



CLIMATE CHANGE AND TRADITIONAL ECOLOGICAL KNOWLEDGE

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WHAT IS TRADITIONAL ECOLOGICAL KNOWLEDGE AND INDIGENOUS KNOWLEDGE?

- Knowledge passed down from tribal the elders and leaders
- Lessons learned through 'Spilyi' coyote legends
- Springtime birds and flowers bring message that the salmon and root season is near
- Tribal people are still connected to the land and the resources and can tell when there are changes to the seasons, wildlife and fish migrations, and changes to the growing seasons



INDIGENOUS TRADITIONAL ECOLOGICAL KNOWLEDGE (ITEK) IN FEDERAL DECISION-MAKING PRACTICES

- November 15, 2021
- President Biden established policy to include ITEK into federal decision-making processes
- This also included regular, meaningful, and robust consultation with tribal officials in the development of federal research, policies, and decisions



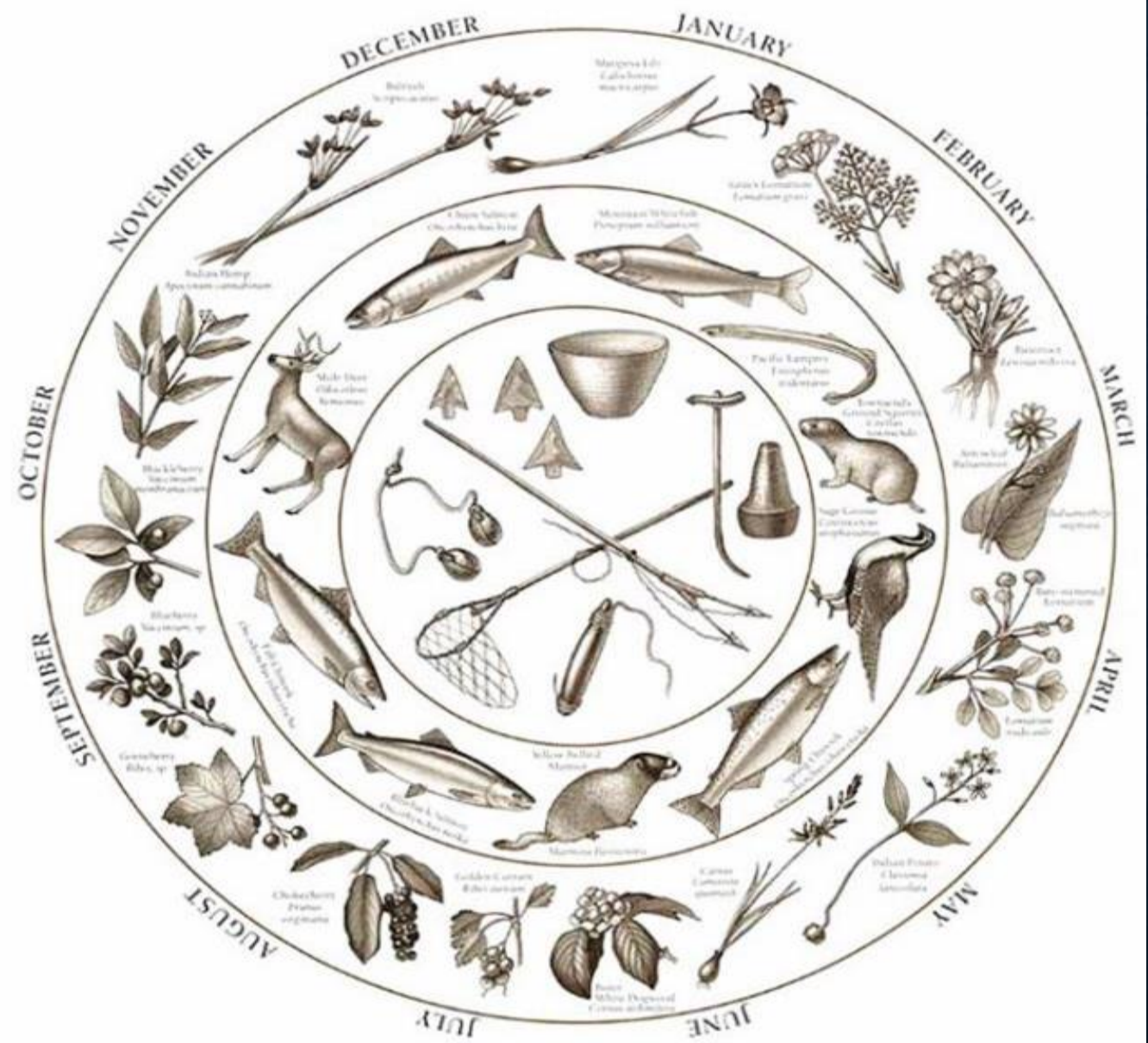
HOW CAN TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK) AND INDIGENOUS KNOWLEDGE (IK) BE APPLIED?

TEK and IK can be applied to the following management strategies:

- Forestry (prescribed fire)
- Rangeland
- Fish and Wildlife management
- Habitat restoration
- Climate change adaptation planning



THE PLATEAU SEASONAL ROUND





EVERYTHING HAS A PURPOSE, AND EVERYTHING IS CONNECTED ON MOTHER EARTH





NATURAL RESOURCES ARE OUR CULTURAL RESOURCES





**TRIBAL MEMBERS ARE AWARE
THAT CLIMATE CHANGE HAS BEEN
HAPPENING WITH THE ACTIVE
CHANGES OF FIRST FOOD
GATHERING OCCURRING
OVER THE PAST FEW DECADES.**

**“THE FISHING, ROOT, AND BERRY
HARVEST
SEASONS ARE NO LONGER
CONSISTENT AND
ARE A REFLECTION OF A
CHANGING CLIMATE.”
QWATASHA**

THE WARMING COLUMBIA RIVER AND TRIBUTARIES



2021 Heat Wave

Sockeye salmon were stranded at Drano Lake, WA.

HOW YAKAMA NATION IS TAKING STEPS TOWARDS CLIMATE RESILIENCY...





Climate Adaptation Plan for the Territories of the Yakama Nation

APRIL 2016

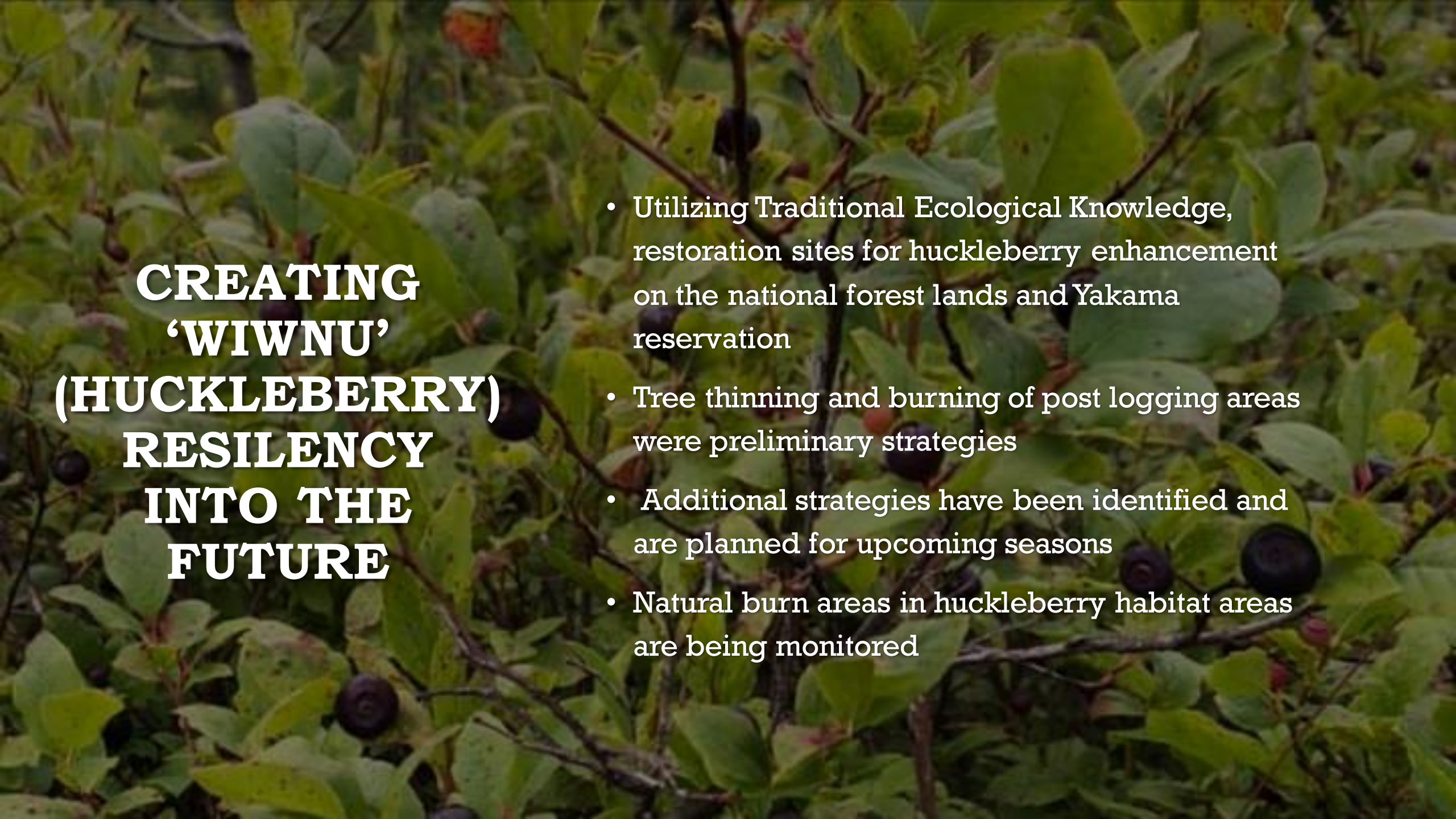


- The Yakama Nation's Climate Adaptation Plan for the Territories of the Yakama Nation was officially adopted by the Tribal Council in 2021
- We work in collaboration with federal, state, and other NGO's to discuss what types of actions can be taken to protect and conserve critical habitats and species in the Yakama Nation Usual and Accustomed Lands
- Yakama Nation is one of the 4 Treaty Tribes of the Columbia River Inter-Tribal Fish Commission (CRITFC).

HERE ARE STEPS WE ARE TAKING TO ADDRESS CLIMATE CHANGE IN YAKAMA COUNTRY

- Yakama Nation Department of Natural Resources (Forestry, Wildlife, Fisheries, Water Resources, Range, etc..) manage their projects to adequately monitor the current conditions in relation to historical conditions to assist in developing conservation and restoration strategies for the future
- Bringing back “*Wishpoosh*” beaver back to their natal drainages to assist in water storage
- Yakama Nation DNR projects incorporate Climate Resilient components into many of their conservation and restoration projects





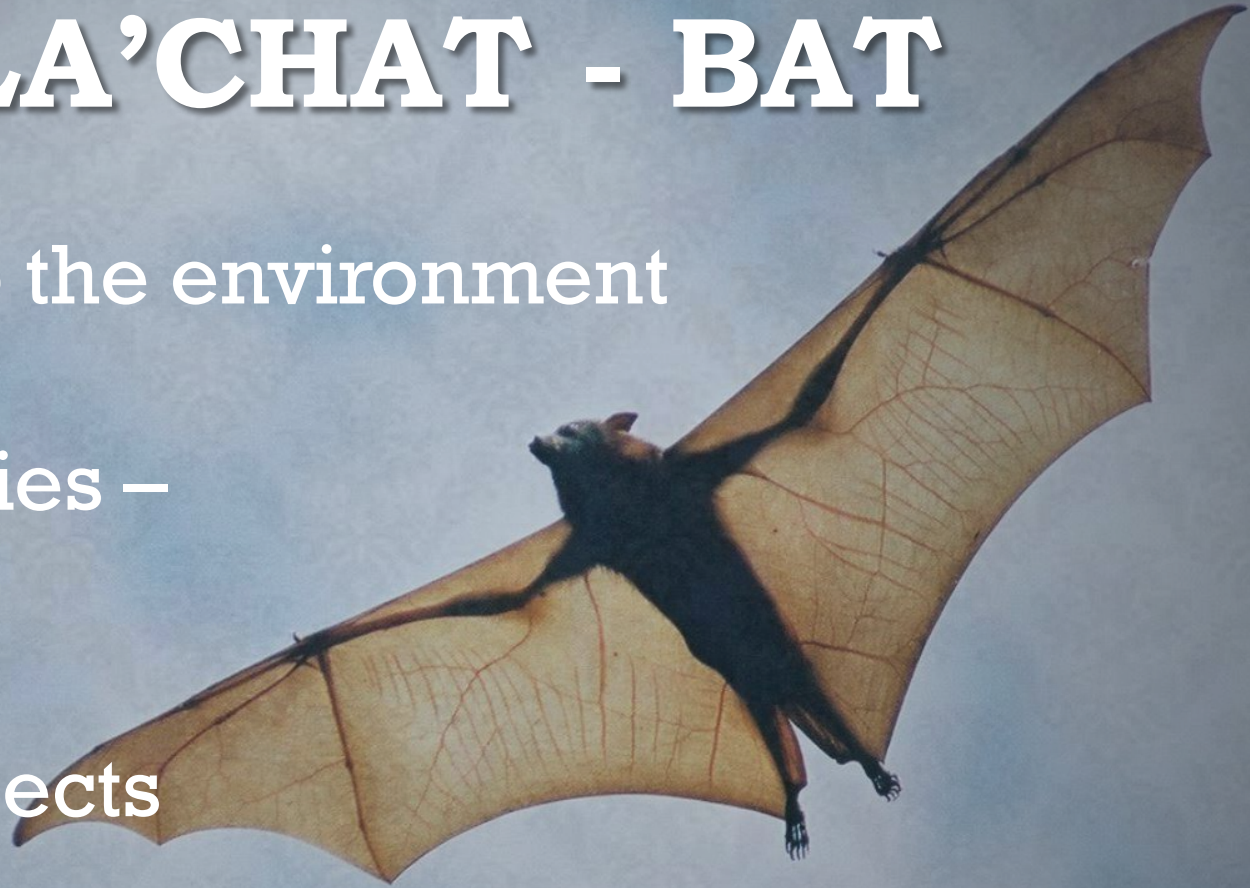
**CREATING
'WIWNU'
(HUCKLEBERRY)
RESILENCY
INTO THE
FUTURE**

- Utilizing Traditional Ecological Knowledge, restoration sites for huckleberry enhancement on the national forest lands and Yakama reservation
- Tree thinning and burning of post logging areas were preliminary strategies
- Additional strategies have been identified and are planned for upcoming seasons
- Natural burn areas in huckleberry habitat areas are being monitored

LA'CHAT LA'CHAT - BAT

Importance of bats to the environment

- Very sensitive species – Indicator Species
- Pollinators
- Control invasive insects



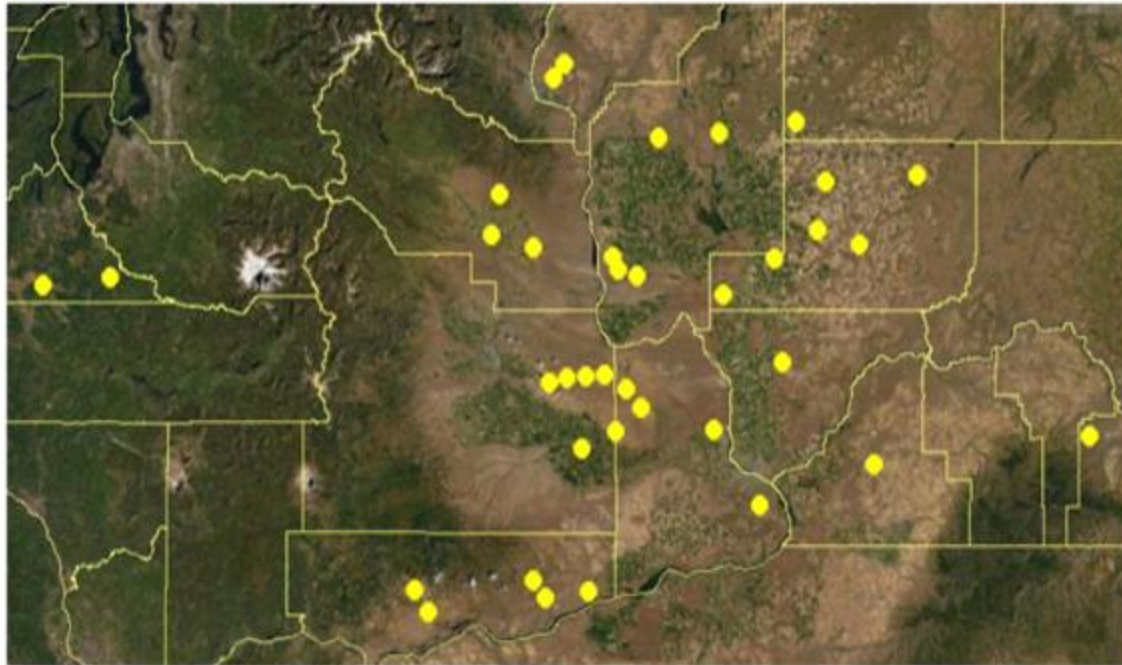
Think about their habitat and contribution to the local ecosystem. What if they are removed out of the system and what ecological impacts could there be?

ALL TRIBES HAVE VESTED INTERESTS IN THEIR ANCESTRAL LANDS AND RESOURCES FOR ALL FUTURE GENERATIONS



CLIMATE CHANGE AND THE “GREEN ENERGY MOVEMENT”

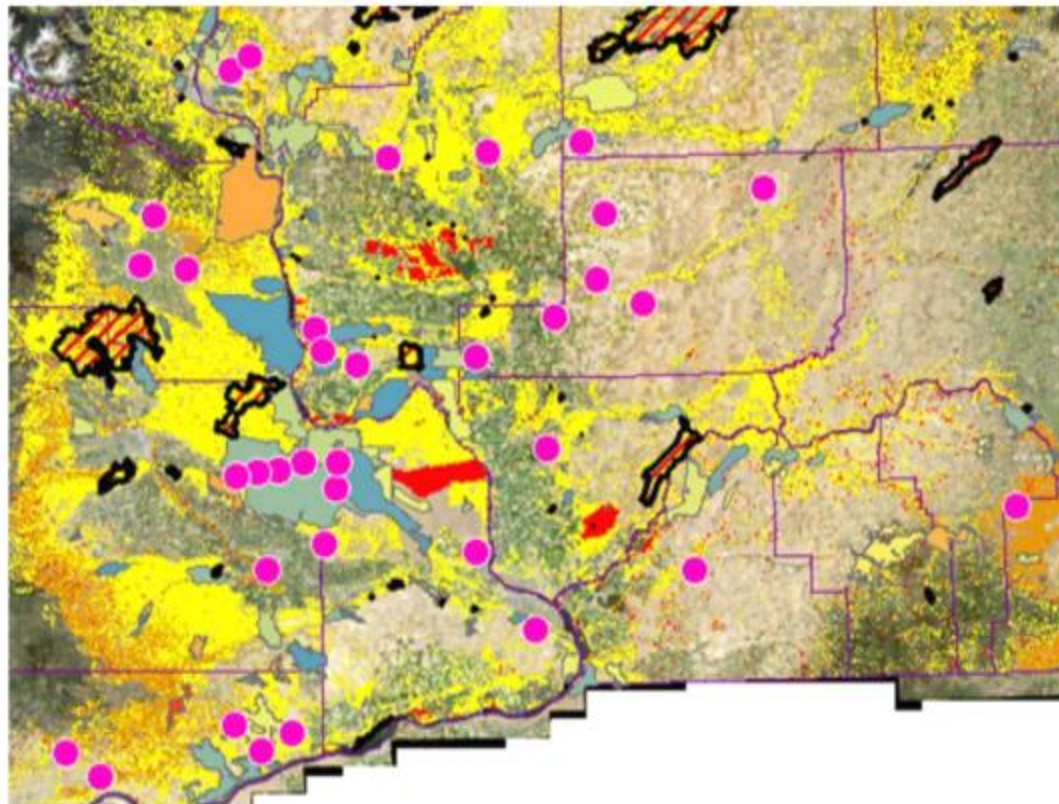
Solar proposals in Washington



- 37 Solar Projects proposed to date
- > 50,000 acres
- > 78 square miles



- Shrubsteppe habitat in yellow, overlaid by fires from 1991-2020
- Projects are:
 - operational (one project)
 - constructed (two projects)
 - in permitting (four)
 - proposed/potential (28)
 - West-side projects (see previous slide)
- 92% of projects are in Columbia Plateau ecoregion
- 80% of eastern WA projects have NOT initiated permitting, but many have spent several years in pre-permitting work



REPORTAGE

When renewables threaten the sacred

How a lack of tribal consent for green energy projects is perpetuating environmental injustice.

BY SARAH SAX

JEREMY TAKALA, a Yakama citizen, was fishing for sockeye and summer chinook a few years ago, just downstream from the John Day Dam on the Columbia River. He was accompanied by a Yakama elder, who pointed to a high ridge towering above them covered in juniper bushes, shrubs and grasses that plunged dramatically

gigawatts of new solar additions, 4 gigawatts of offshore wind, and 2 gigawatts of onshore wind. (The average size of a coal plant in the U.S. is about 0.6 gigawatts; the biggest offshore wind farm in the world, Hornsea One, can generate up to 1.2 gigawatts.)

The Columbia River Basin is key to this development: it's already a renewable energy

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**DAMS ON THE COLUMBIA RIVER HAVE
BEEN IMPACTING OUR WAY OF LIFE
SINCE 1938 - 1975**



WIND FARMS ALONG THE COLUMBIA RIVER



<https://www.youtube.com/c/KGWNNews8>

PUT'A-LISH "JUNIPER POINT"

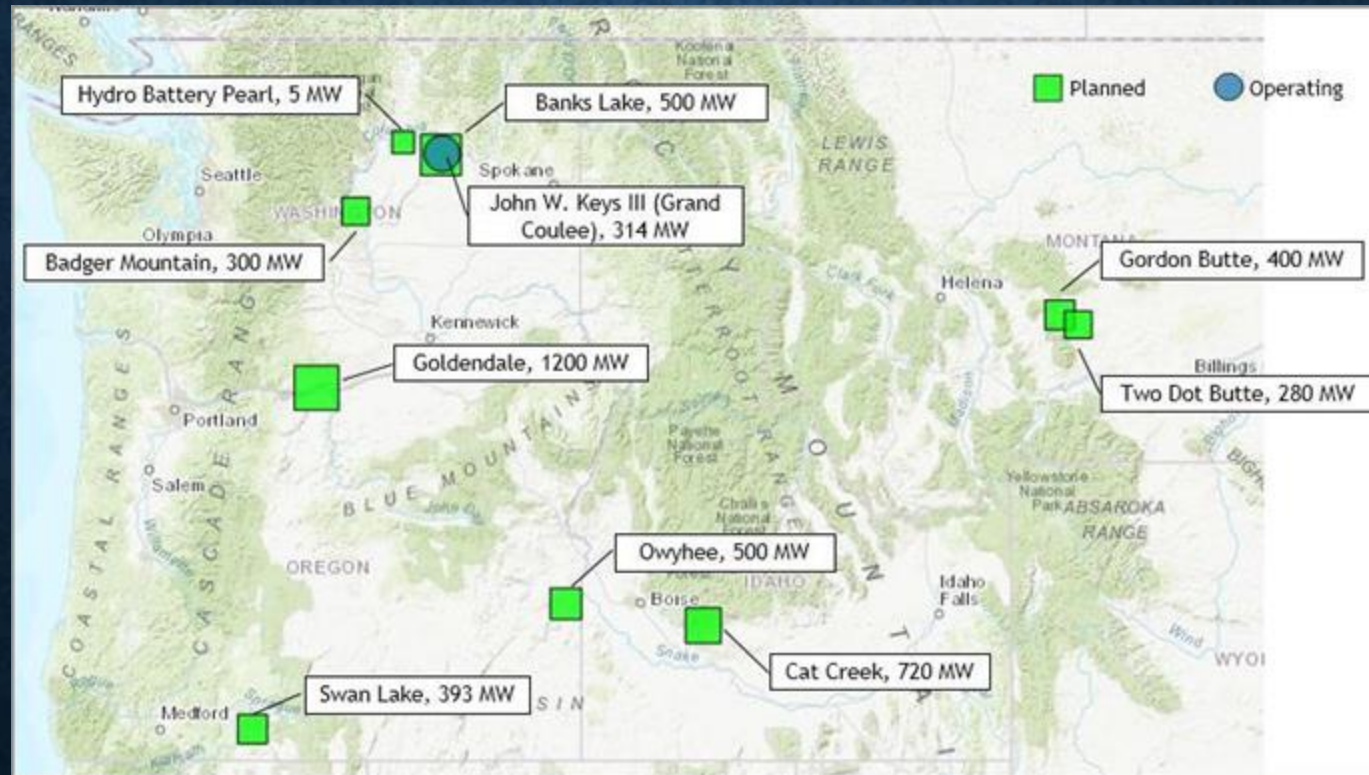


THREATS TO TRIBAL CULTURAL RESOURCES & SACRED SITE

“Green Energy Projects”: Water-pump Storage Project, Wind, & Solar



ADDITIONAL WATER PUMP STORAGES IN THE NORTHWEST REGION



Lund Hill Solar Project
Blue Bird Solar Project

515,700 solar panels on 1,800 acres in
Bickleton, WA

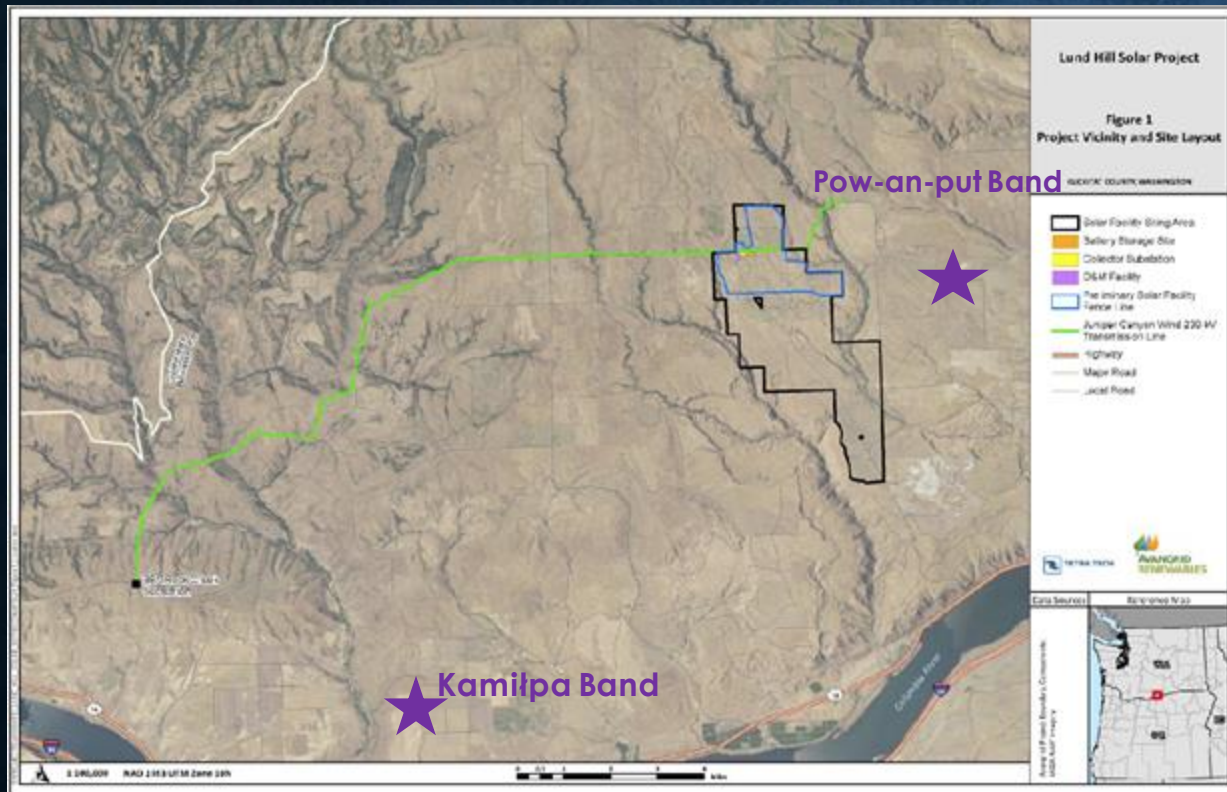
Loss of shrub steppe habitat

There are many culturally significant plants
that grow in this vicinity

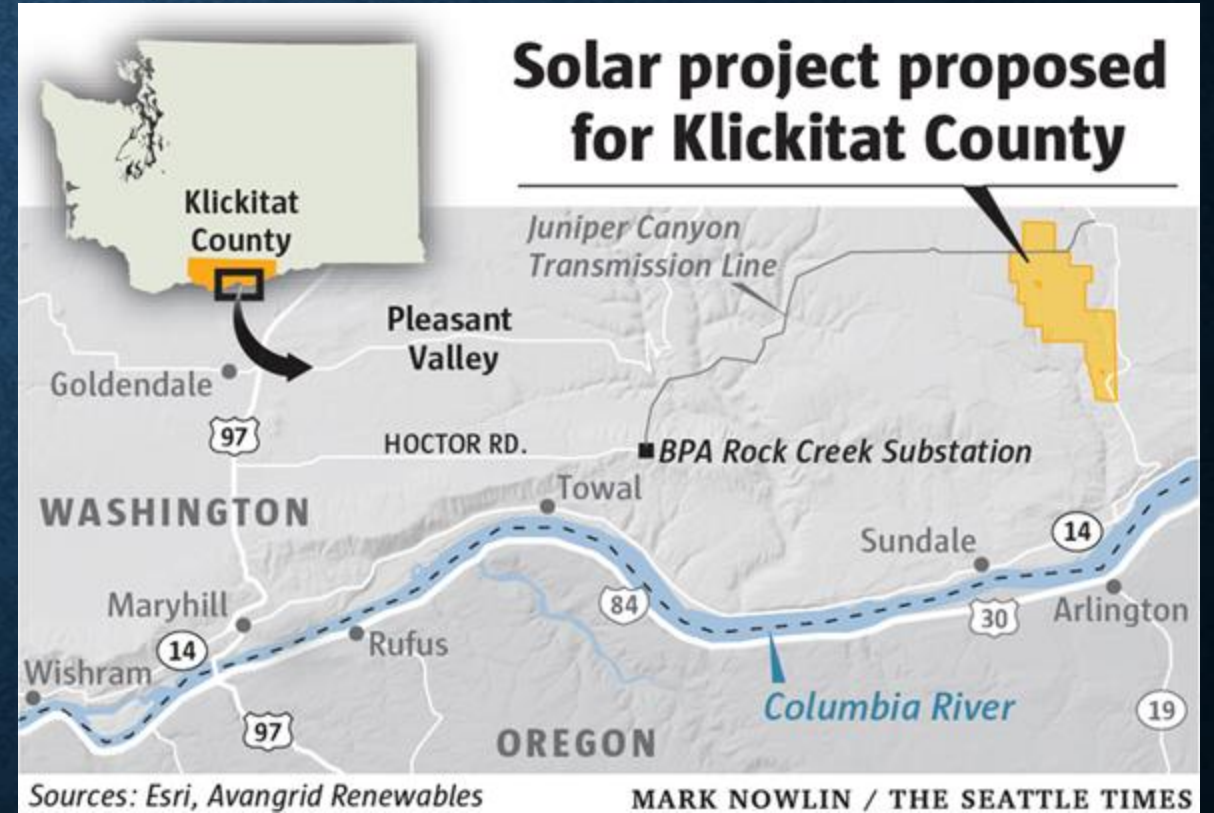
This project is within the Pow-an-put Band
(Pine Creek Band) usual and accustomed
root gathering area

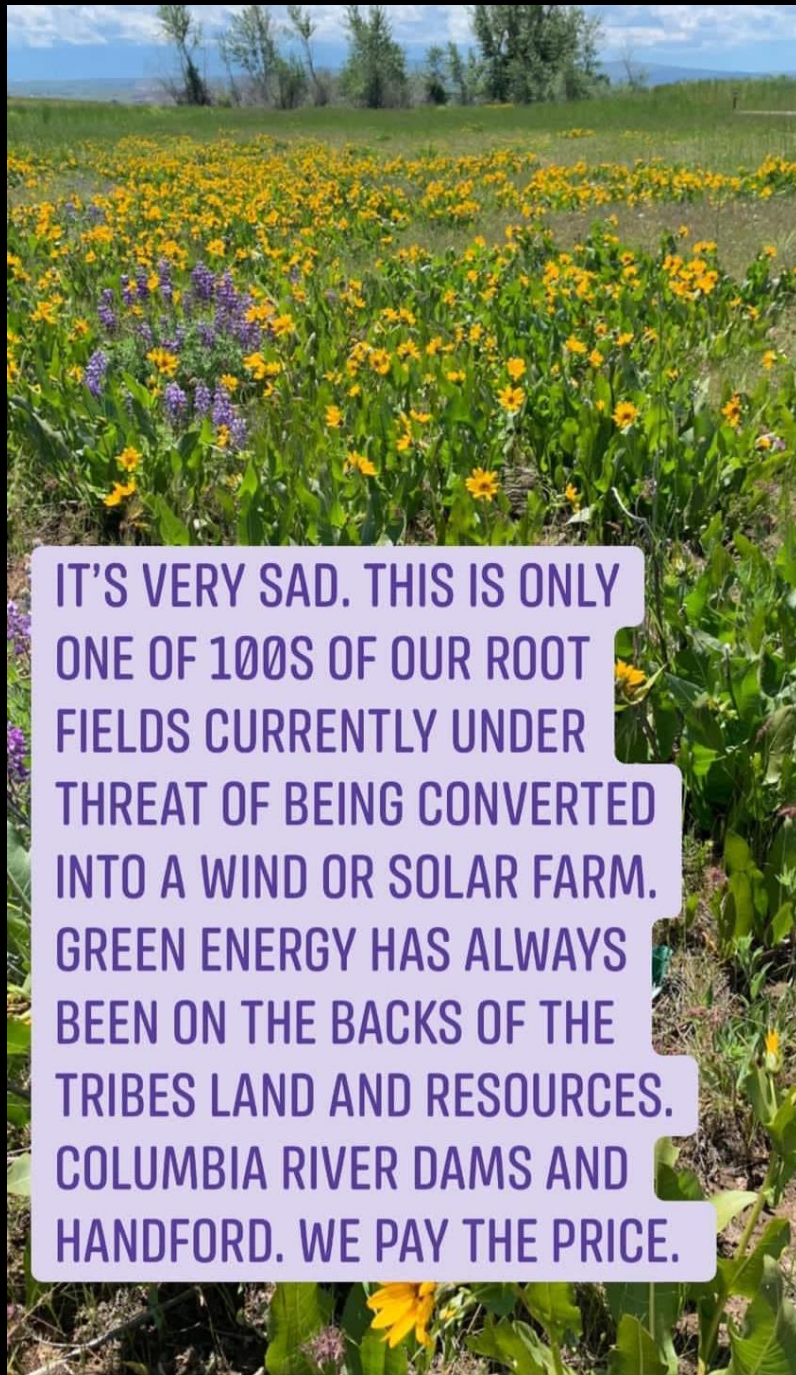
What were the potential impacts to the deer
overwintering habitat if solar panels will
cover 1,700 acres?

Water withdrawals from Pine Creek and
Wood Gulch which would impact rearing
steelhead in both streams



INDUSTRIAL SOLAR IMPEDES OUR ACCESS TO OUR TRADITIONAL FOOD GATHERING SITES





Protect our Cultural Resources!



Indigenous
knowledges
are not a backup
plan anymore,
they are the plan.

DR. CUTCHA RISLING BALDY

[@for.the.wild](#)