

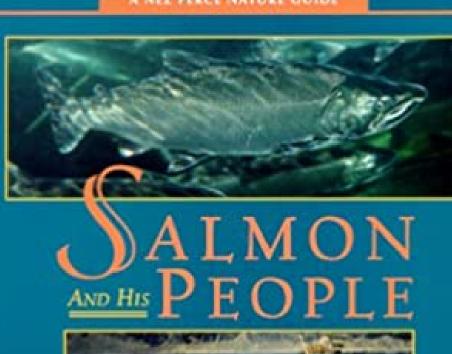
# The Nimíipuu A Climate Change Resilience Story

Stefanie Krantz – Climate Change Coordinator stefaniek@nezperce.org

Department of Energy Resilience Webinar, May 26, 2021









### FISH & FISHING NEZ PERCE CULTURE DAN LANDEEN

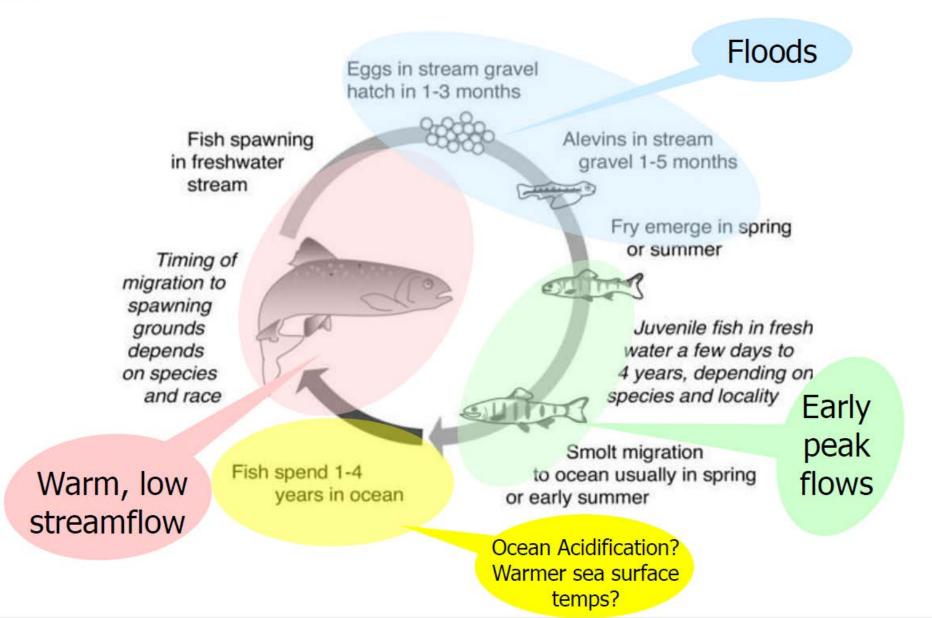
ALLEN PINKHAM



## Salmon Impacted Across Full Life-Cycle

Lethal water temperature for most salmonids i around 69.8° F IMPACTS

GROUP



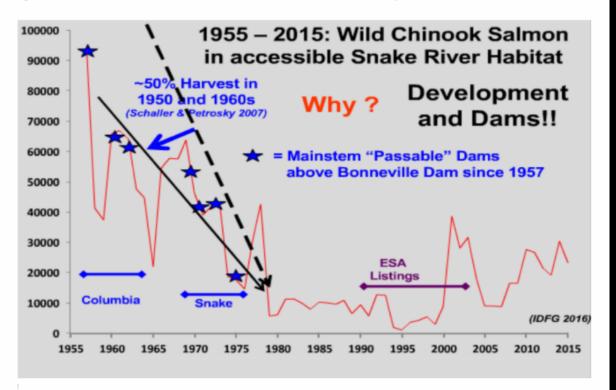
Climate Impacts Group – Lara Whitley Binder

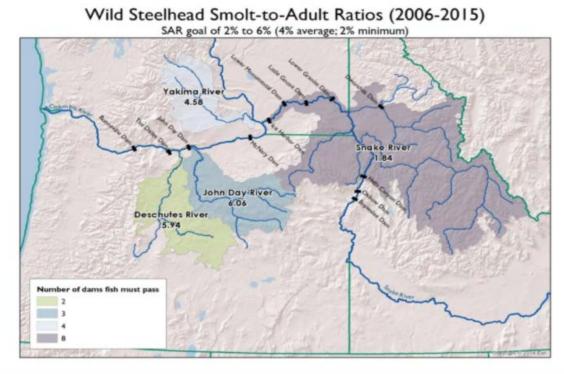


#### **1. POPULATIONS ARE DISMAL**

Lower Snake River salmon and steelhead are incredibly resilient. But they're also incredibly vulnerable at this moment.

In short, extinction is not a far-fetched reality. If we cannot find a way to solve the challenges we face, the science indicates we may see the extinction of this iconic species which once returned to the Snake River basin by the millions.





Measuring smolt to adult returns is a good way to assess the impact of dams. The more dams crossed, the lower the smolt to adult ratio and the harder it is to maintain a healthy population of fish. Souce: Idaho Conservation League.

But it is not just the dams themselves. Conditions created by massive reservoirs create issues for fish. Historically, it took about two days for young fish to reach the sea. Today, it takes an average of three weeks and up to six weeks, increasing the exposure to high water temperatures and predators.

"I don't see my grandchildren having what I had. That's why I take them fishing today."

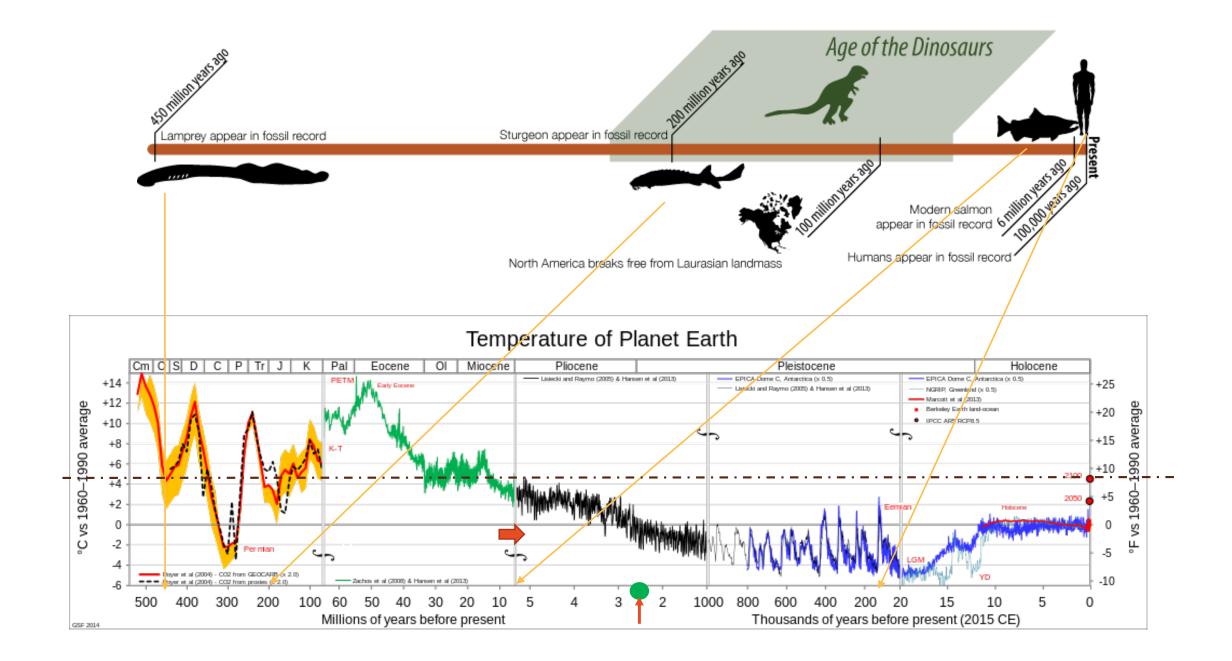
"When I was little there was fish everywhere, all kinds of fish. Now there's no fish hardly."

There's no water, all the streams are smaller and smaller. They're finding out the dams and the lack of salmon is even impacting the orca whales in the ocean.

**Everybody's connected. The circle of life. It's really that way. It's not only the fish, it's everything.** There's more fires, there's less food. We go digging and there's less to dig. It is our medicine and our food. A lot of it's closed off or not there no more. It's been burned off or dug up or there's wheat fields where there never used to be.

I'm scared for my children from what I've seen in my lifetime. There's going to be no fishing for them or no treaty rights. There's less and less for them."

Jeff Scott, fisherman and elder of the Nez Perce Tribe

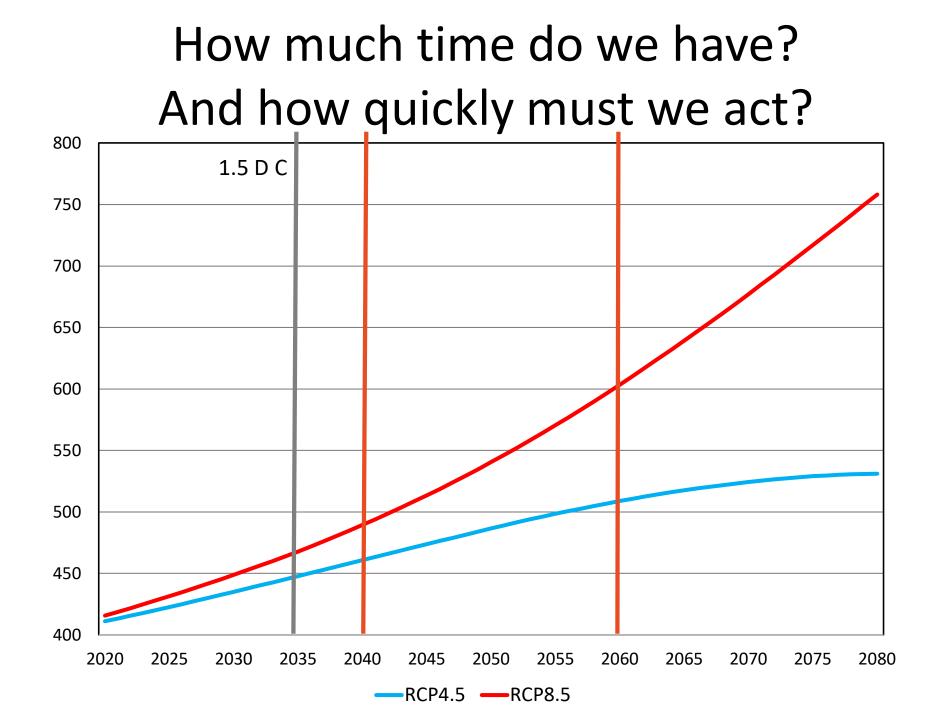


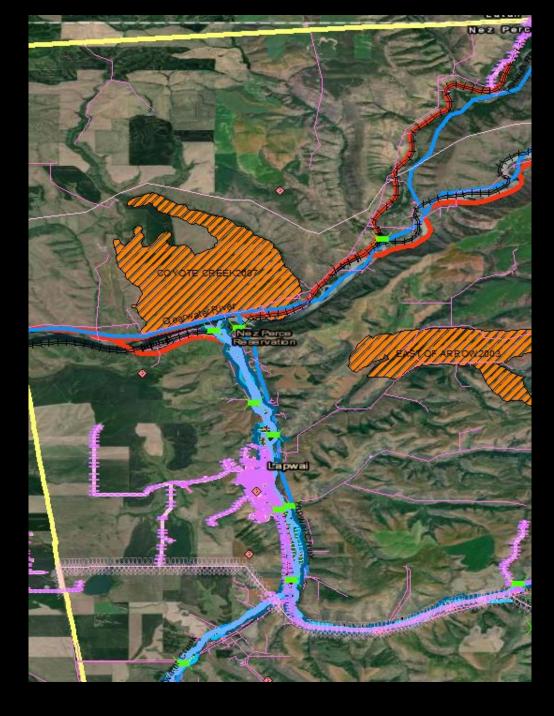
# Existing Fish Vulnerability Assessments

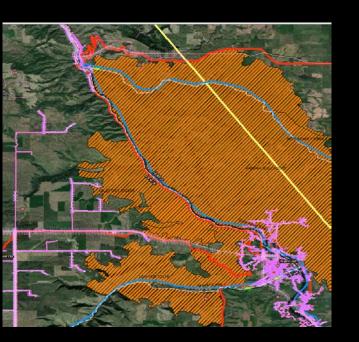
FIGURE 6-12. CLIMATE CHANGE VULNERABILITY MATRIX FOR FOCAL SPECIES OF FISH (DUNHAM, 2015) (CROZIER, ET AL., 2019) (USFWS, ET AL., 2017, SEPT 29) (ISAAK, YOUNG, NAGEL, HORAN, & GROCE, 2015).

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| *           | Vulnerability of Focal Species of Fish |     |          |  |  |
|-------------|--|-----|----------|--|--|
| Sensitivity | Very High                              |     |          | Snake River Sockeye  | Bull Trout;<br>Lamprey: Asotin and<br>Selway |
|             | High                                   |     |          | Lower Columbia River Coho;<br>Snake River Basin Steelhead;<br>Snake River Fall-Fun Chinook | Spring/Summer Run                            |
|             | Moderate                               |     |          |  |  |
|             | Low                                    |     |          |  |  |
|             |  | Low | Moderate | High   | Very High                                    |
|             | Exposure                               |     |          |  |  |

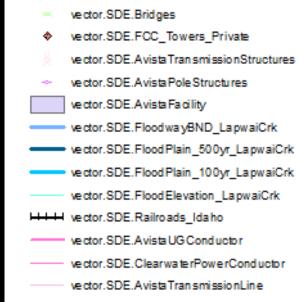








#### Legend



- USA\_Rivers\_and\_Streams
  - vector.SDE.AvistaOHConductor
  - vector.SDE.RoadsHWY\_ldaho





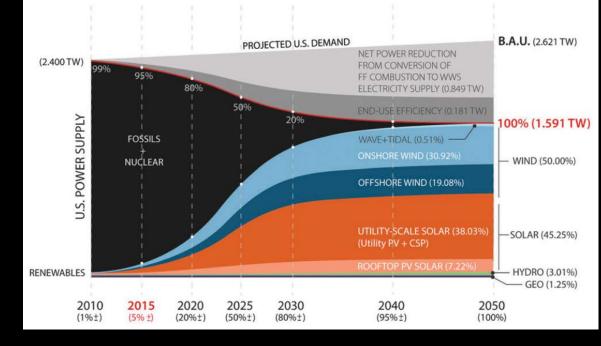


## Okay, this is depressing, *can we solve this*? And what can the tribe do? what do tribal members want?

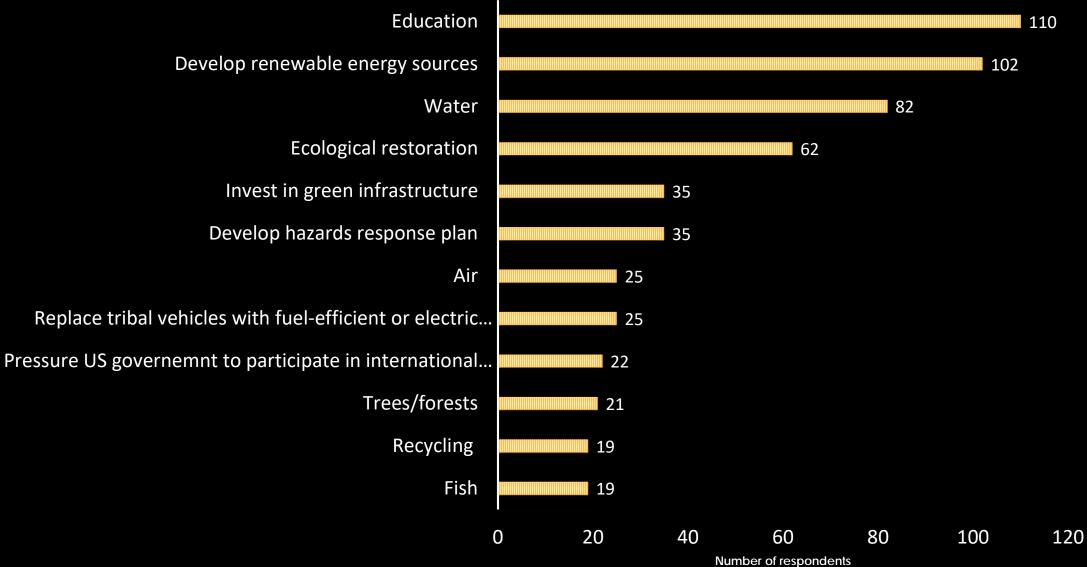


This guy and his team at Stanford University figured out how! And, it is cheaper than the alternative and would create good jobs! Really!

"Based on our findings, there are no technological or economic barriers to converting the entire world to clean, renewable energy sources, It is a question of whether we have the societal and political will." "Mark Z. Jacobson



### http://thesolutionsproject.org/



#### TOP PRIORITIES FOR PLANNING FOR CLIMATE CHANGE

# WHAT IS RESILIENT ENERGY?

All the

squares

combined

#### BOXES TO SCALE WITH MAP

- 1980 (based on actual use) 207,368 SQUARE KILOMETERS
- 2008 (based on actual use) 366,375 SQUARE KILOMETERS

2030 (projection) 496 805 SOLIARE KILOMETERS Areas are calculated based on an assumption of 20% operating efficiency of collection devices and a 2000 hour per year natural solar input of 1000 watts per square meter striking the surface.

These 19 areas distributed on the map show roughly what would be a reasonable responsibility for various parts of the world based on 2009 usage. They would be further divided many times, the more the better to reach a diversified infrastructure that localizes use as much as possible.

- Wind Energy is now CHEAPER THAN COAL!
- Tesla's Electric Cars go 400 miles on a charge



Nez Perce Tribe

"The Nez Perce Tribe, however, is out ahead of the game. There is a fast-charging station at the Clearwater River Casino and Lodge along U.S. Highway 12, and Shelby Leighton, who works with the tribe, said there are plans in the works to put fast-charging stations at the It'se Ye-Ye Casino in Kamiah and possibly Zims Hot Springs near New Meadows, off U.S. Highway 95."



DNEWS.COM

Electric vehicles slowly becoming more accessible, practical Once the purview of the eccentric — or the very rich — electric veh...

We don't have to chose between the environment and the economy.

#### Tribe steps into solar age

Nez Perce Tribe flips switch on 770 solar panels, the first step in its effort to fight climate change, move toward energy independence

By Eric Barker Of the Tribune Feb 4, 2021 🔍





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https://vimeo.com/499831141







"I have heard talk and talk, but nothing is done. Good words do not last long unless they amount to something..." — Chief Joseph

"We were contented to let things remain as the Great Spirit Chief made them. They were not; and would change the rivers and mountains if they did not suit them."

- Chief Joseph

From where the sun now stands, I will fight no more forever. – Chief Joseph

"The earth is the mother of all people, and all people should have equal rights upon it." — Chief Joseph

Qe'ci'yew'yew'

Special thank you to RevoluSun, the Nez Perce Tribe Executive Committee, the BIA Tribal Resilience Program, our investors, Tuck Miller, the TERO program, the Climate Change Task Force, the Nimiipuu, Salmon,

and the 35 solar installers who made this possible.

