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Chair  
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## Northwest **Power** and **Conservation** Council

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Montana

**Ginny Burdick**  
Oregon

**Louie Pitt, Jr.**  
Oregon

April 5, 2022

### **MEMORANDUM**

**TO: Council Members**

**FROM: Patty O'Toole**

**SUBJECT: The Columbia River Inter-Tribal Fish Commission's 2022 Energy Vision for the Columbia River Basin**

### **BACKGROUND:**

**Presenters:** Aja DeCoteau, Executive Director; Rob Lothrop, Policy Department Manager; Christine Golightly, Policy Analyst; Paul Ward, Intergovernmental Affairs Director; Columbia River Inter-Tribal Fish Commission; and Ed Sheets, President, Ed Sheets Consulting

**Summary:** Representatives of the Columbia River Inter-Tribal Fish Commission will present their updated *Energy Vision for the Columbia River Basin*.

**Relevance:** The Columbia River Inter-Tribal Fish Commission's 2022 Energy Vision contains detailed near-term and longer-term recommendations for the region's electrical power system, including hydrosystem operations and system configuration thus relating closely to the Council's 2021 Power Plan and the hydrosystem operations portion of the Council's 2014/2020 Columbia River Fish and Wildlife Program.

**Workplan:** Program Planning and Policy, A. Coordination

**Background:** The Columbia River Inter-Tribal Fish Commission was created by the Nez Perce, Umatilla, Warm Springs, and Yakama tribes in 1977. CRITFC provides technical, policy coordination and enforcement services to the





# COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

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April 4, 2022

Guy Norman, Chair  
Northwest Power and Conservation Council  
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Portland, Oregon 97204  
gnorman@nwcouncil.org

Dear Chair Norman:

Since 1977, the Columbia River Inter-Tribal Fish Commission (CRITFC) has worked on behalf of its four member tribes to protect their treaty-reserved rights. To support that mission, CRITFC spent the last year developing its *2022 Energy Vision for the Columbia River Basin*. The 2022 Energy Vision provides an update to the vision developed by the Commission in 2003 and its 2013 update. The 2003 Energy Vision was developed in response to the West Coast energy crisis of 2001, which caused curtailments of ESA protections for salmon migrating through the Federal Columbia River Power System.

CRITFC and its member tribes envision a future where the Columbia Basin electric power system supports healthy and harvestable fish and wildlife populations; protects tribal treaty and cultural resources; and provides clean, reliable, and affordable electricity. The 2022 Energy Vision addresses the recent dramatic changes in Columbia Basin salmon populations and the West Coast energy planning environment and provides 43 energy-related recommendations intended to protect the tribes' treaty-secured fish, wildlife, cultural, and other resources. CRITFC staff met several times with Council staff during the Vision's development.

The *2022 Energy Vision for the Columbia River Basin* was approved by the CRITFC Commission in February 2002. We enclose a prepublication final version of the Vision for the Council's review. The Vision includes the following 11 recommendations for the Northwest Power and Conservation Council to implement. We look forward to discussing these and the full 2022 Energy Vision with you, the other Council Members and your staff.

Recommendation 1: The region should prepare to implement river restoration, dam configurations and river operations that are compatible with, and support, healthy and harvestable fish populations as detailed in [Section 3.1] and Appendix C. These recommendations include breaching the four lower Snake River dams, spill operations at run of river dams, flow related operations at storage dams, structural modifications to aid salmon and lamprey passage, needed maintenance, flood control studies, actions to improve water temperatures, and capability for lower Snake River dam breaching.

Recommendation 4: The Council, BPA, and utilities should include the peak savings and reductions in transmission and distribution benefits in calculating the capacity value of energy efficiency programs.

Recommendation 10: The Council, BPA, and utilities should fund the incremental costs of heat pump water heaters to stimulate the adoption of this technology.

Recommendation 15: The Council and utilities should not pursue potential pumped storage sites unless they are consistent with the siting criteria described in Section 3.6.

Recommendation 16: Utilities and the Council should continue to monitor green hydrogen technologies.

Recommendation 17: The Council should increase the conservation targets in the 8th Power Plan to maintain at least the level of activity called for in the 7th Plan and work with BPA and utilities to try to exceed the targets.

Recommendation 18: The Council should monitor the implementation of energy efficiency programs to ensure that utilities meet the conservation targets.

Recommendation 22: Congress, state legislatures, the Council, and public utility commissions should review programs to reduce greenhouse gases to avoid unintended consequences.

Recommendation 23: The Council should analyze the integration of renewable resources under a range of scenarios for river operations.

Recommendation 28: The Council, Northwest legislatures, energy regulators, and utilities should consider adopting zero net energy building standards.

Recommendation 30: The Council, BPA, and utilities should continue to monitor and support other promising renewable resources.

The recommendations identified in CRITFC's 2022 Energy Vision will allow for a healthier environment for fish resources and provide better protection against unforeseen events, such as drought or other extreme weather that affect the environment and energy systems. CRITFC and its member tribes are committed to working with other regional interests to lead the region to this brighter and healthier future.

We look forward to working with the Northwest Power and Conservation Council on how to track implementation of the Energy Vision recommendations by you and others.

Sincerely,



Aja K. DeCoteau  
Executive Director

Enclosure: 2022 Energy Vision for the Columbia River Basin (v. prepublication final)

# **ENERGY VISION FOR THE COLUMBIA RIVER BASIN**

PRESENTATION TO  
NORTHWEST POWER AND  
CONSERVATION COUNCIL  
MARCH 13, 2022



# THE PACIFIC NORTHWEST IS FACING FOUR CRITICAL ISSUES



**Climate crisis  
already  
underway**



**Salmon at risk  
of extinction.**



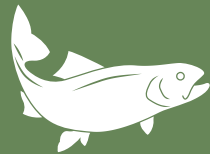
**Push for quick  
transition to  
carbon-free  
energy**



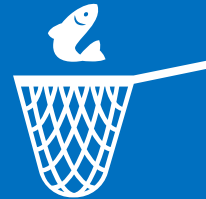
**Bad energy  
planning can  
make things  
worse for  
salmon**

# VISION

CRITFC and its member tribes envision a future where the Columbia Basin electric power system:



**Supports healthy  
and harvestable  
fish and wildlife  
populations**



**Protects tribal  
treaty and  
cultural  
resources**



**Provides clean,  
reliable, and  
affordable  
electricity**

# GOAL 1

Create a **regional energy portfolio** that protects and enhances environmental quality, treaty protected resources, and supports the restoration of Columbia Basin's fish and wildlife to healthy and harvestable population levels.





## GOAL 2

**Prevent new and reduce ongoing damage** to Columbia River Basin resources, including fish, wildlife, water quality, and tribal cultural resources, by recognizing the relationships and interdependencies of natural and built systems including the Northwest's energy system.



# GOAL 3

Provide increased **protection for both fish and wildlife and utility customers against unanticipated events**, such as drought, fire and market aberrations while providing an adequate, economical, and reliable electric supply.



# GOAL 4

Mitigate climate change impacts to protect Northwest ecosystems by replacing fossil-fuel electric generation and reducing the reliance on fossil-fuels for power, transportation, and other uses.



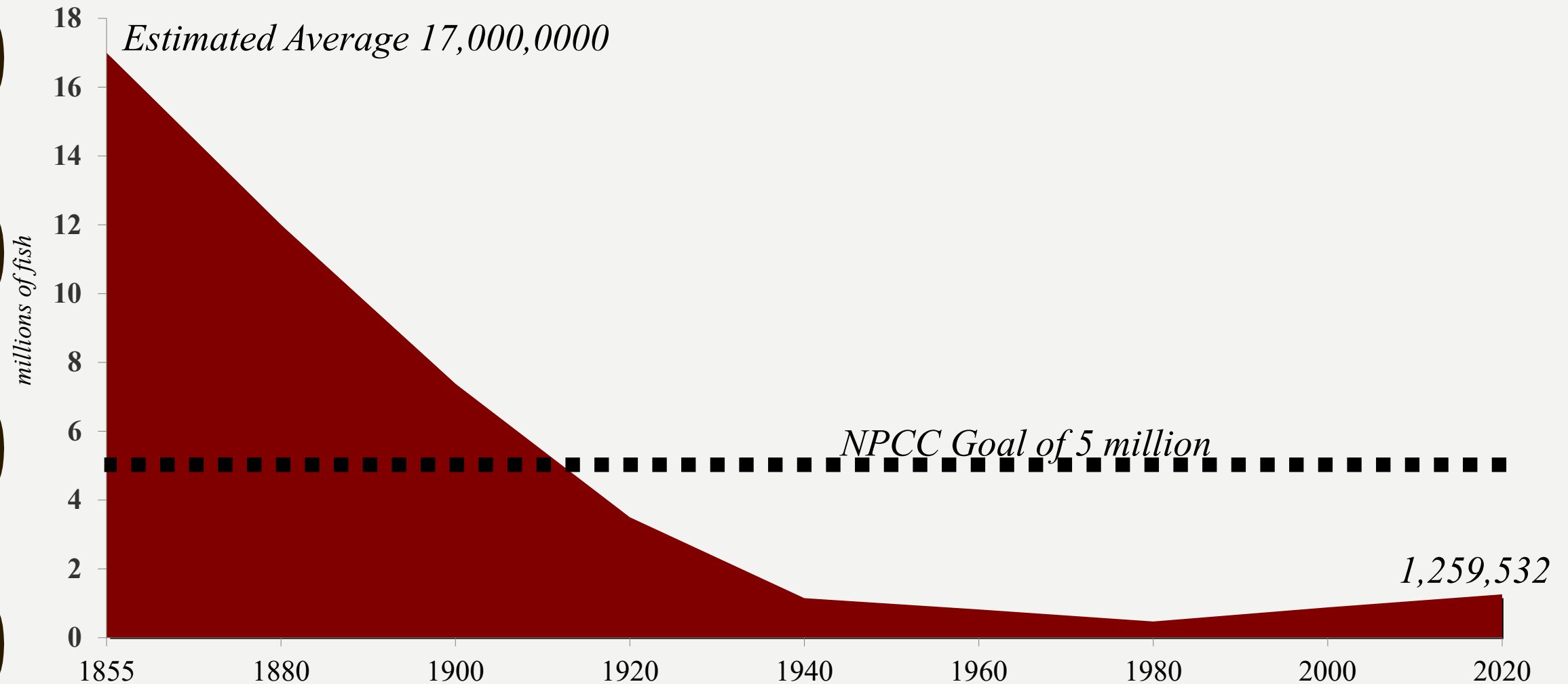
# **SALMON POPULATIONS CONTINUE TO DECLINE**

Energy Vision describes:

- The crisis facing salmon and steelhead populations
- Salmon protections that have been weakened or eliminated
- The need to plan for near-term and long-term changes in the configuration and operation of the dams

# SALMON DECLINE

**Returning Columbia River salmon (chinook, steelhead, sockeye, coho)**



*1855: NPCC historical run extrapolation estimate; 1880-1920 data points extrapolated from Columbia R cannery output; 1940-present: dam counts & river mouth estimates*

# SIGNIFICANT NW ENERGY SYSTEM CHANGES ALREADY IN PROGRESS

Stricter policies and standards

State greenhouse emissions policies and standards and federal programs

Coal phase out

- ▼ 6,000 MW announced by 2028
- ▼ Another 2,700 MW by 2037

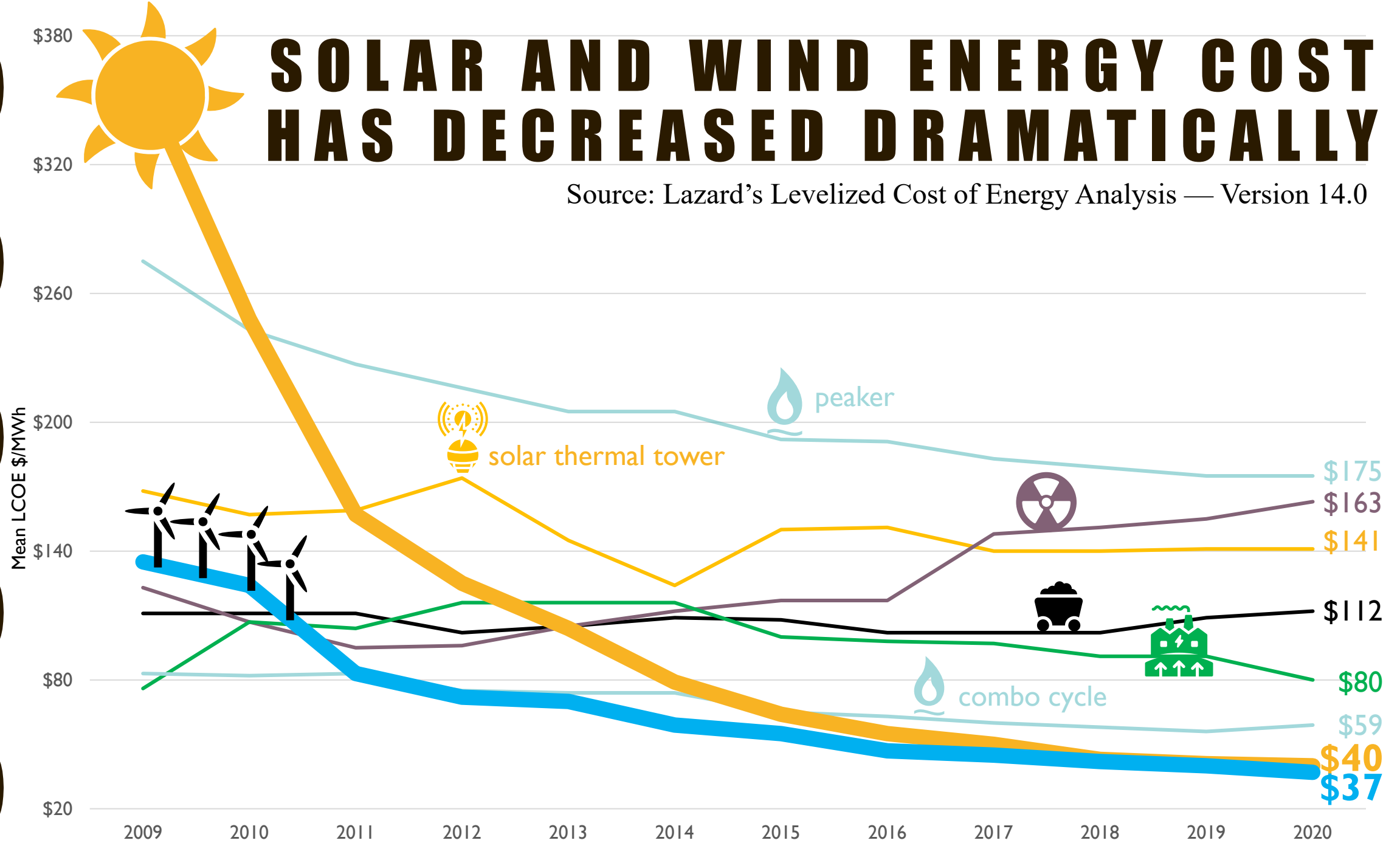
Energy efficiency

-  1,800 MW since 2013
-  > 7,000 MW since 1978
-  Saved consumers \$70 billion

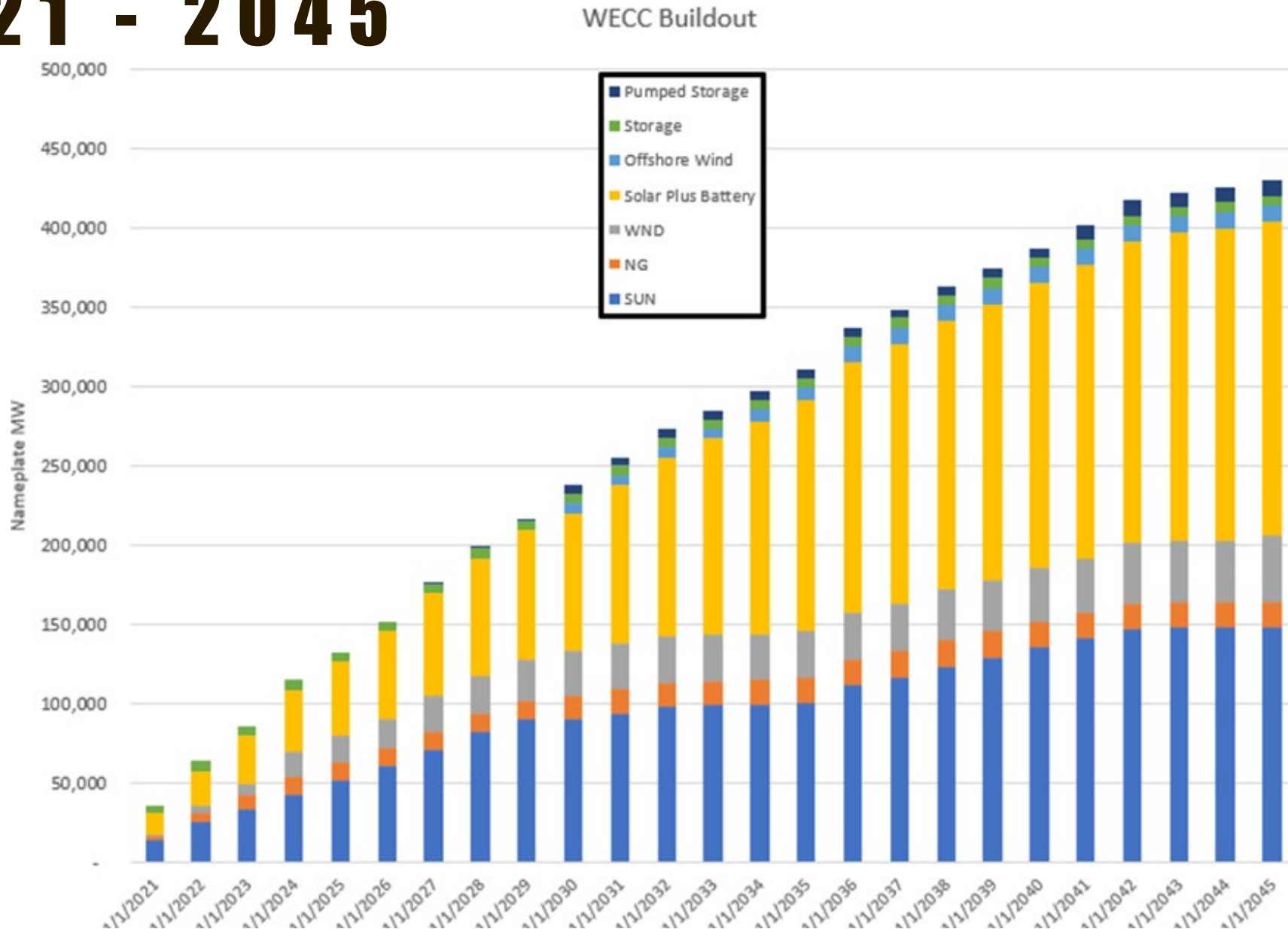
Electricity adequacy issues

# SOLAR AND WIND ENERGY COST HAS DECREASED DRAMATICALLY

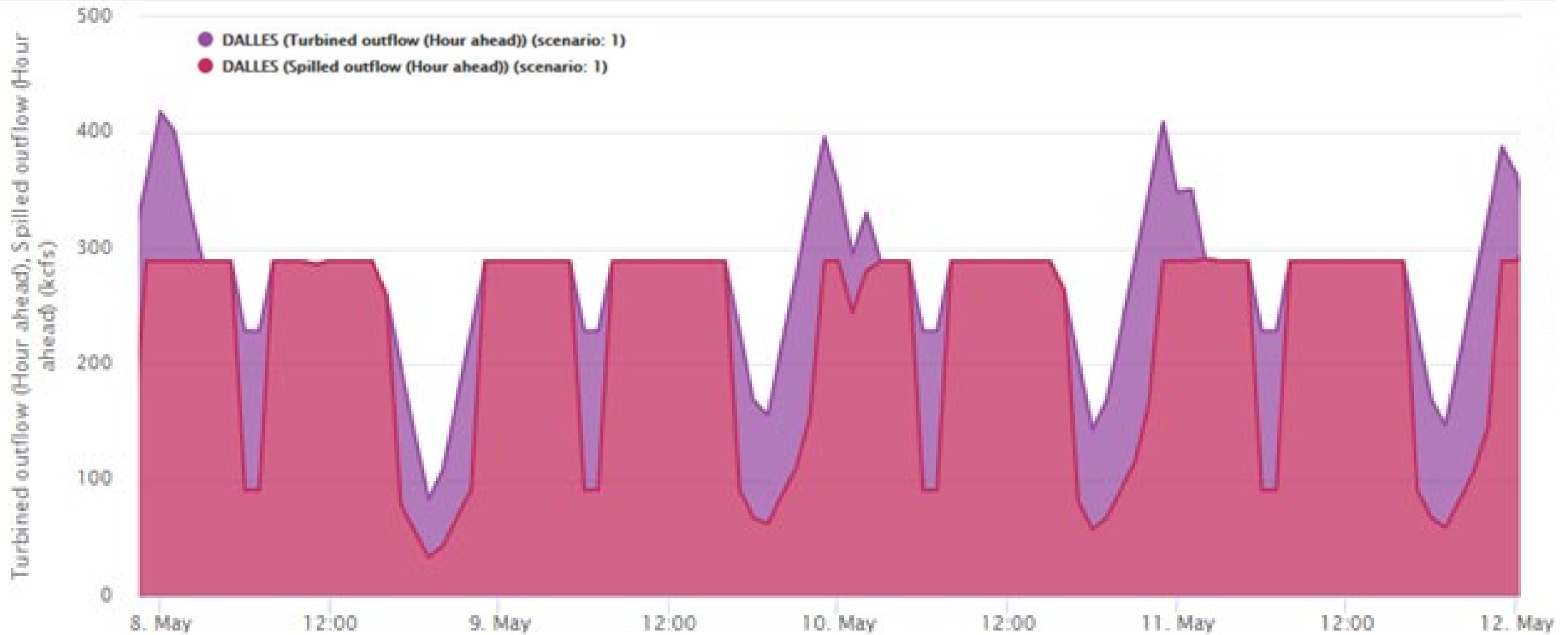
Source: Lazard's Levelized Cost of Energy Analysis — Version 14.0



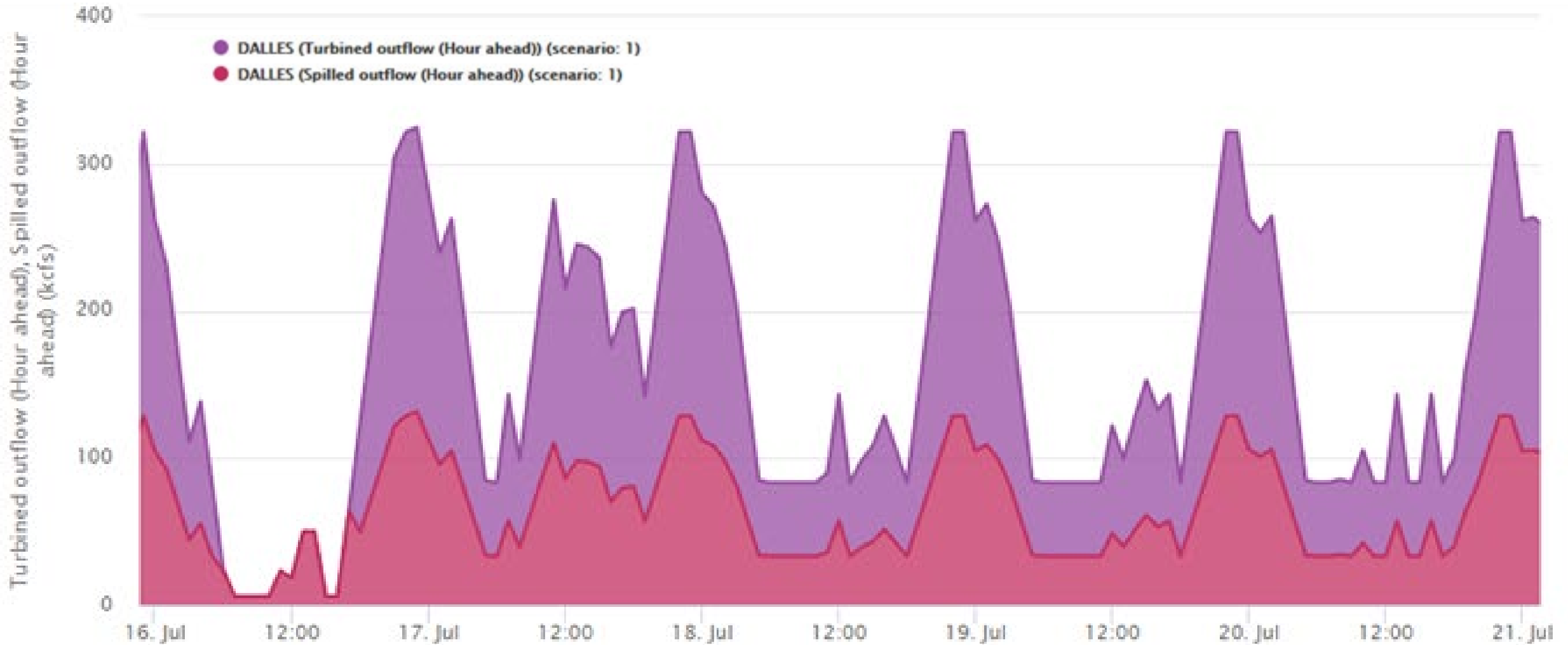
# UTILITY PLANS FOR RENEWABLES 2021 - 2045







# 2023 FLOWS AT THE DALLES DAM



# 2032 FLOWS AT THE DALLES DAM

# NEED TO REDUCE TRANSMISSION AND DISTRIBUTION COSTS

- Energy Vision found that BPA and four largest utilities spent more than **\$8 billion** on transmission and distribution costs from 2016-2020
- Transmission lines **damage tribal resources**
- Recommendations in the Energy Vision would **reduce the need** for new transmission and distribution lines—reducing costs and damages
  - Energy efficiency
  - Energy storage
  - Demand management
  - On-site solar systems



# SUMMARY OF 43 ENERGY VISION RECOMMENDATIONS



Improve River Configuration & Operations



Amend the Columbia River Treaty



Reduce Peak Loads



Maximize Energy Efficiency



Harness Renewable Resources



Strategically Site Renewable Resources



Increase Resource Adequacy



Minimize Transmission & Distribution System Costs



Address the Climate Crisis

# RECOMMENDATIONS

## ENERGY PRODUCTION OFF THE BACKS OF SALMON



Improve  
River  
Configuration  
& Operations

The region needs to plan for **changes to reduce the damage** to migrating salmon and steelhead caused by the Columbia Basin dams, including breaching the four lower Snake River dams.



Amend the  
Columbia  
River Treaty

Amend the treaty to include **protections for fish and wildlife** and expand the scope to include win-win opportunities to integrate renewable resources.



Increase  
Resource  
Adequacy

Avoid electricity shortages which **can reduce protections and funding** for fish and wildlife.

# RECOMMENDATIONS

# SHIFT TO CARBON-FREE ENERGY



Address the  
Climate  
Crisis

Reduce greenhouse gas pollution and continue to increase energy efficiency to try to avoid the devastating effects we are facing.



Maximize  
Energy  
Efficiency

Energy efficiency measures have saved consumers over \$70 billion and are positive for fish and wildlife.



Harness  
Renewable  
Resources

Renewable resources in combination with batteries and electric load management can create an environment that is better for fish and wildlife and other tribal resources.

# RECOMMENDATIONS

## REDUCE PEAK LOADS



Reduce Peak  
Loads

**Peak Loads Hurt Salmon and Consumers.** Peak loads kill salmon. They cause big fluctuations in rivers during salmon migration and damage habitat. They also hurt consumers. They are often served by expensive resources and transmission and distribution lines.

**Reduce Peak Demands.** Utilities should shift the heating and cooling of buildings and water heating out of peak times.

**Pricing Transparency.** Utilities and utility commissions should provide clear price signals on the costs of serving peak loads.

**Smart Charging.** Utilities and automakers should ensure that electric cars charge during off-peak periods.

# RECOMMENDATIONS

## THE RIGHT ENERGY AT THE RIGHT PLACE



Strategically Site  
Renewable  
Resources

Develop a **regional plan for where renewable resources should be developed**, and where they should **not**, and to provide expeditious siting with clear and uniform standards across all political subdivisions.



Minimize  
Transmission  
& Distribution  
System  
Costs

Siting renewable resources **near existing transmission lines or close to electricity loads** will reduce costs for consumers and damage to tribal resources.



Harness  
Renewable  
Resources

**Expand on-site solar systems** to provide reliability and cost benefits to consumers and reduce the need for new resources and power lines that damage habitat and other tribal resources.



# PROCESS TO DEVELOP 2022 ENERGY VISION

CRITFC staff worked with staffs from member tribes to update 2013 Energy Vision

Engaged six energy experts in preparing the Energy Vision

Drafts were reviewed by 28 organizations and outside experts

Ongoing review by tribal staffs from June 2021 to January 2022

Periodic briefings to state energy planning bodies

Adopted by CRITFC February 2022