

ANADARKO PETROLEUM CORPORATION »



NYSE: APC
WWW.ANADARKO.COM

ONE COMPANY'S WATER STRATEGY

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Cautionary Language

Regarding Forward-Looking Statements and Other Matters

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Anadarko believes that its expectations are based on reasonable assumptions. No assurance, however, can be given that such expectations will prove to have been correct. A number of factors could cause actual results to differ materially from the projections, anticipated results, or other expectations expressed in this presentation. See “Risk Factors” in the company’s 2016 Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and other public filings and press releases. Anadarko undertakes no obligation to publicly update or revise any forward-looking statements.



Anadarko: Brief History of Produced Water

2014

25,000 b\ld
5 SWD wells
100 miles pipeline

Create
dedicated
water team
in E&P
upstream

Evaluate
commercialization
of produced water
infrastructure

Move produced
water team to
midstream MLP;
Stand up
commercial
water business

Execute agreements
with APC and other
E&Ps first
commercial assets
operational

Present

250,000 b\ld
10 SWD wells
300 miles pipeline



Infrastructure to Meet a Growing Demand

Rationale

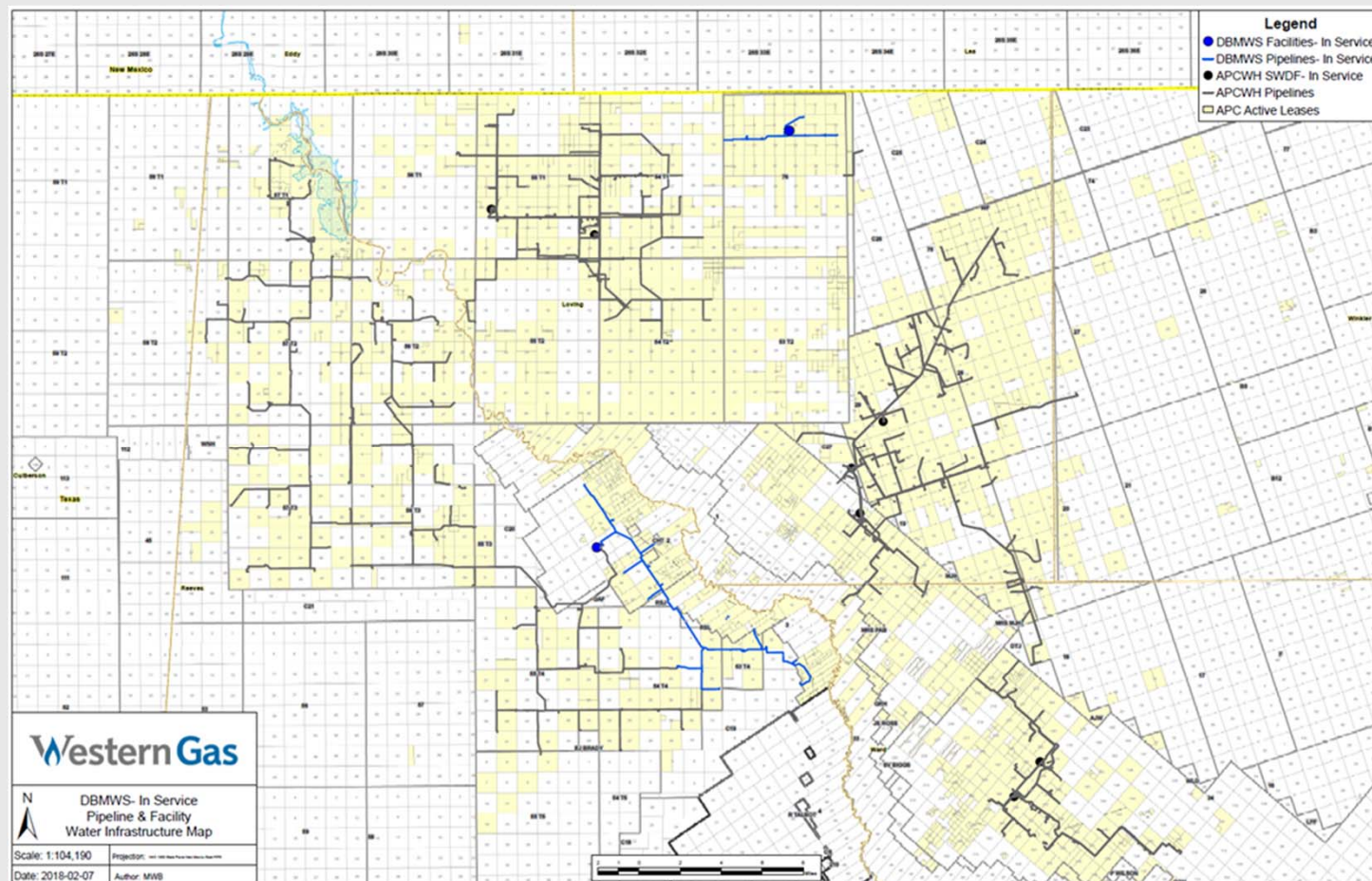
- ▶ Shared routes with oil/natural gas lines
- ▶ Lease obligation drilling
- ▶ Commitment to tankless wellsite facilities

Benefits

- ▶ Exceptional development flexibility
- ▶ Backup capacity and redundancy
- ▶ High facility utilization rates
- ▶ Strong platform for 3rd-party expansion

Challenges

- ▶ Expensive in the short term



Organizational Structure

Rationale

- ▶ Source water has upstream-type characteristics (demand driven by wells to-be-drilled)
- ▶ Produced water has midstream-type characteristics (demand driven by wells already drilled)

Benefits

- ▶ Midstream benefits from upstream expertise in subsurface (vital to subsurface injection)
- ▶ Keep the commercial value proposition clean, focused, and simple

Negatives

- ▶ Recycling requires good communication to bridge the midstream / upstream verticals

WTX Upstream Business Unit	APC Midstream / Western Gas / Delaware Basin Midstream
Water Sourcing for Completions / Drilling	Produced Water Gathering and Disposal
Midstream In-House Functions	Shared Functions with Upstream
Surface Land	Drilling
Production Engineering	Reservoir Technology Modelling
Geology	Regulatory / Permitting
Commercial	Seismology / Geophysics
Facilities Engineering	
Infrastructure Planning	
Construction	
Operations	



The Future of Almost Incomprehensible Challenges and Volumes



Future Anadarko
1,500,000 barrels per day
60 SWD wells



Future Industry
7,500,000+ barrels per day
300 SWD wells

► Water Volume Facts

- A 60 ft. stretch of 30 ft. high wave contains about 2,500 bbls of water
- Water parks require roughly 16,000 bbls to fill and 325 bbls/mo water replacement
- Lake Travis contains roughly 8.6 billion bbls of water



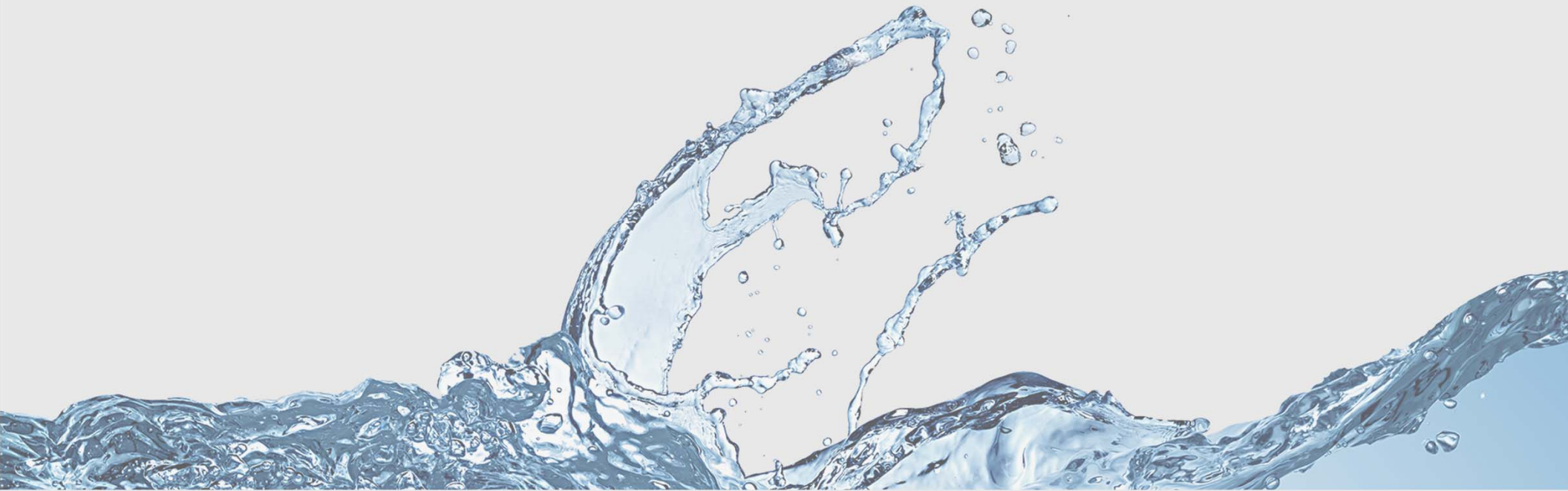
The Long-Term Questions for Produced Water Management

- ▶ **Where Will We Put it All? Where Can That Much Water Go?**
- ▶ **What are the Risks?**
- ▶ **What are the Costs of Our First Choice Options?**
- ▶ **What are the Costs of Our Contingency Options?**
- ▶ **At What Cost Does Investment Leave the Basin?**
- ▶ **What Resources Should We Put into Researching our Contingency Options?**
- ▶ **What are We Doing to Ensure Proper Use and Protection of Injection Capacity?**

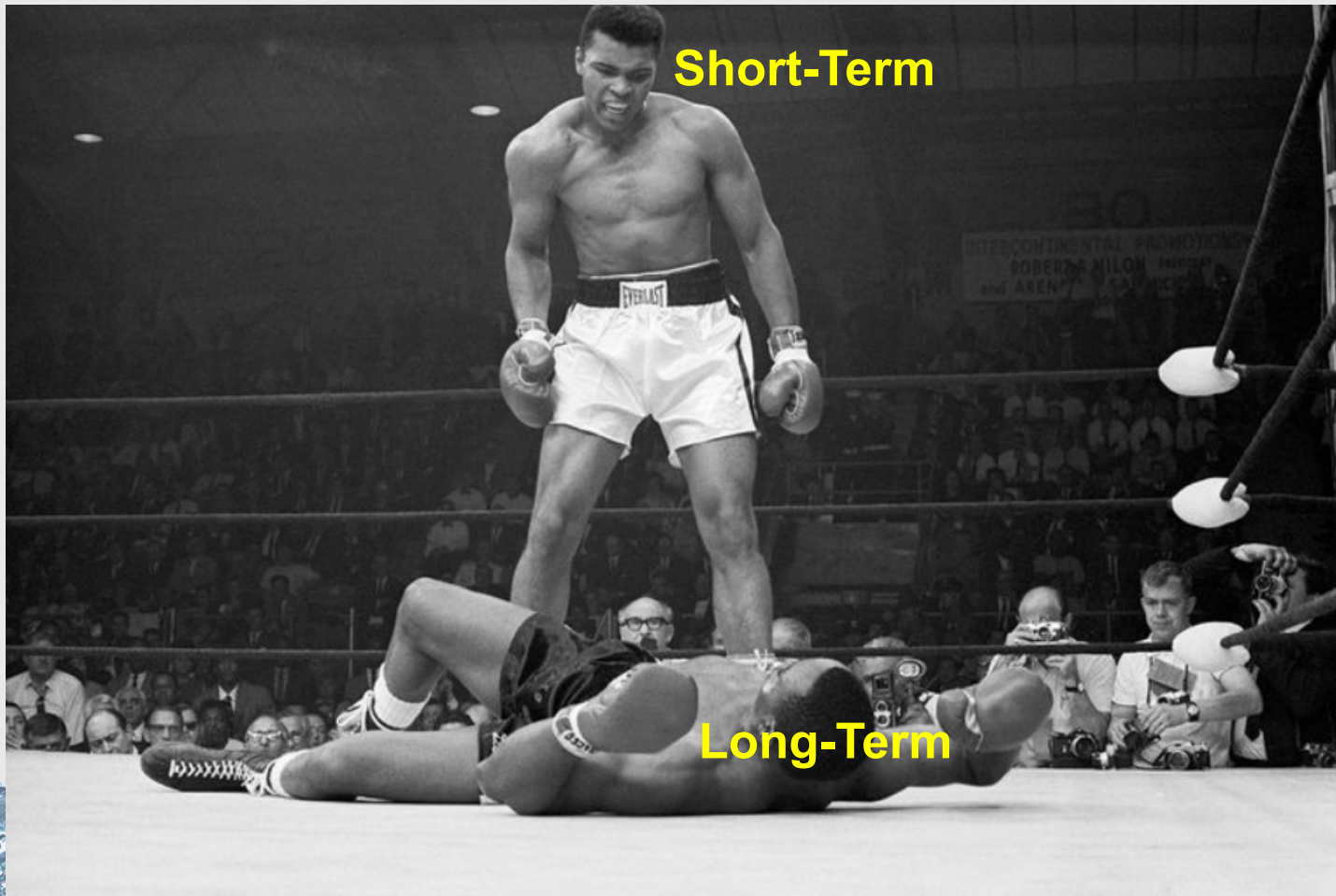


The Short-Term Questions for Produced Water Management

- ▶ What's the Fee?
- ▶ Will it be Operational when our Wells Come Online?



The Producer Challenge: Short-Term Questions Always Beat Long-Term Questions



For Example...

Service Fee Discount = \$0.05/bbl

Vs.

Significant Interruption in Service



Conclusion

- ▶ **Best of Both Worlds – Low Fee, 100% Long-Term Operational Certainty**
- ▶ **Low Fees and Reliability are Not Mutually Exclusive**
- ▶ **Acknowledge Legitimate Long-Term Risks to Preferred Disposal Options**
- ▶ **What Value do you Place on Practices and Research That Mitigate These Risks?**
- ▶ **What Penalty do you Apply to Practices that Ignore These Risks?**



Summary

- ▶ **Anadarko Experienced Evolution in Water Approach**
- ▶ **Produced Water Moved to Western Gas MLP as a Commercial Business**
- ▶ **Anadarko Infrastructure Design is a Result of its Unique Position and Constraints**
- ▶ **Planning for Extremely Large Quantities of Water in the Future**
- ▶ **Investing Significantly in Disposal Research and Optionality**
- ▶ **Water Injection is an Incredible Resource and Should be Used Responsibly**

