



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Susitna-WatanaHydro.org



Alaska Power Association
Sara Fisher Goad, executive director
Aug. 27, 2015

What Does the Future Hold?



Where We Are



- ✓ Study Plan Development
- Study Implementation Phase
- Impact Assessment
- Development of Protection, Mitigation and Enhancement Measures (PMEs)

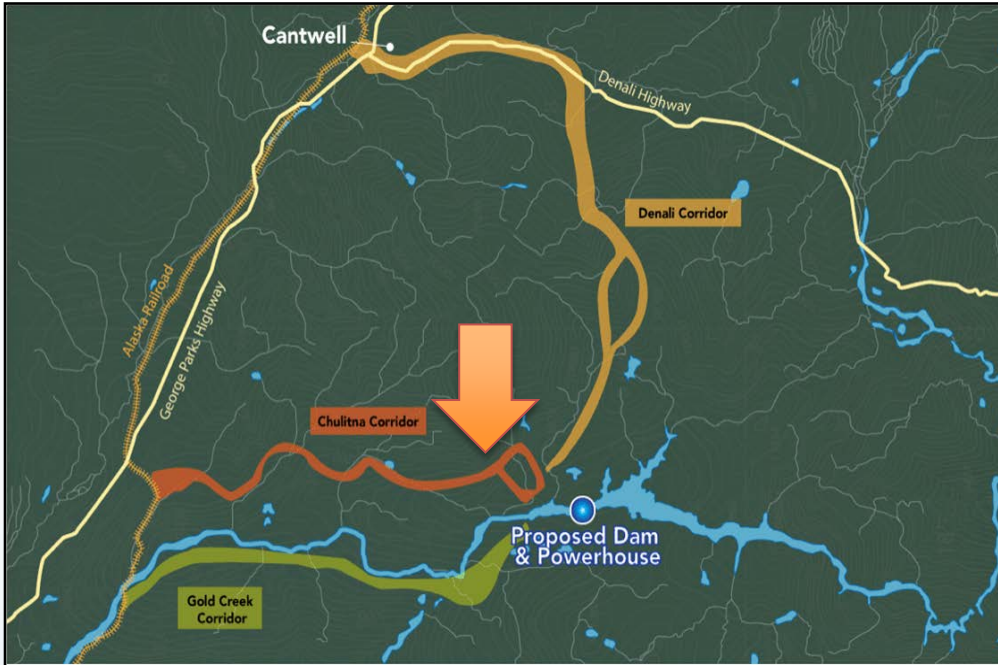
Technical Feasibility



Posted Engineering Feasibility Report (2014)

- Refined dam height to 705 feet
- Optimized Capacity while maintaining 2,800 GWh annual energy
- Drilling confirmed no active faults at the dam site (2014)

Refined Potential Access



- Eliminated the Chulitna road access potential route

Status of FERC Studies

- Completed 13 of 58 FERC-approved studies
- Filed Initial Study Report (2014)
- Filed 32 technical memorandums on 2014 environmental study results
- Administrative Order 271 “paused” ILP process
- Resuming ILP with ISR meetings in 2016



Emissions Reductions

- Susitna-Watana Hydro would displace an estimated 1.3 million metric tons of CO2 annually
- In 2015, Renewable Energy Fund projects are expected to displace 200,000 metric tons of CO2 emissions

Susitna-Watana Hydro would decrease Alaska electric generation emissions by 42%

Average Annual Flow Contributions

Susitna River at Watana Dam $\approx 16\%$

Ungaged Tributaries $\approx 4\%$
Watana Dam to Gold Creek

Chulitna River $\approx 18\%$

Ungaged Tributaries $\approx 4\%$
Gold Creek to Sunshine

Talkeetna River $\approx 8\%$

Ungaged Tributaries $\approx 10\%$
Sunshine to Susitna Station

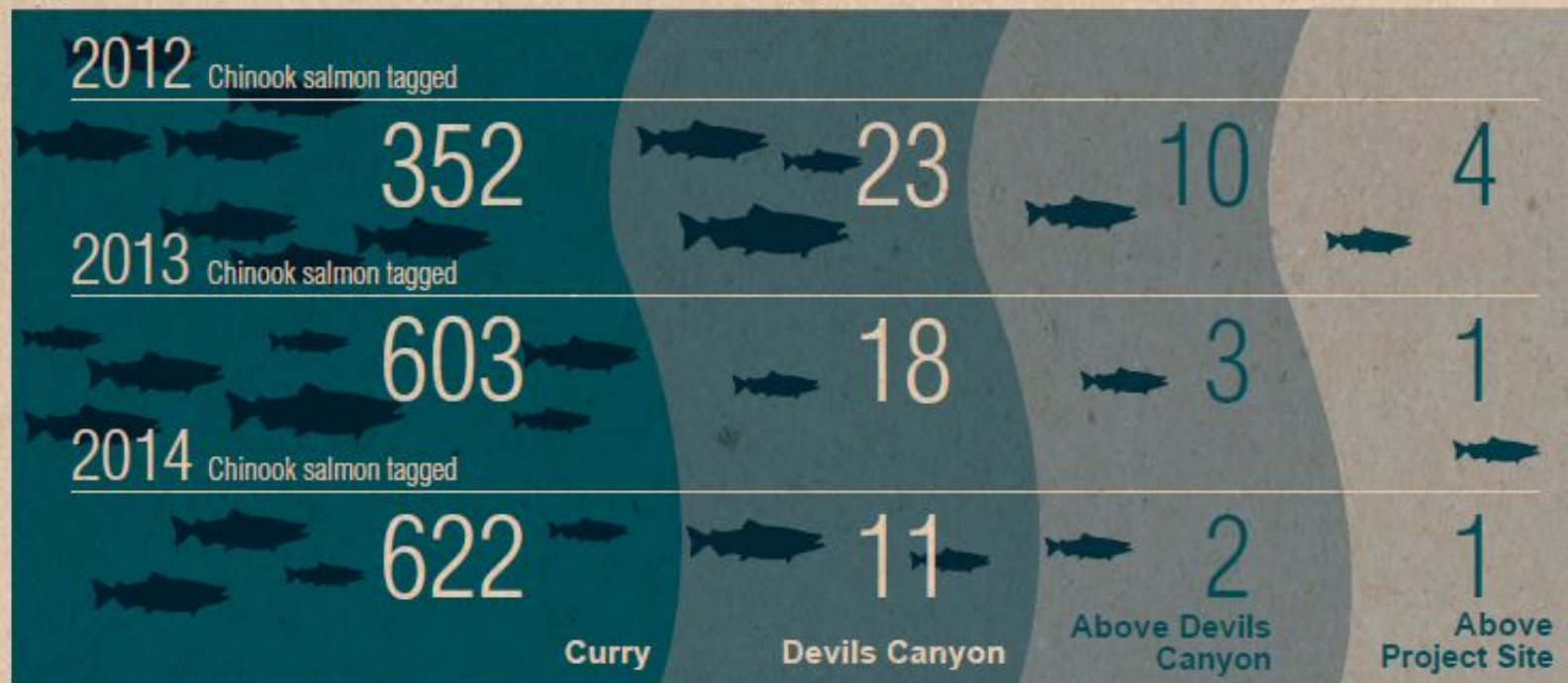
Yentna River $\approx 40\%$

Susitna River at Susitna
Station $\approx 100\%$

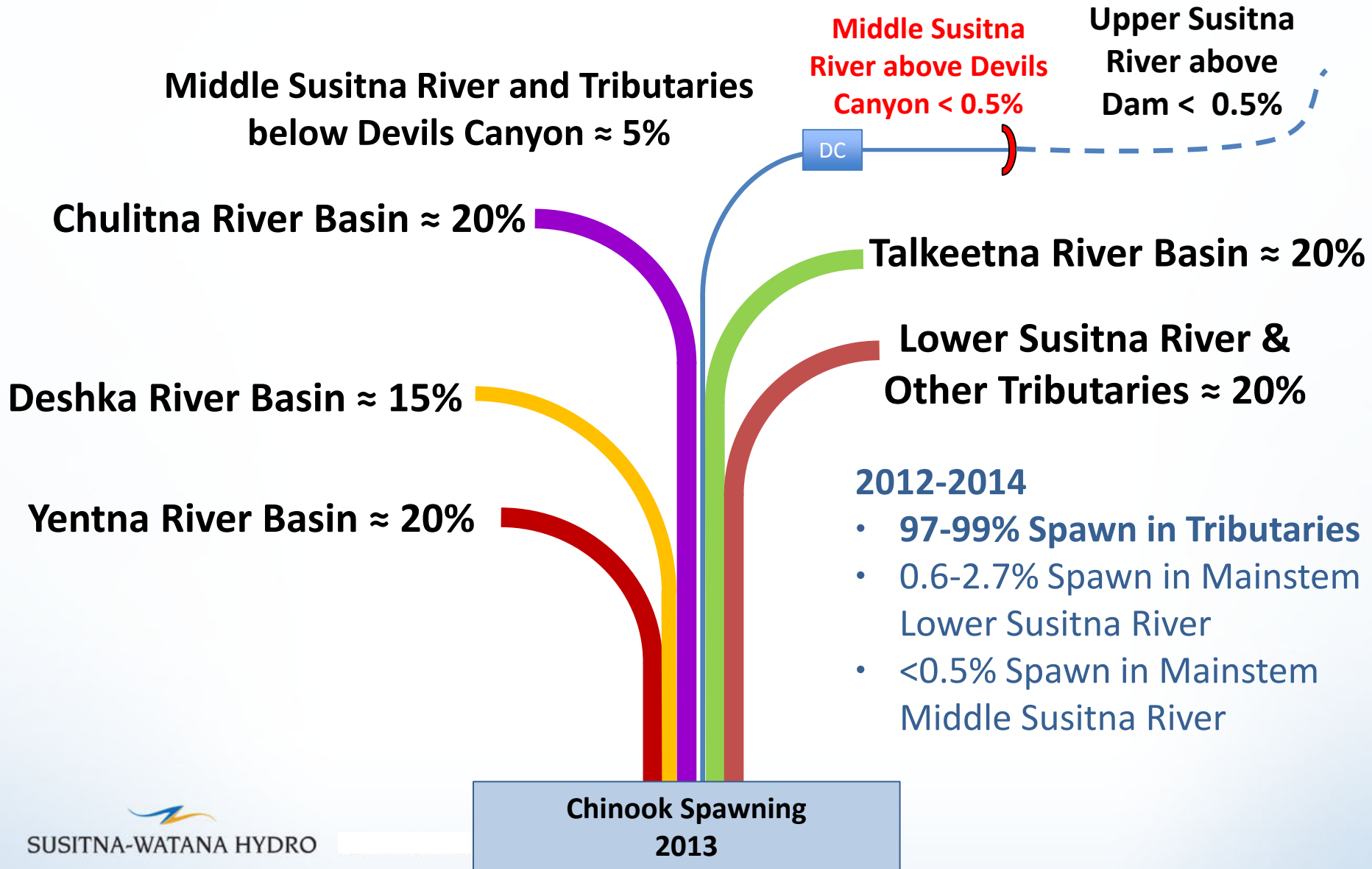
Chinook by the Numbers

Tagged Chinook Salmon and Devils Canyon

Only one salmon species has been documented within 30 miles of the project site.



2013 Chinook Salmon Spawning Distribution by Basin



2013 Coho Salmon Spawning Distribution by Basin

Middle Susitna River
below Devils Canyon ≈ 5%

Susitna River Above
Devils Canyon = 0

Chulitna River Basin ≈ 15%

Talkeetna River Basin ≈ 5%

Deshka River Basin ≈ 10%

Lower Susitna River &
Other Tributaries ≈ 20%

Yentna River Basin ≈ 45%

2012-2014

- 93-97% Spawn in Tributaries
- 2.8-6% Spawn in Mainstem Lower Susitna River
- <0.5% Spawn in Mainstem Middle Susitna River

Administrative Order

- Administrative Order 271 issued Dec. 2014
 - Stopped discretionary spending on six large projects, including Susitna-Watana Hydro
 - Reduced scope of work focused on wrapping up studies and contractual obligations

Administrative Order

- Clarifying memo received July 2015
 - Clarified “discretionary spending” to include advancing project to next milestone
 - Project will be re-evaluated under current fiscal climate

Appropriations	Dollars Spent	Remaining Funds	Encumbered Funds <i>(committed against the remaining funds balance)</i>
\$192 million	\$172 million	\$20 million	\$9.5 million

What's Next?

- Advance the project to the FERC Study Plan Determination (2016)
- Preserve the value of data collected
 - Archiving online to allow access for Alaskans
 - Wrapping up studies
 - Synthesizing data
- Approximately \$103 million needed to advance to FERC license application

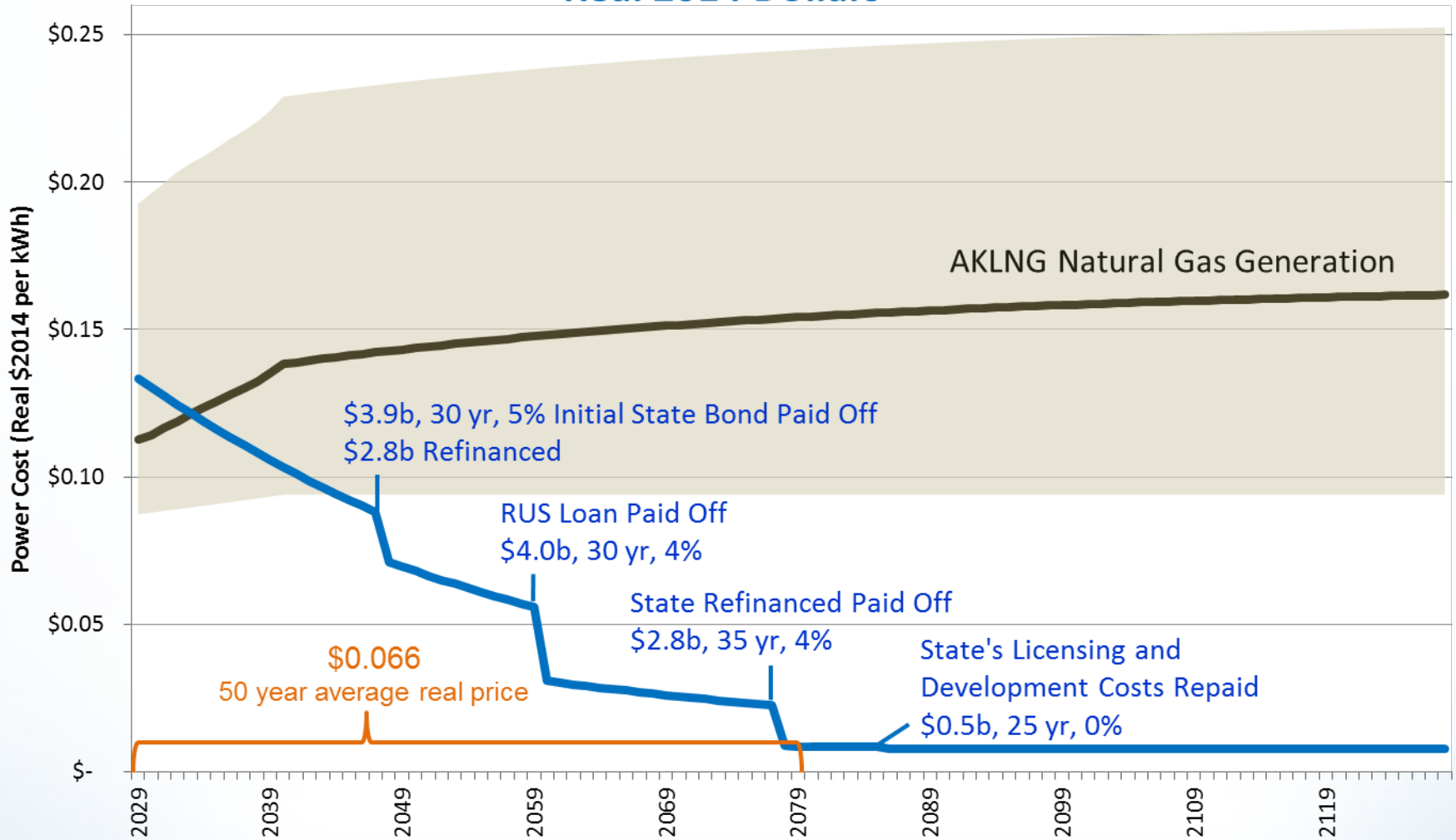
Providing Economic Value

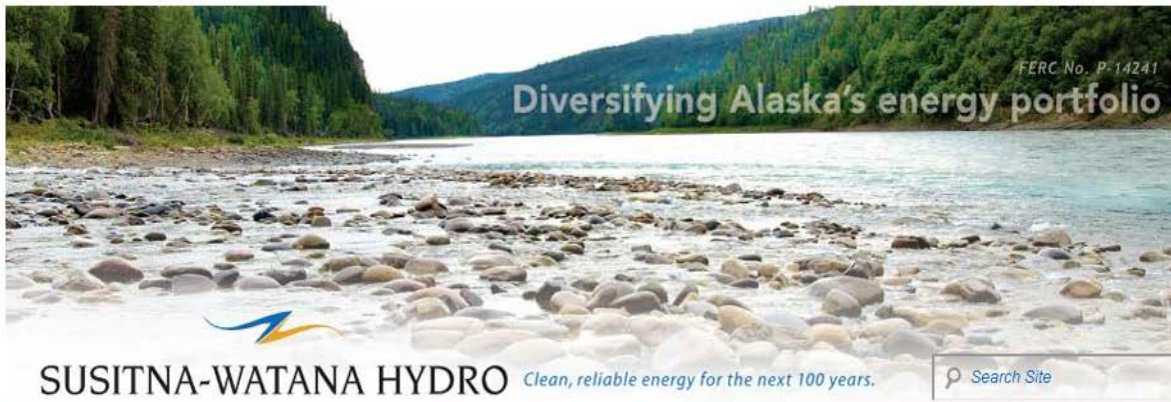
Susitna-Watana Hydro would provide billions of dollars in energy savings for the Alaska Railbelt

- \$11.2 billion in energy savings during first 50 years
- 5,000 preconstruction and non-construction direct jobs (2010-2028)
- 12,000 direct overall construction workforce
- 1,155 peak construction workforce expected in 2025
- \$2.6 billion in direct local spending during construction

Susitna-Watana vs. Natural Gas Power Costs

Real 2014 Dollars





[Home](#) |
 [Project](#) |
 [Study Plan](#) |
 [FAQ](#) |
 [Documents](#) |
 [Meetings](#) |
 [News](#) |
 [Contact](#) |
 [Why Hydro?](#)



Project Highlights

Location: River mile 184, above Devils Canyon
Size: 750-foot high dam

Reservoir: 41-miles long, 2-miles wide (at widest)

Estimated Supply: Nearly 50 percent of Railbelt electrical demand

Installed Capacity: 600 MW

Annual Energy: 2,800,000 MWh

Licensing: Federal Energy Regulatory

Susitna-WatanaHydro.org

