $950 million – $1.1 billion, projecting rate base growth of 4% – 6%

Excellent operations and efficient cost structure

- Commitment to safety, reliability, and high-quality service
- Continued focus on efficient business operations

Lower-Risk Growth

- North Mist in gas utility segment provides additional regulated storage
- Water strategy provides earnings diversity



Stable and Growing Return Proposition


APPENDIX

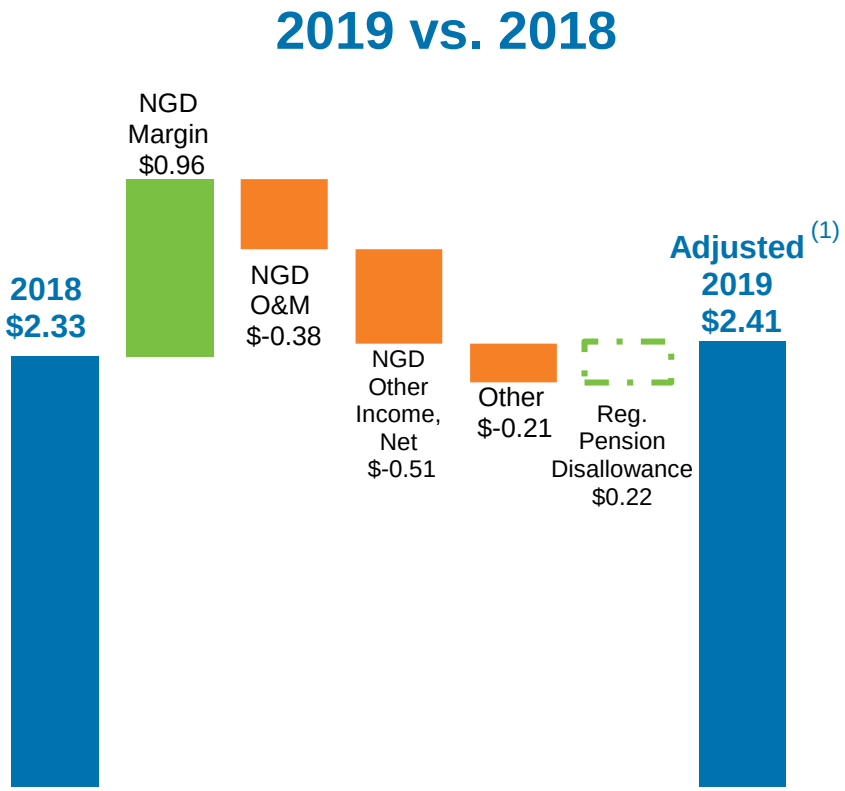
NET INCOME FROM CONTINUING OPERATIONS

Natural Gas Distribution (NGD)

- Increased margin
  - New rates in Oregon & Washington
  - Strong customer growth of 1.7%
  - North Mist in-service May 2019
- O&M and other income, net increases related to pension disallowance and recovering pension expenses through rates

Other

- Mist primarily due to change in optimization sharing
- Water integration & development costs
- Impact of 1.4 million share issuance



(1)Adjusted 2019 net income from continuing operations is non-GAAP and excludes the regulatory pension disallowance of $10.5 million pre-tax or $6.6 million and 22 cents per share after-tax. See "Non-GAAP Reconciliation" for additional information in Appendix

Higher Earnings from New Rates

NON-GAAP RECONCILIATION

(In millions)	FY 2019 $	FY 2019 EPS	FY 2018 $	FY 2018 EPS
Net income from continuing operations	$65.3	$2.19	$67.3	$2.33
Regulatory pension disallowance(1)	10.5	0.35	-	-
Income tax effect of disallowance(1)	(3.9)	(0.13)	-	-
Adjusted net income from continuing operations	$71.9	$2.41	$67.3	$2.33
Diluted Shares		29.9		28.9

(1) Regulatory pension disallowance recognized in Q1 2019. Tax effect of adjustment is calculated using a combined federal and state statutory rate of 26.5% as well as a $1.1 million deferred tax asset specifically associated with the pension balancing account.

SUPPORTIVE MECHANISMS

OREGON
Decoupling

- Breaks link between earnings and consumption by removing incentive to increase usage
- Employs use-per-customer decoupling calculation, which adjusts margin revenues to account for the difference between actual and expected customer volumes

OREGON
Weather Normalization (WARM)

- Stabilizes collection of fixed costs for residential and commercial customers
- Adjusts billings based on temperature variances compared to average weather
- Applied from December through May of each heating season

OREGON • WASHINGTON
Purchased Gas Adjustment (PGA)

- Adjusts annual rates to reflect changes in expected cost of gas commodity purchases
- Includes spot purchases, contract supplies, derivatives, storage inventories, in OR gas reserves
- Includes temporary rate adjustments amortizing deferred regulatory account balances

OREGON • WASHINGTON
Environmental Cost Recovery

- Recovers environmental costs attributed to Oregon and Washington
- Costs are subject to an annual prudence review and in Oregon an earnings test[1]
- Allows for deferral of environmental costs and in Oregon the accrual of carrying costs

(1) To the extent the utility earns more than its authorized ROE in Oregon in a year, the utility is required to cover environmental expenses and interest on expenses greater than $10 million (plus interest from insurance proceeds) with those earnings that exceed its authorized ROE

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CURRENT UTILITY COMMISSIONERS

	OREGON COMMISSION (OPUC)	WASHINGTON COMMISSION (WUTC)	IDAHO COMMISSION (IUTC)	TEXAS COMMISSION (PUCT)
Chair	**Megan Decker (D)** • Appointed April 2017 • Term ends March 2021	**David Danner (D)** • Appointed chair Feb 2013 • Current term ends Jan 2025	**Paul Kjellander (R)** • Appointed 2011 • Term ends Jan 2023	**DeAnn Walker (R)** • Appointed Sep 2017 • Term ends Sept 2023
Commissioners	**Letha Tawney (D)** • Appointed May 2018 • Term ends May 2020	**Ann Rendahl (D)** • Appointed Dec 2014 • Current term ends Jan 2021	**Kristine Raper (D)** • Appointed Feb 2015 • Term ends Jan 2021	**Arthur D'Andrea (R)** • Appointed Nov 2017 • Term ends Aug 2023
	Mark Thompson (R) • Appointed Dec 2019 • Term ends Nov 2023	**Jay Balasbas (R)** • Appointed Feb 2017 • Term ends Jan 2023	**Eric Anderson (R)** • Appointed Dec 2015 • Term ends Jan 2025	**Shelly Botkins (R)** • Appointed June 2018 • Term ends Sept 2025

OREGON 2018/19 RATE CASE

- **Oct. 2018 Order Resolved Majority of Items –** Revenue requirement and sharing allocations for utility asset management revenue with customers resolved
- **March 2019 Order Resolved Remaining Items in Case –** Addressed how to provide tax reform savings to customers and recovery of the pension balancing account, which are primarily cash flow related matters. Resulted in regulatory disallowance of certain pension costs
- **Customer Rate Impacts –** Oregon customers' rates declined 1.6% from the combined effect of the Oregon general rate case and annual Purchase Gas Adjustment (PGA) for the 2018-19 gas year

	2012 Rate Case	Final 2018/19 Rate Case Outcome
ROE	9.5%	9.4%
ROR	7.78%	7.317%
Equity/Debt Ratio	50 / 50	50 / 50
Rev. Requirement		+$24.8M
Net Income		+$11.4M
Cash Flows		+$21.3M
Rate Base	$886M	$1,201M
Non-Cash Charge (After-tax)		-$6.6M

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WASHINGTON 2019 RATE CASE

- **Order in October 2019 –** Resolves all items in rate case with rates effective Nov. 1, 2019
- **Tax Reform –** Provide customers with $2.1M benefits in first year with $0.5M benefit each year thereafter
- **Environmental Mechanism –** recovery of remediation expenses associated with historical manufactured gas plant clean-ups attributable to Washington

	2009 Rate Case	Final 2019 Rate Case Outcome
ROE	10.1%	9.4%
ROR	8.4%	7.161%
Equity/ LT Debt/ ST Debt Ratio	51 / 44 / 5	49 / 50 / 1
Rev. Requirement		+$5.1M
Net Income		+$3.8M
Rate Base	$127.8M	$173.7M

NW Natural®

DIVERSE RESOURCE PORTFOLIO

Gas Supply

- 60% supply from Canada
- 40% supply from the Rockies
- Natural gas serves territory through one bi-directional pipeline

LNG Peaking Facilities

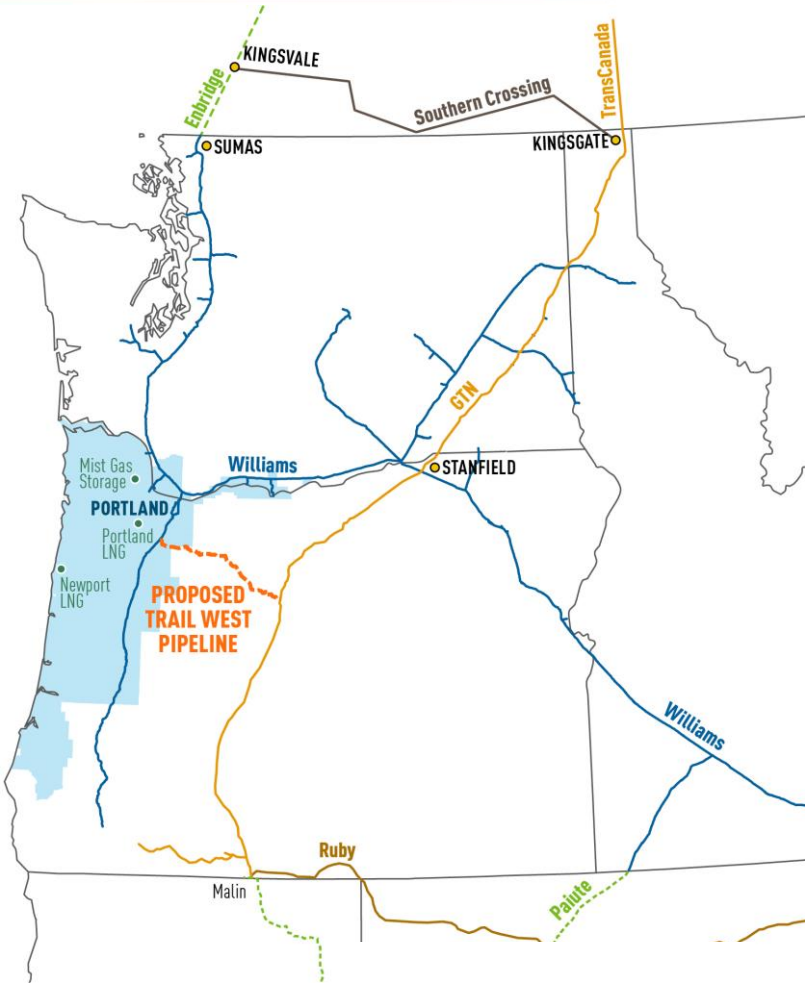
- Portland LNG – 0.6 Bcf
- Newport LNG – 1.0 Bcf

Mist Gas Storage Facility

- Valuable asset – limited storage in the Pacific Northwest
- 16 Bcf facility with 11 Bcf serving utility customers and 5 Bcf under long-term contracts
- Utility can recall 5 Bcf to support customer demand

North Mist Storage Expansion

- 4 Bcf expansion serves a single customer under long-term contract



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MIST STORAGE FACILITY

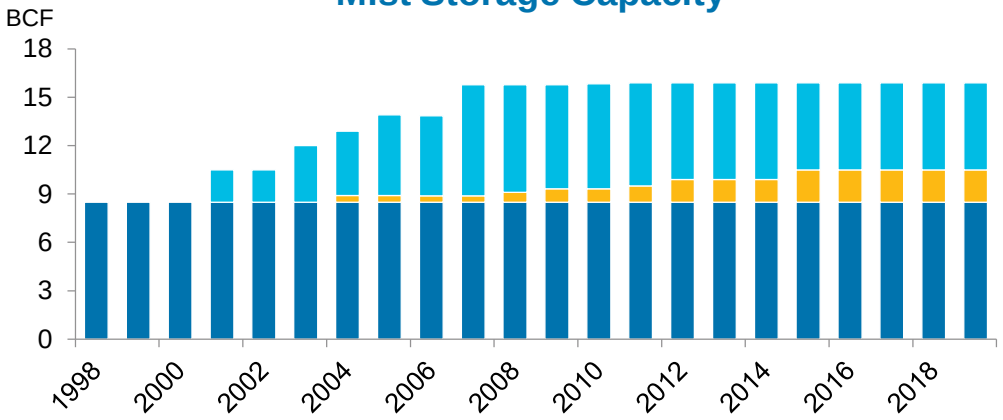
Overview

- In operation since 1989
- Storage capacity at Mist 16 Bcf
  - 11 Bcf Core Utility
  - 5 Bcf Interstate Storage Services

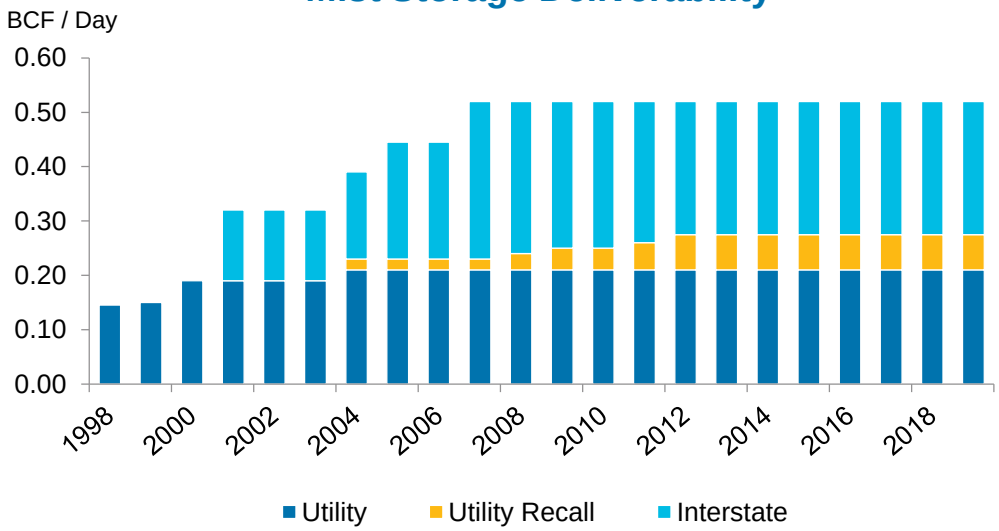
Unique, Valuable Asset

- Limited storage options in Pacific Northwest
- Part of utility's diverse, reliable gas supply strategy
- Utility can recall Interstate portion for Core Utility demand
- Optimize non-utility portion and share revenues with utility customers
- 5 Bcf under long-term high-value contracts

Mist Storage Capacity

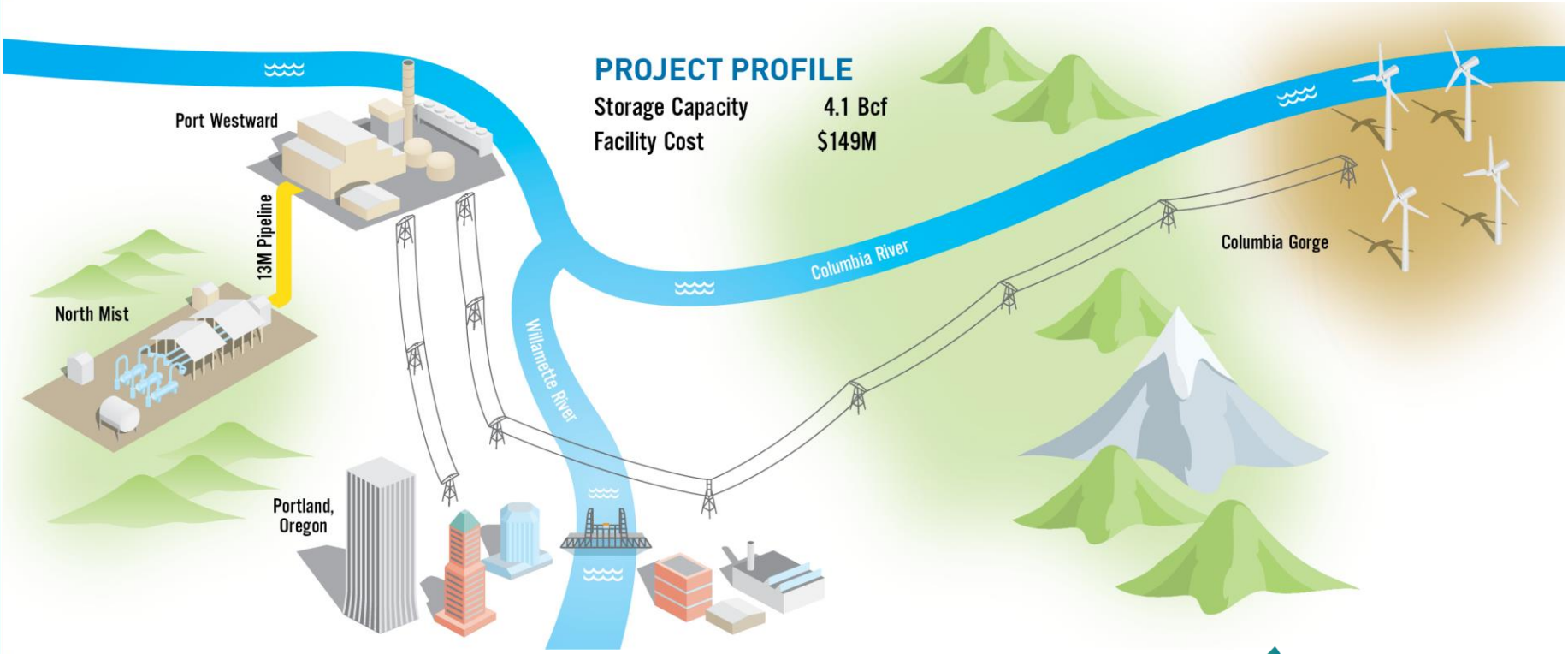


Mist Storage Deliverability



NORTH MIST FACILITY

- Unique no-notice 24/7 storage service supporting gas-fired electric generating facilities that are integrating wind into energy generation mix
- $149 million investment was immediately included in rate base once placed into service in May 2019
- Contracted under 30-year agreement with single-customer (Portland General Electric)*

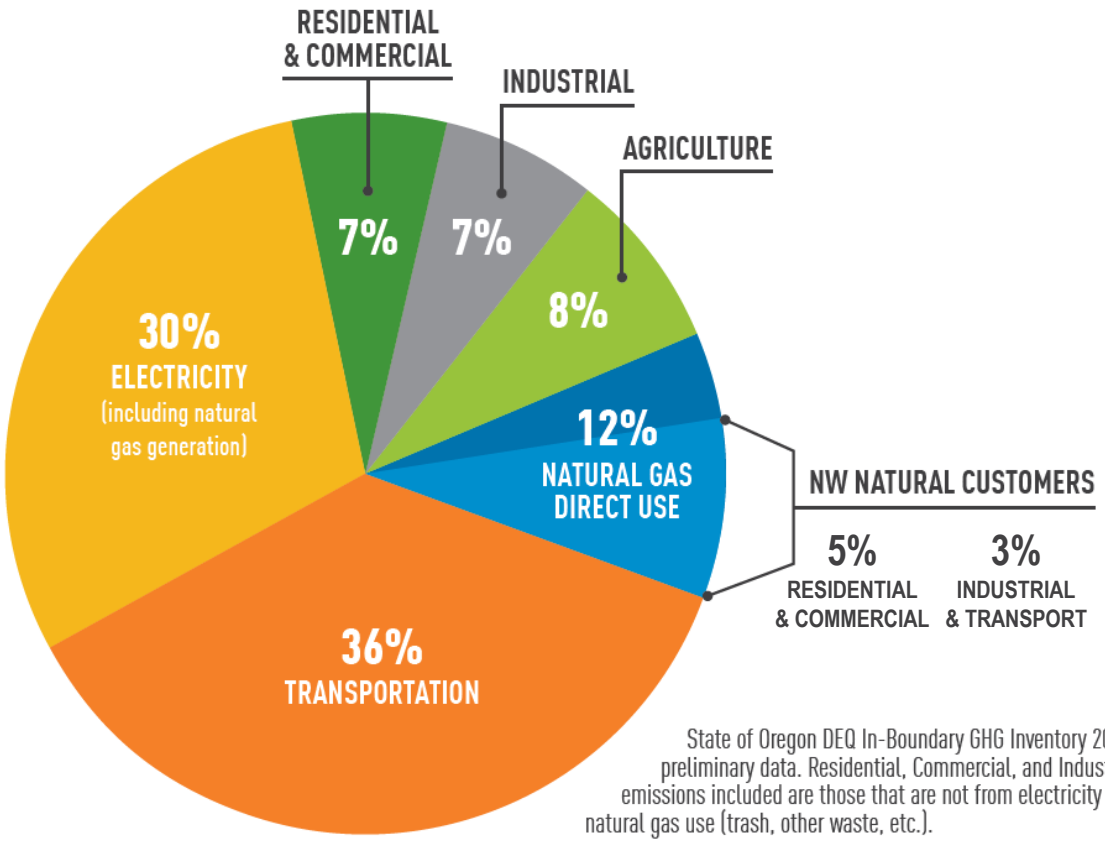


*Contract includes options to extend up to an additional 50 years

NW Natural®

NWN SYSTEM HIGHLY EFFICIENT

Oregon's GHG Emissions



State of Oregon DEQ In-Boundary GHG Inventory 2015 preliminary data. Residential, Commercial, and Industrial emissions included are those that are not from electricity or natural gas use (trash, other waste, etc.).

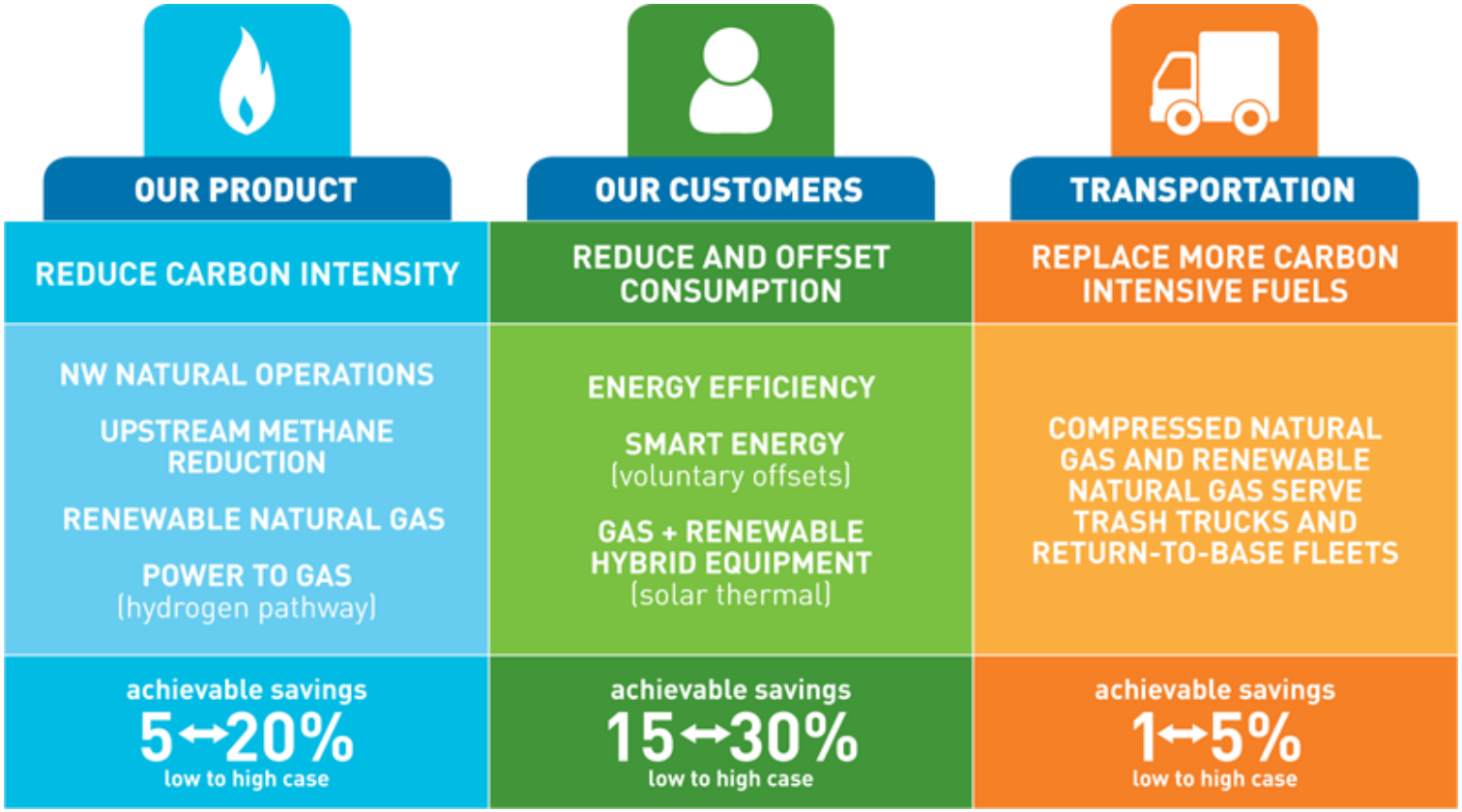
NW Natural's System

- **Heats 74%** of residential square footage in the areas we serve
- **Provides 90%** of peak day energy needs for our residential space and water heat customers
- Our residential and commercial customers' emissions **account for just 5%** of Oregon's total carbon emissions

NW Natural®

OUR LOW-CARBON PATHWAY

VOLUNTARY GOAL: 30% CARBON SAVINGS BY 2035



Baseline: 2015 emissions associated with customer use

DEEP DECARBONIZATION



How does the Pacific Northwest achieve an 80% reduction in economy-wide GHG emissions by 2050 from a 1990's baseline? What pathways are possible and what are the trade offs?

Believe natural gas will be critical to achieving deep decarbonization

- All four separately commissioned Northwest studies show natural gas is pivotal to achieving deep decarbonization most affordably and reliably
- NW Natural commissioned a study by premier environmental consultant, E3, to analyze how to achieve the goal while also serving peak energy needs on the coldest winter days

E3 study shows direct use of gas offers a viable, pragmatic path toward 2050 targets

- Study showed that with a 25% blend of renewable natural gas, the region can achieve deep decarbonization more affordably by using the existing gas system already in place
  - Recent Oregon Department of Energy study identified nearly 50 Bcf of RNG technical potential
  - Assumes commercialization of gas heat pumps
- Full electrification of heating would require:
  - Perfect adoption and proper installation of "cold climate" heat pumps in 2 million existing homes and businesses
  - The equivalent energy of 38 new large gas-fired peaker plants to serve 17 Gigawatts of new electric winter load
  - At an estimated incremental cost that grows to $3 billion more annually by 2050
  - Other electric scenario with more typical heat pump installations had an estimated incremental cost of $9.5 billion annually

NW Natural®

WATER TRANSACTIONS

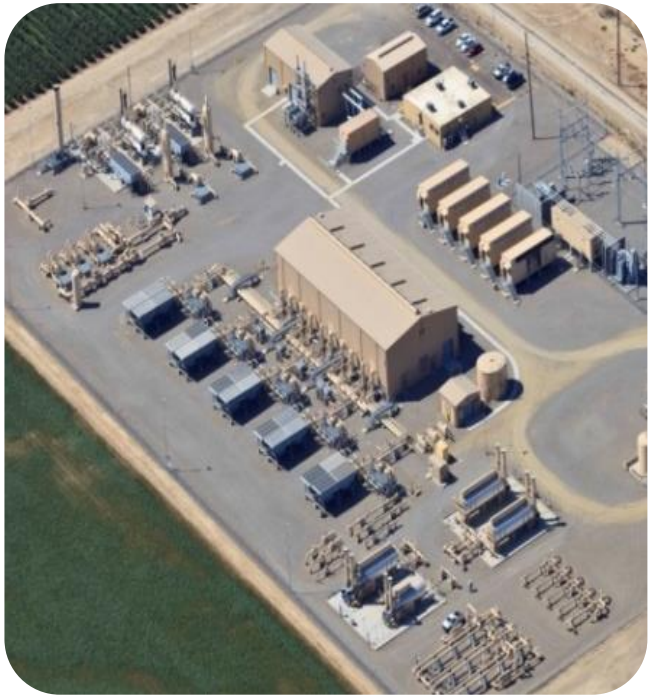
Transaction	People Served	Connections	Location	Date Signed	Date Closed	NWN Water Company Entity
Salmon Valley Water Company	1,500	921	Welches, OR	12/18/2017	11/1/2018	Salmon Valley
Falls Water Company	17,900	5,545	Idaho Falls, ID	12/19/2017	9/13/2018	Falls Water
Lehman Enterprises	2,894	902	Whidbey Island, WA	5/15/2018	11/2/2018	Cascadia
Sea View Water	606	190	Whidbey Island, WA	5/15/2018	11/2/2018	Cascadia
Sunriver Water & Environmental	20,000	9,363	Sunriver, OR	10/12/2018	5/31/2019	Sunriver
Spirit Lake East/Lynnwood	750	300	Coeur d'Alene, ID	12/18/2018	7/31/2019	Gem State
Estates/Monterra	1,400	560	Sequim, WA	1/22/2019	5/1/2019	Cascadia
Diamond Bar/Bar Circle S	780	348	Coeur d'Alene, ID	3/21/2019	10/1/2019	Gem State
Suncadia Water & Environmental	5,950	2,798	Cle Elum, WA	10/12/2019	1/31/2020	Suncadia
T&W Water	9,150	3,660	Conroe, TX	10/31/2019	3/2/2020	T&W Water
Total Closed	**60,930**	**24,587**				
Taylor Mountain Water & Sewer	810	324	Idaho Falls, ID	6/28/2019		Falls Water
Happy Valley/Bitterroot	450	180	Coeur d'Alene, ID	9/12/2019		Gem State
Total Pending	**1,260**	**504**				
Total Closed & Pending	**61,920**	**24,983**				

NW Natural WATER™

GILL RANCH STORAGE

Status

- Determined Gill Ranch is no longer central to our long-term regulated growth strategy
- At Dec. 31, 2017 recognized non-cash impairment of $192.5 million pre-tax ($141.5 million after-tax)
- On June 20, 2018 signed a purchase and sale agreement to sell Gill Ranch
- Working toward closing transaction in 2020
- Gill Ranch presented in discontinued operations in financial statements beginning Q2 2018



Background

- NW Natural owns 15 Bcf or 75% of the 20 Bcf Gill Ranch storage facility near Fresno, CA. PG&E owns the remaining 5 Bcf or 25% of the Gill Ranch facility
- California storage challenged by low market prices and low price volatility due to abundant supply of natural gas and storage facilities in region

GROWTH
SUSTAINABILITY
INNOVATION

NW Natural HOLDINGS™