

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

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NWEC FALL CONFERENCE – NOV 17, 2022





# COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

Combined ceded area:

- 66,591 square miles
- More than 25% of the entire Columbia Basin
- 55% of the rivers and streams that are still accessible to salmon
- Includes almost all of the salmon habitat above Bonneville Dam



# **FATE OF SALMON INTERTWINED WITH THE HYDROPOWER SYSTEM**

**OXBOW DAM ACCIDENTAL FISH  
KILL, 1958.**



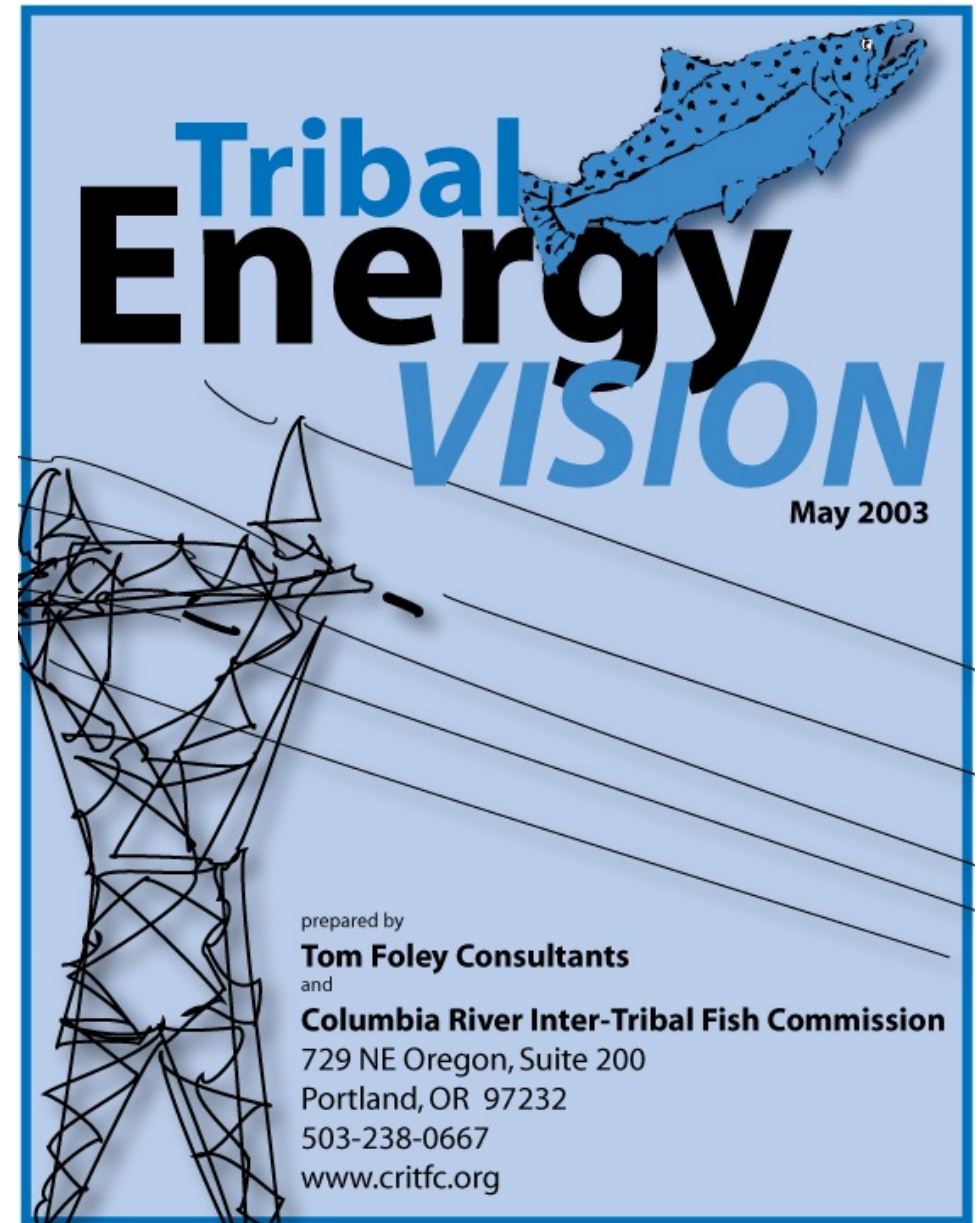


# 2003 TRIBAL ENERGY VISION

Recommendations to avoid another energy shortage that **damaged fish and wildlife and the economy**.

Prompted by the 2001 NW power shortage that:

- Cost BPA's consumers **\$4B**
- Resulted in BPA **eliminating protection measures** for salmon migrating through the dams
- **Cut funding** for fish and wildlife restoration programs



# 2013 ENERGY VISION UPDATE

Focused on **reducing hydroelectric dam impacts on salmon** populations and decreasing costs for consumers

- Strategies to **reduce peak demands**, which harm salmon and cost consumers hundreds of millions of dollars to operate expensive resources and expand transmission and distribution systems.
- Identified additional **energy efficiency actions** that could save hundreds of millions of dollars



# 2022 TRIBAL ENERGY VISION

Focused on addressing four interconnected and critical issues:



**Climate crisis  
already  
underway**



**Salmon at risk  
of extinction.**



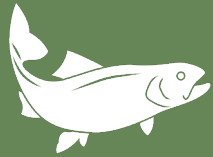
**Push for quick  
transition to  
carbon-free  
energy**



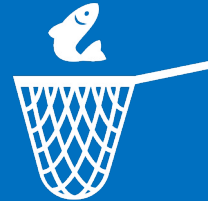
**Bad energy  
planning can  
make things  
worse for  
salmon**

# VISION

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



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



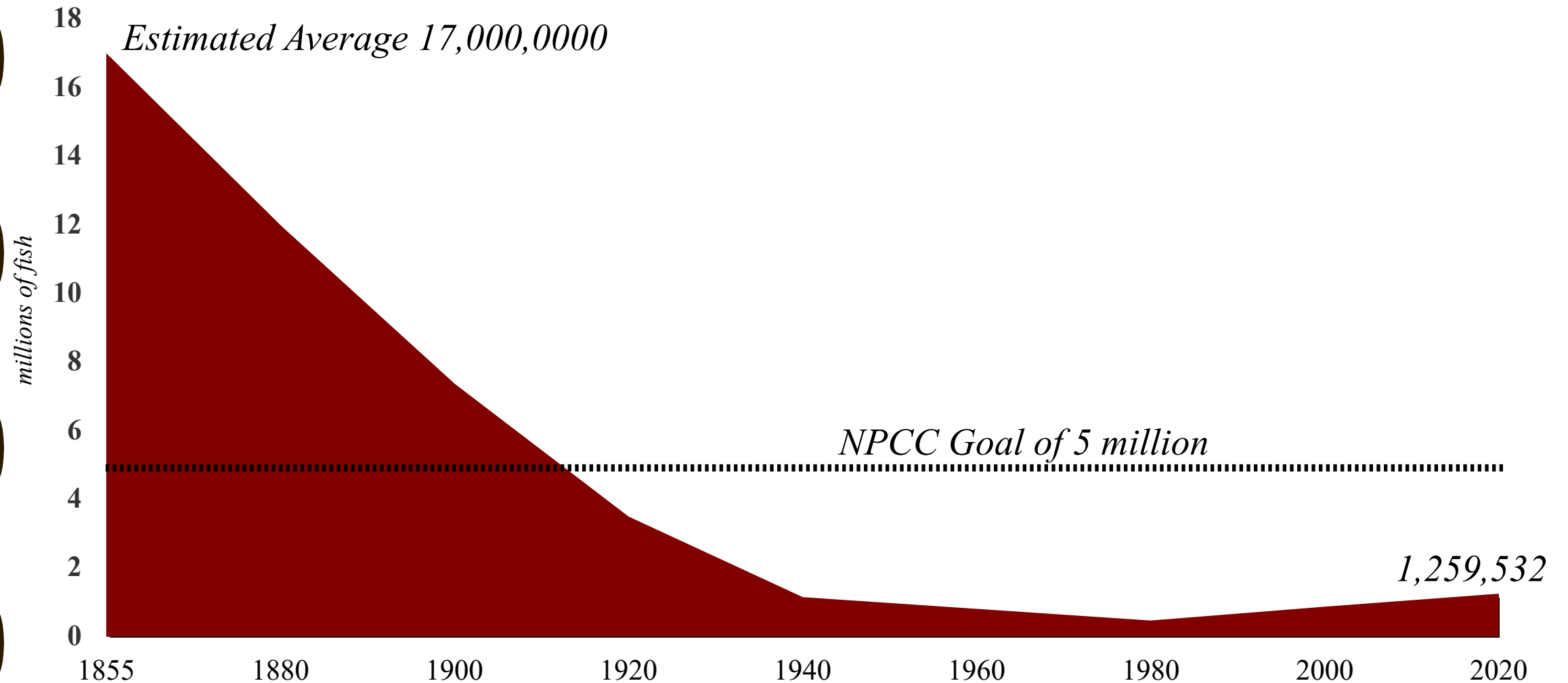
**Protects tribal  
treaty and  
cultural  
resources**



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

# 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

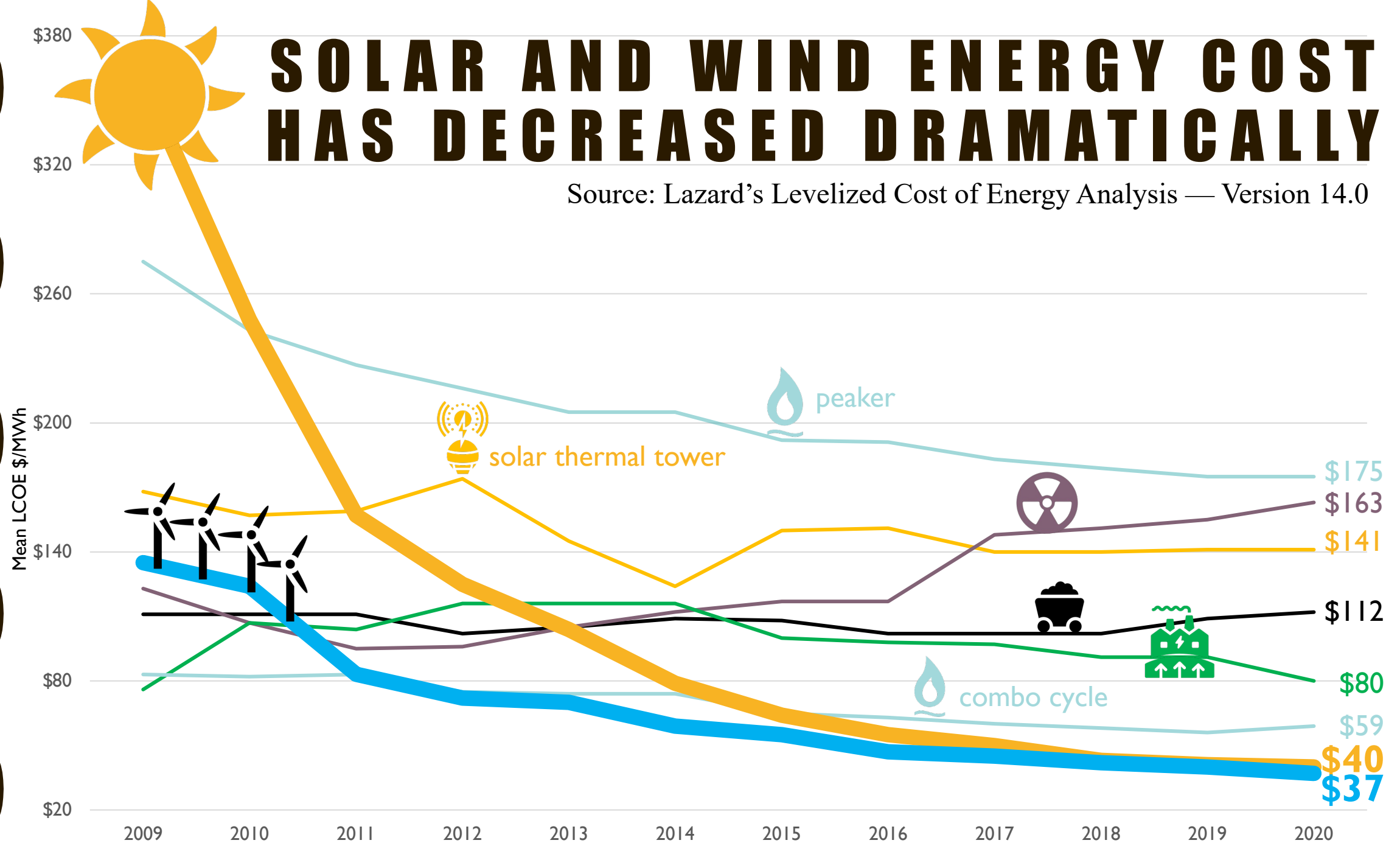
## Energy efficiency

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

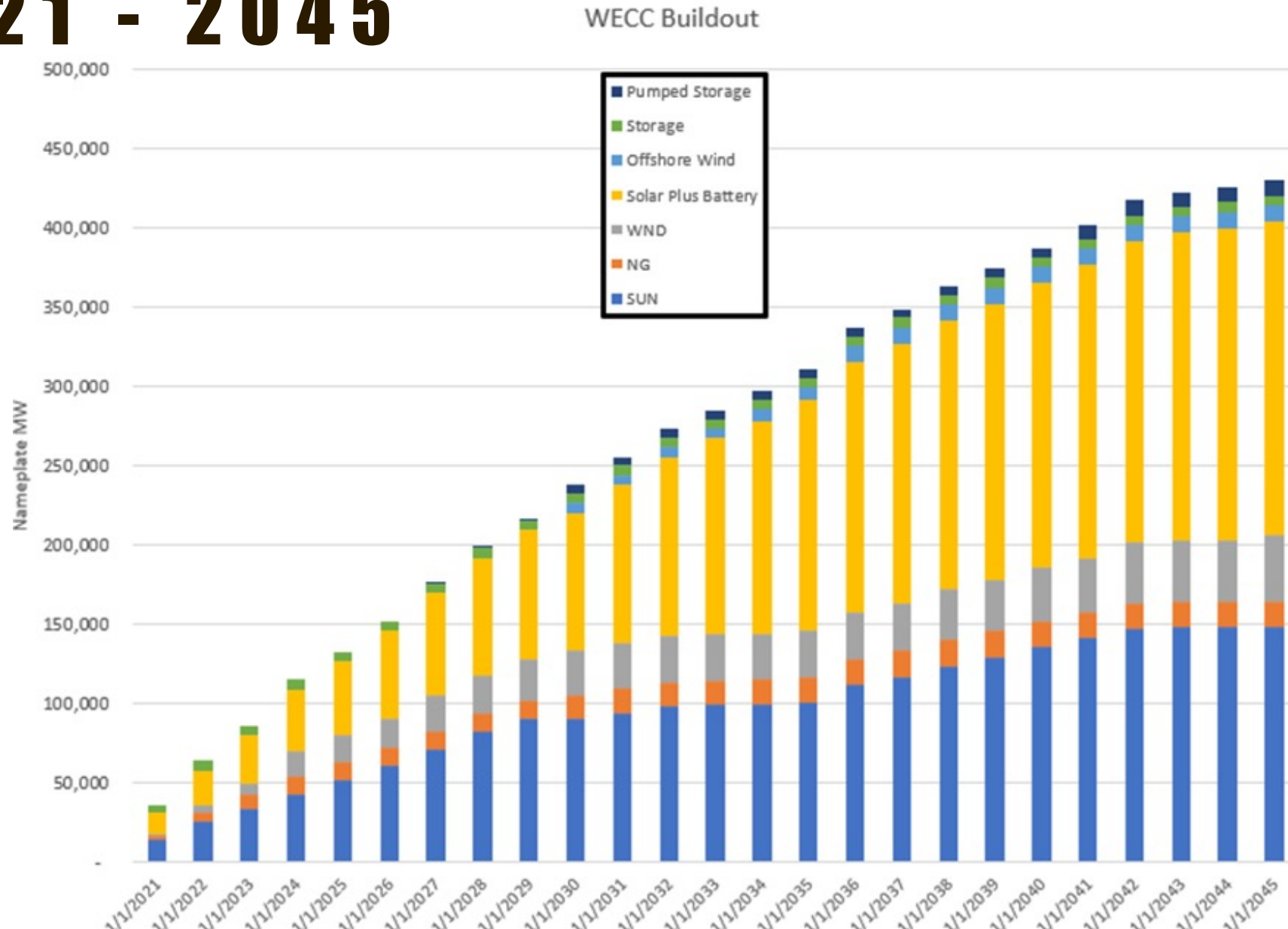
## Electricity adequacy issues

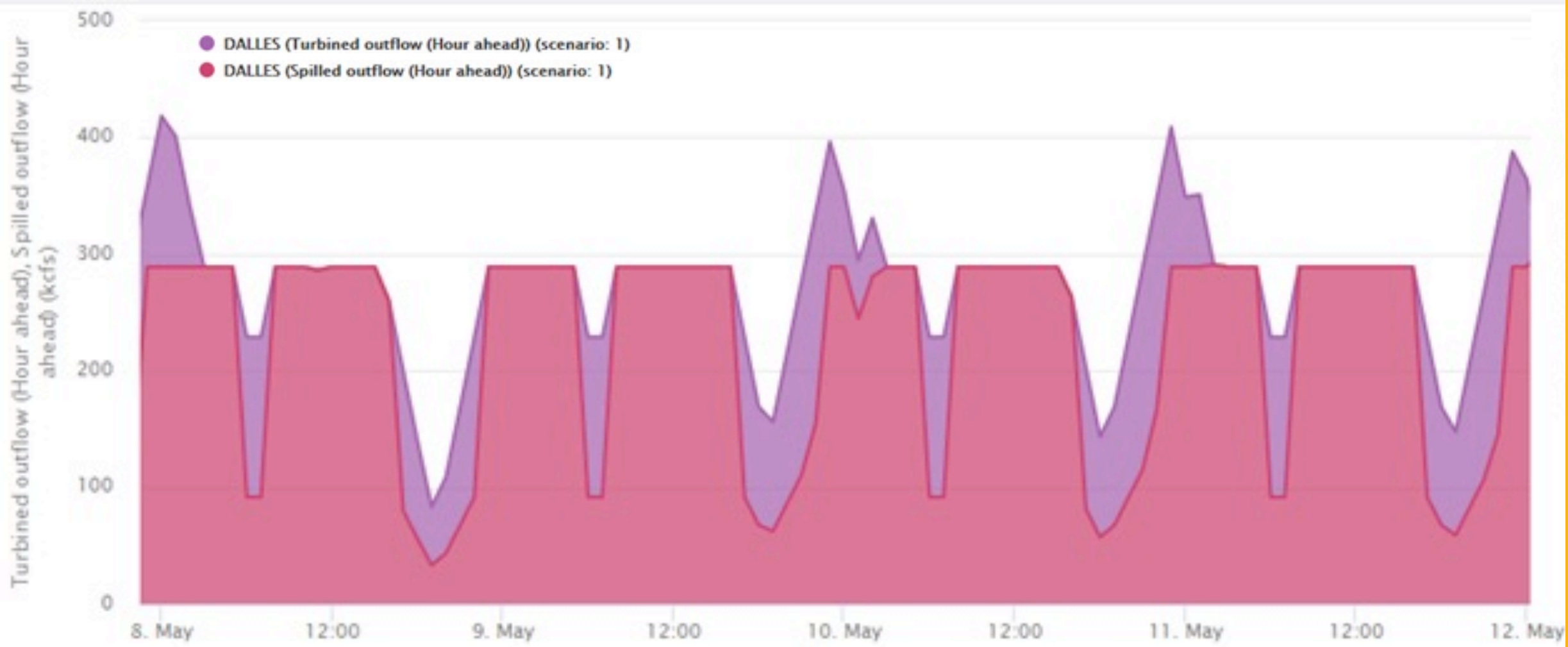
# SOLAR AND WIND ENERGY COST HAS DECREASED DRAMATICALLY

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

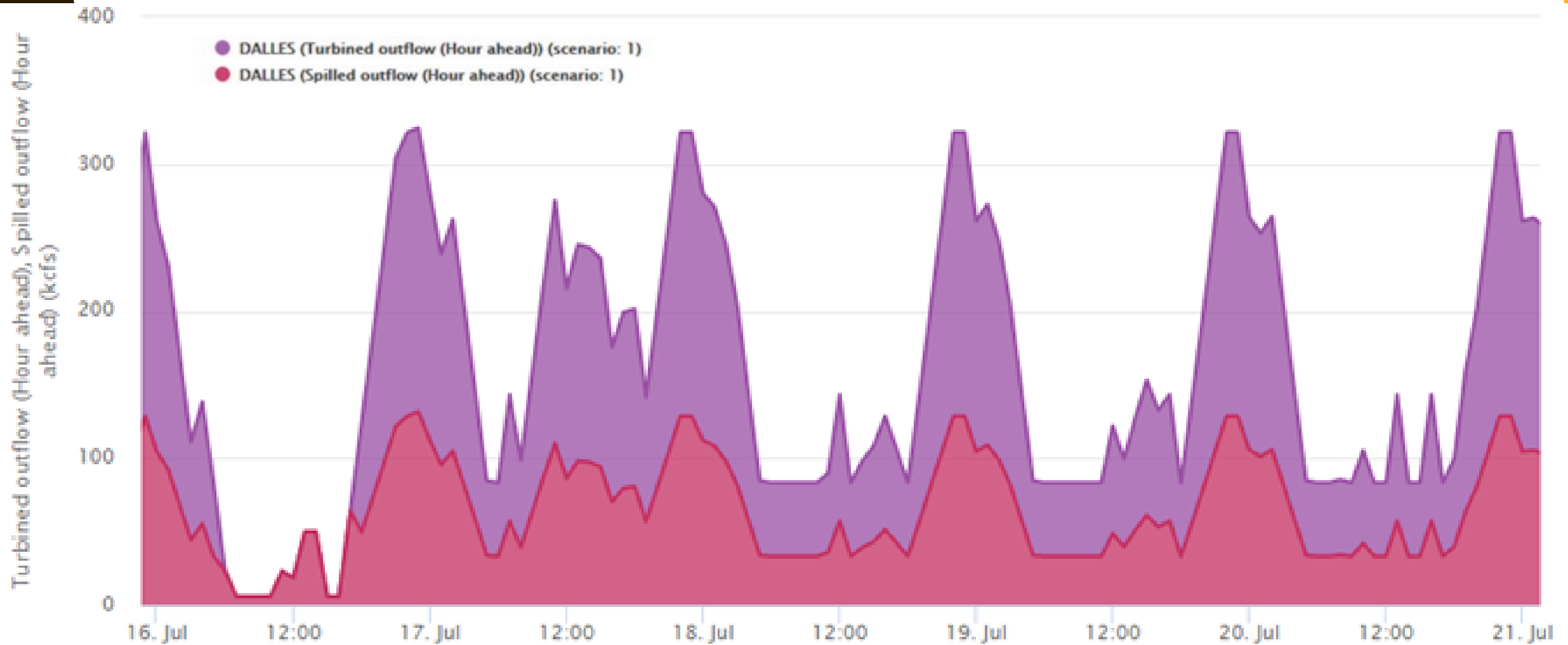


# UTILITY PLANS FOR RENEWABLES 2021 - 2045





# 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

## 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.



## RECOMMENDATION 31

CRITFC and its member tribes should work with state energy and siting agencies, federal agencies, Northwest Grid, the Northwest Power Pool, and others to develop a comprehensive plan for siting renewable resources and transmission lines that builds in efforts currently being developed in the states.

*New solar array atop the Nez  
Perce Tribe's Government  
Headquarters*



# QUESTIONS?

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