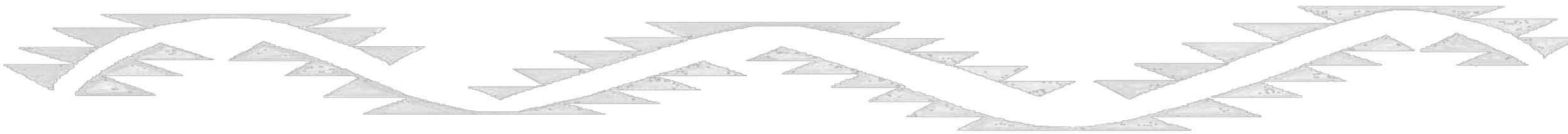
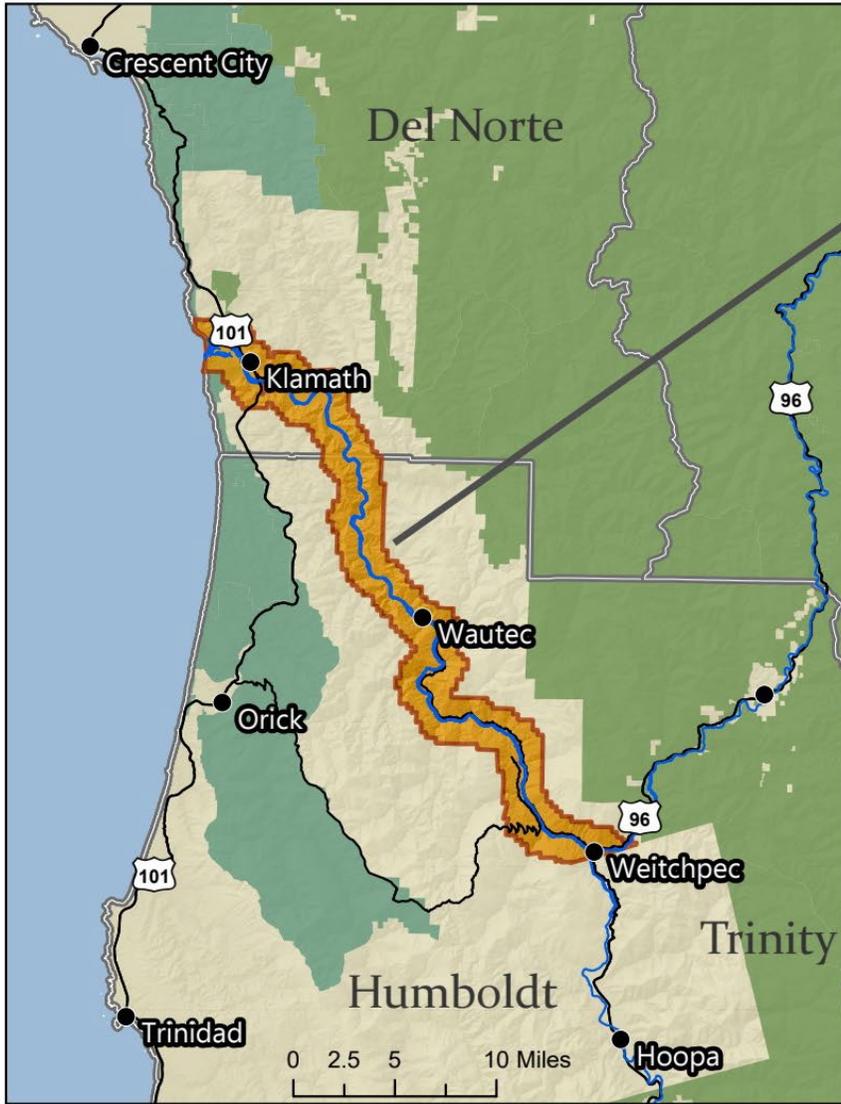


Trees Alone do not a Forest Make

Dawn Blake, Cultural Practitioner, Yurok Tribe
Forestry Director, Natural Resources Division;
California Board of Forestry and Fire Protection
Member



Yurok Reservation & Ancestral Territory



- Community
- Major Road
- Yurok Reservation
- County
- National Forest
- Redwood National and State Park

The Yurok Reservation is located in Northern California within Del Norte and Humboldt counties. The reservation spans approximately one mile on each side of the Klamath River from the confluence with the Trinity River to the Pacific Ocean.



Yurok Tribe



Renowned for:

California's Carbon offset projects

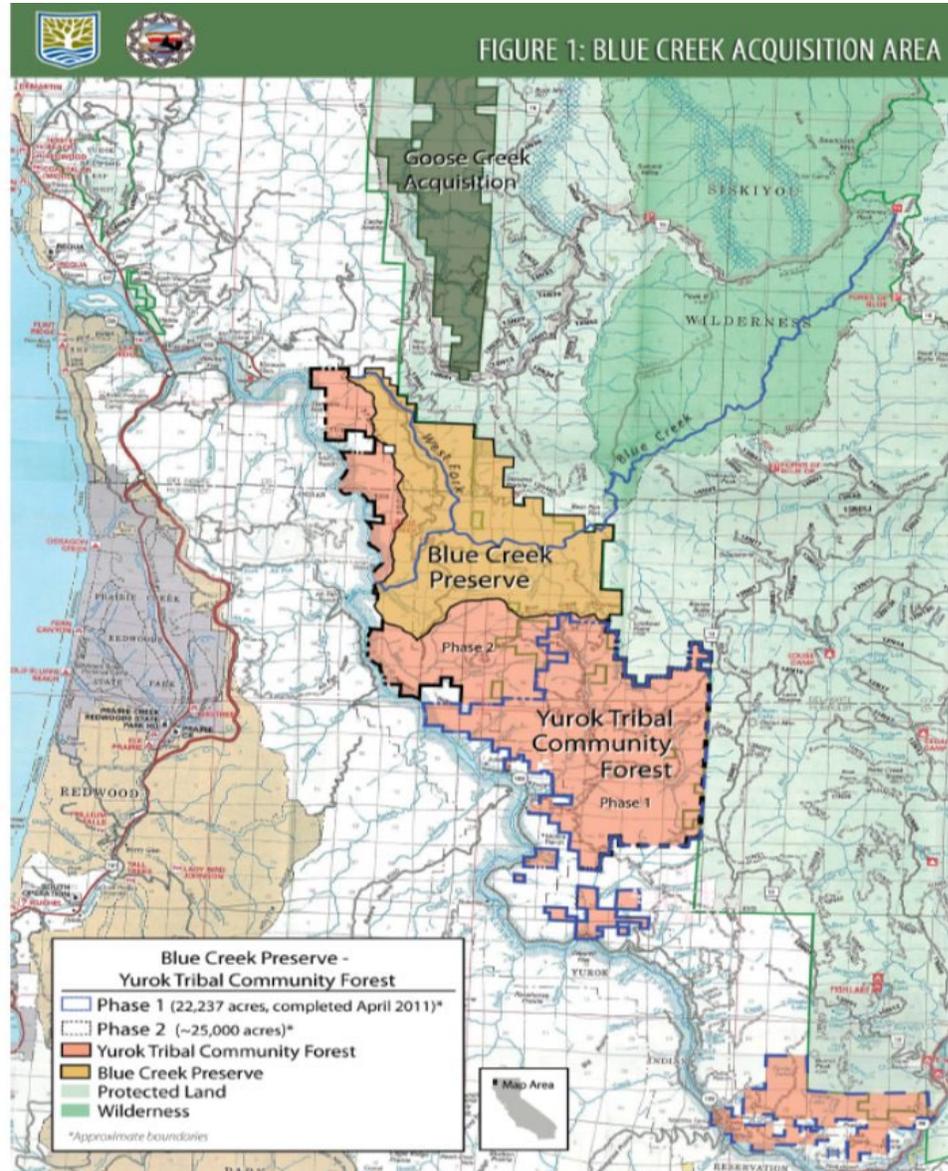
Land acquisition

Involvement in Dam removal on the
Klamath River

Condor Reintroduction



Acquisitions

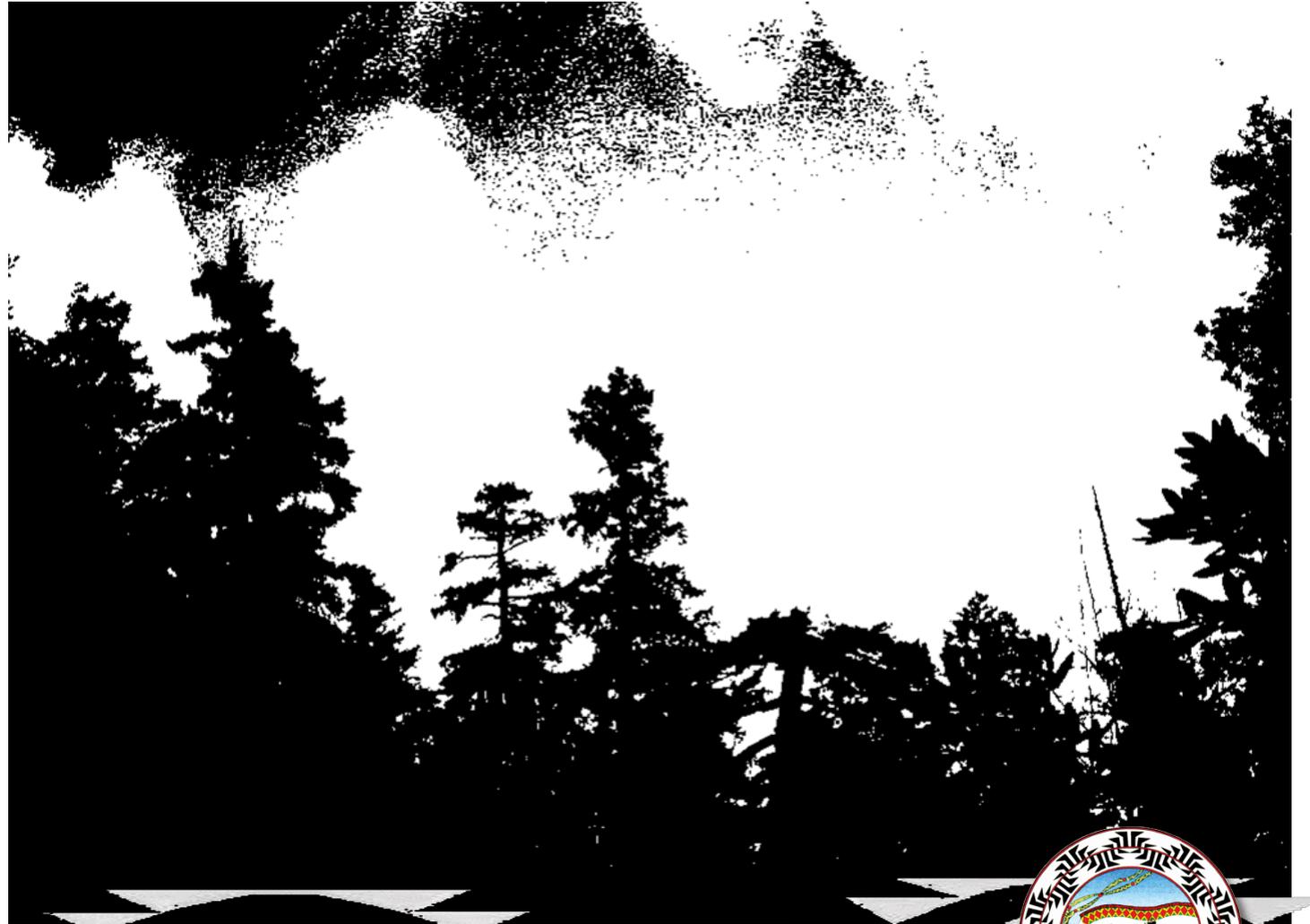


Phase	Acres
Phase II-A	8,496
Phase II-B	6,489
Phase II-C	748
Phase II-D	562
Phase II-E	8,576
Totals:	24,871



Natural Resource Departments

Environmental
Wildlife
Carbon
Fisheries
Watershed
Forestry



Sustained Yield

Management of a Forest Property for the continuous production with the aim of achieving at the earliest possible time a **balance between net growth and harvest**



Circular Economy

- YT Strives to capture the portions of the supply chain that will provide cost savings.
- Sell Timber/purchase lumber
- Missing components would allow the Tribe to retain value especially when both markets are affected by remoteness.
- Also, add value by creating opportunities



Health



Health resources limited due to limited funding



Forest Management also suffers limited funding



Restore ecosystems that are tied to Yurok lifeways



Health is inextricably tied to spiritual and ceremonial preservation



Relationship

Acorns

Condor

Deer/Elk

Fish

Berries

Basketry

Medicine



Lag

Recognizable lag from the mistakes of former management

Large clear-cuts of the 80s

Prior to the 70s and 80s the logging footprint is not as intense

Equipment evolved and efficiency increased to extract large volumes of Timber



Largest California Wildfires

- AUGUST COMPLEX (2020) 1,032,648.
- DIXIE (2021) 963,309.
- MENDOCINO COMPLEX (2018) 459,123.
- SCU LIGHTNING COMPLEX (2020) 396,624.
- CREEK (2020) 379,895.
- LNU LIGHTNING COMPLEX (2020) 363,220.
- NORTH COMPLEX (2020) 318,935.
- RUSH (2012) 315,577.



Traditional Ecological Knowledge

Lack of fire management has caused a paucity of resources

Recent prescribed fires has caused an alliance among basket weavers

Scale is still lacking





Woodpeckers

Provision habitat for other animals

Nests and roosts

Examples of other animals....

Size of woodpecker relative to the size of the cavity they provide

Relative to the size of the animal that uses



SA 3206



- *strives to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation.*
- *Management taken.*
- *Management regime criminalized*
- *Land holding lost by questionable means.*
- *Deforestation and Fire exclusion*

By the time the Yurok Tribe came back in contact with management, the animals were in peril due to habitat loss.

Oak Woodland Restoration

400 acres

Conifer to be extracted

Hwy 169

Partners of Fish and Wildlife

State Coastal Conservancy



Oak Woodland Restoration

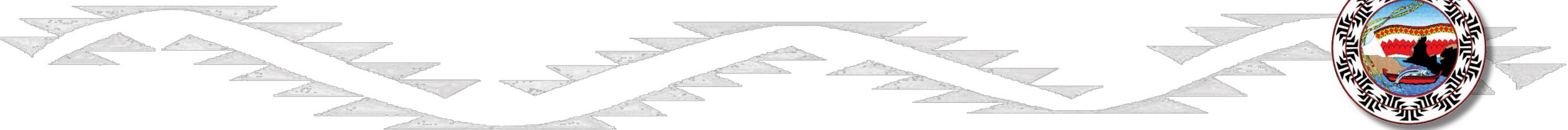
Oak woodland historically managed

Special area for basketry

Openness good for preferred
wildlife

Food

Medicine





Oak Woodland

Conifer encroachment

Falling Oaks

Promote shade intolerant species

Basketry

Release Oaks for carbon sequestration

And

Area next to hwy 169 is a high ignition area



Phase I West Timber Sale

Prairie Restoration

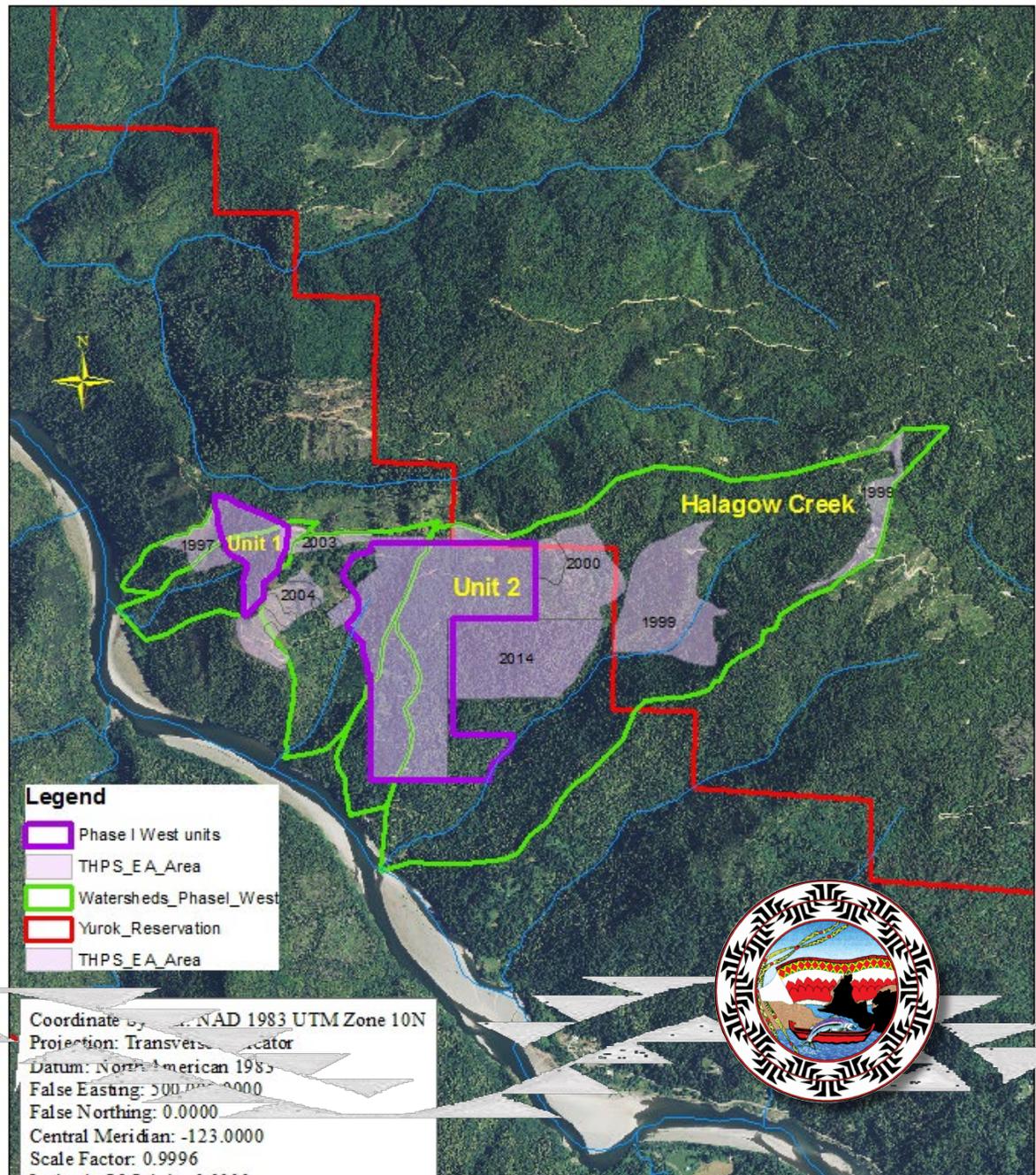
Phase 1 West Timber Sale

Unit 1 Single-tree selection

Thin from below

Trees exhibiting poor form

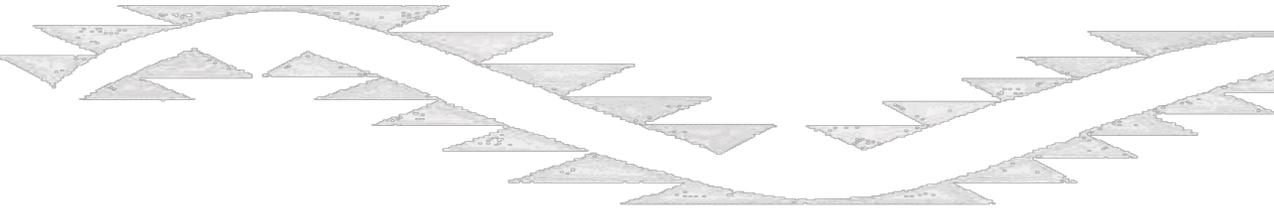
Yurok Carbon Project



Legend

- Phase I West units
- THPS_EA_Area
- Watersheds_PhaseI_West
- Yurok_Reservation
- THPS_EA_Area

Coordinate System: NAD 1983 UTM Zone 10N
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -123.0000
Scale Factor: 0.9996





Restoration

Challenges

Restorations considered conversions

Although prairies are important ecological features on the landscape that lend to healthy forests

Produce carbon

Not a good fit in FPR

- Tanoak not considered oak
- Basis of the ecosystem
- All the way to apex predators including humans.



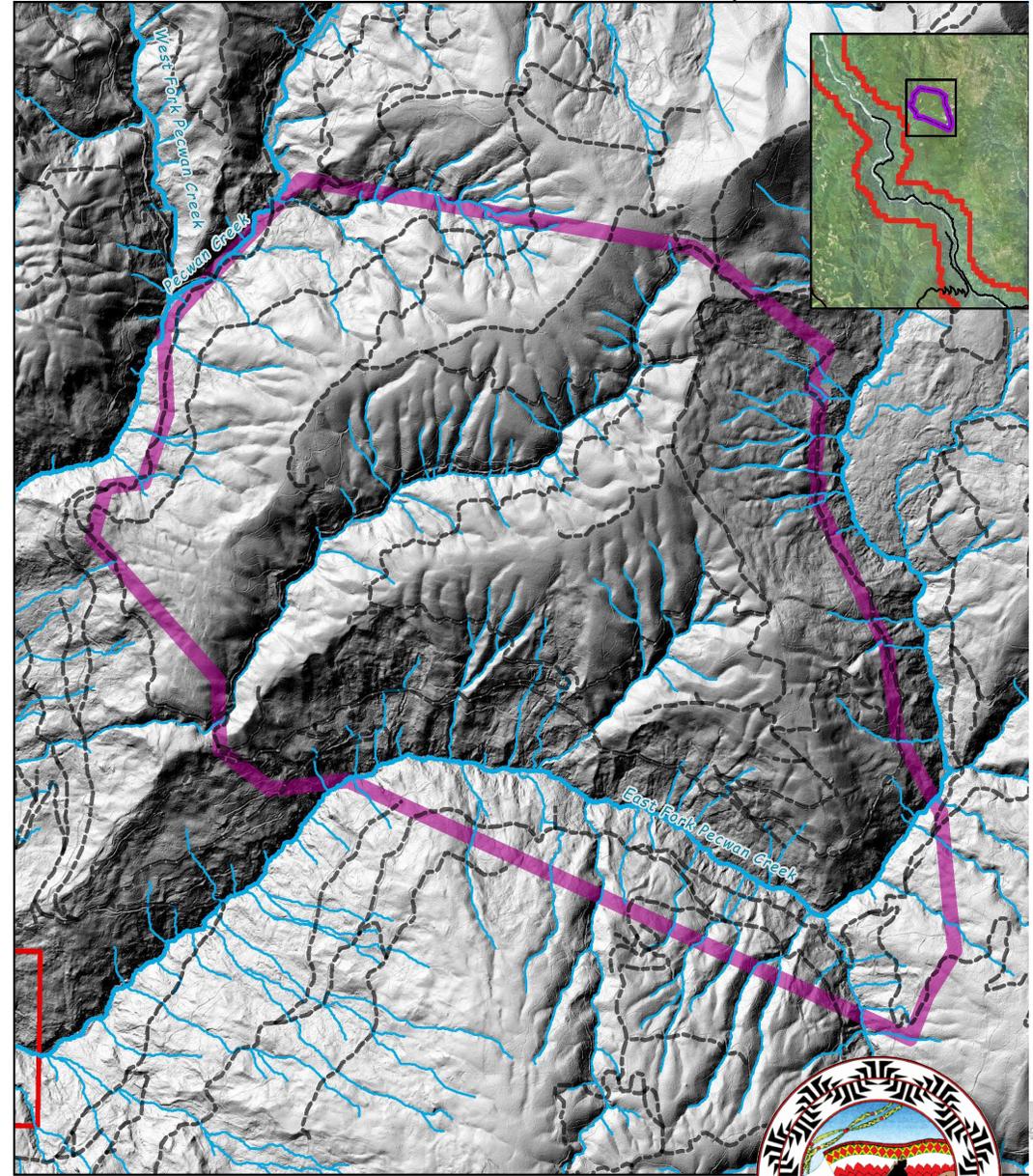
Forest Health

Pecwan Project

Cal Fire Forest Health Grant

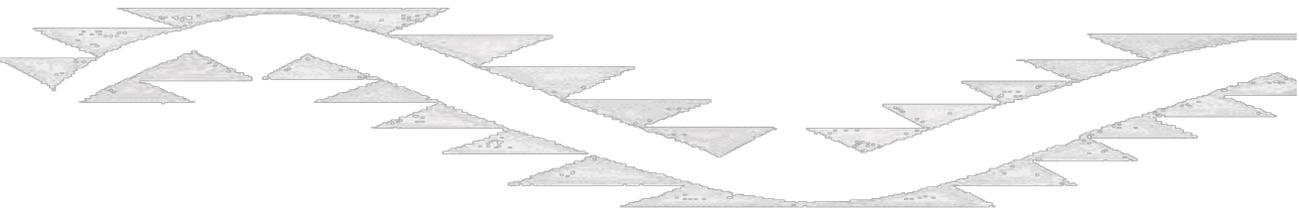
800 Acres

Promote Forest Health



0 5
es

Although information from land survey data was used in the creation of this map, in no way does this map constitute a land survey. The lines and areas represented on this map are approximate and their actual location on the ground may vary. While every effort has been made to assure the accuracy of this information, it should be understood the data is intended to be used for general planning purposes only. The Yurok Tribe assumes no liability or responsibility in the use or misuse of this map and the information within.



Pecwan Forest Health Project

Forest Health

Phase 1 lands

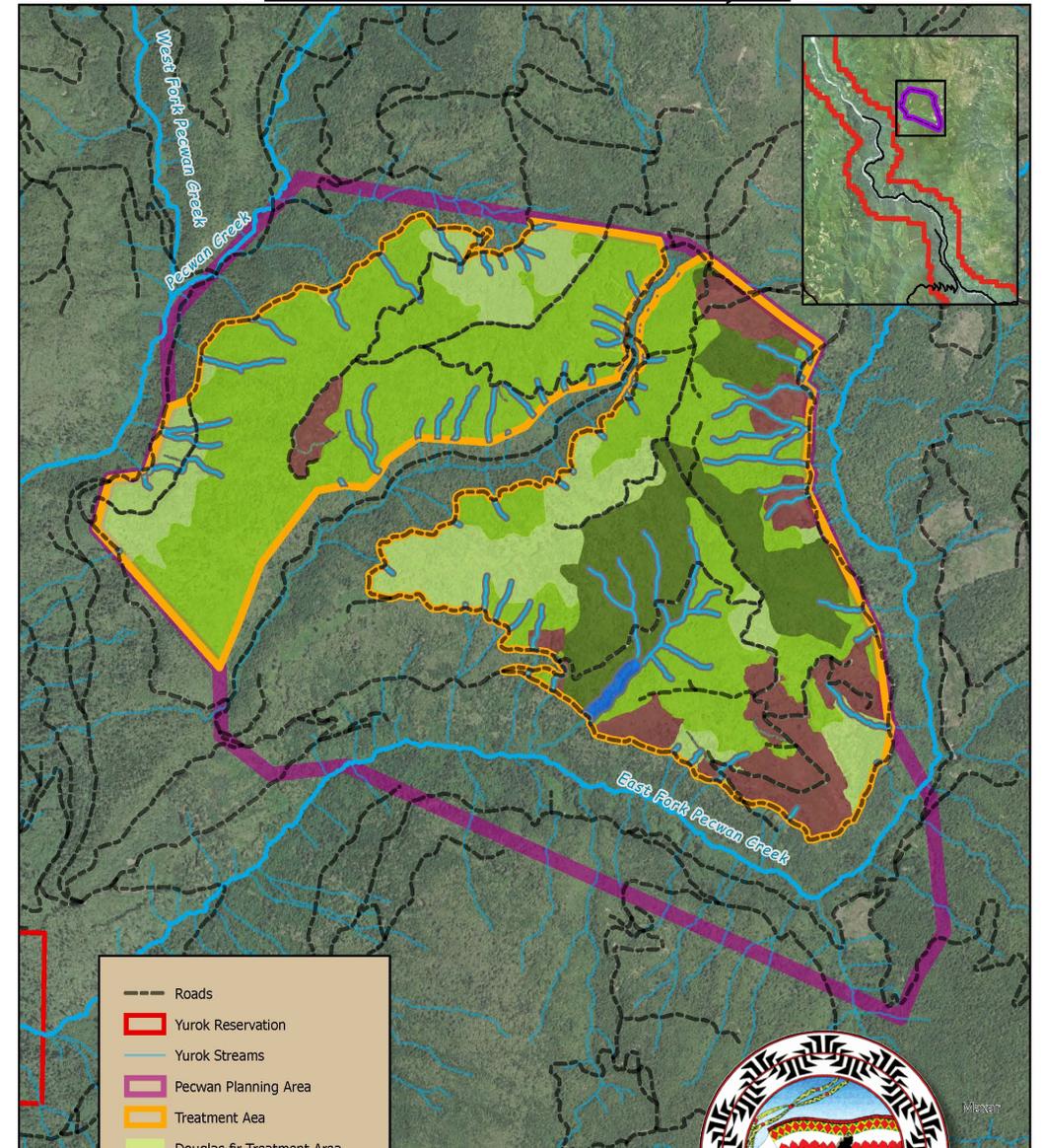
Establish late seral forest characteristics

Interrupt the fuel continuity

Decrease density

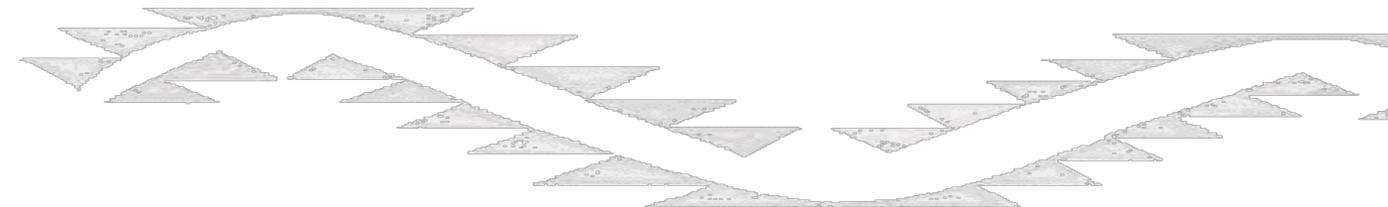
Reinstitute fire management

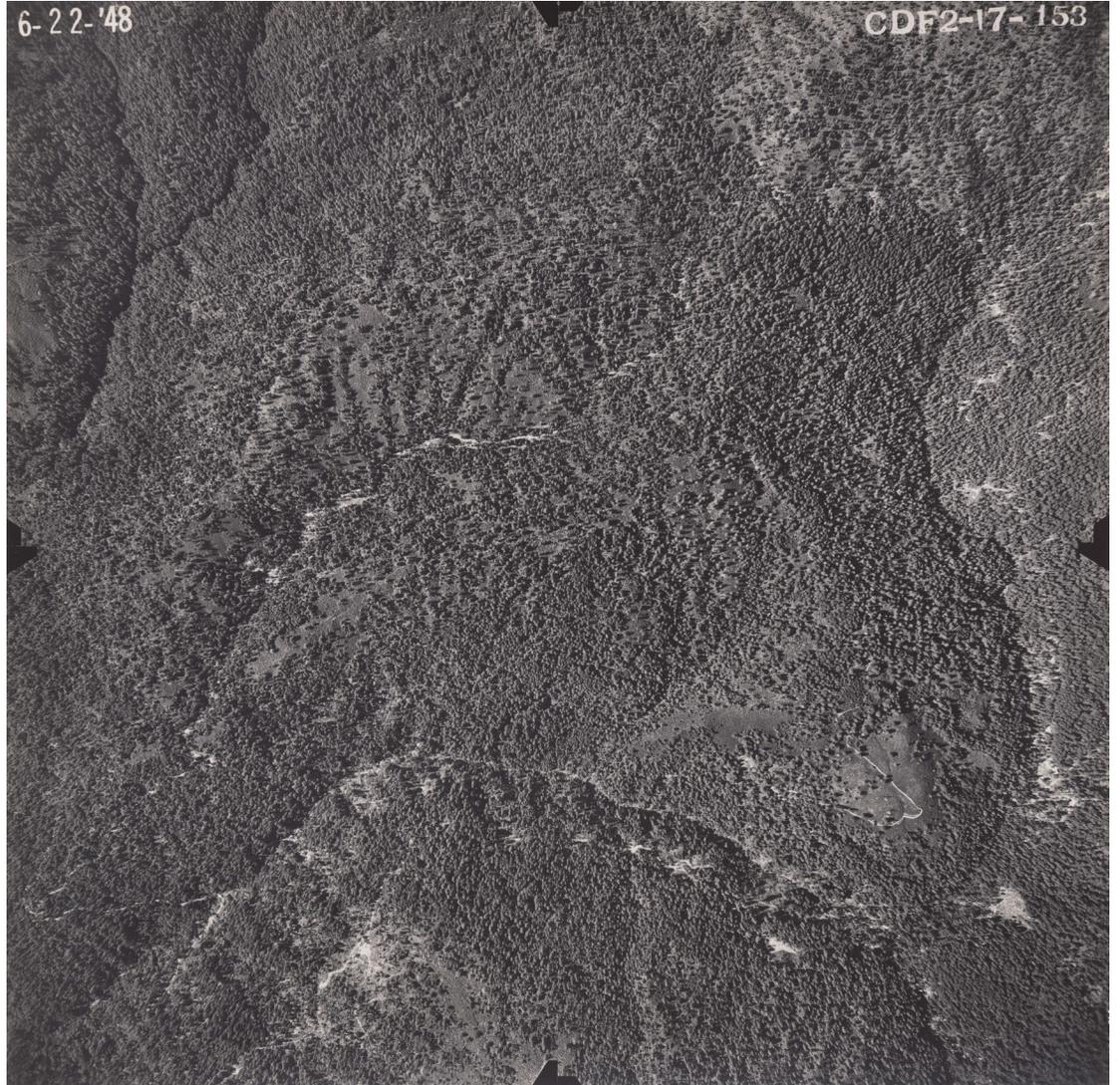
Promote habitat

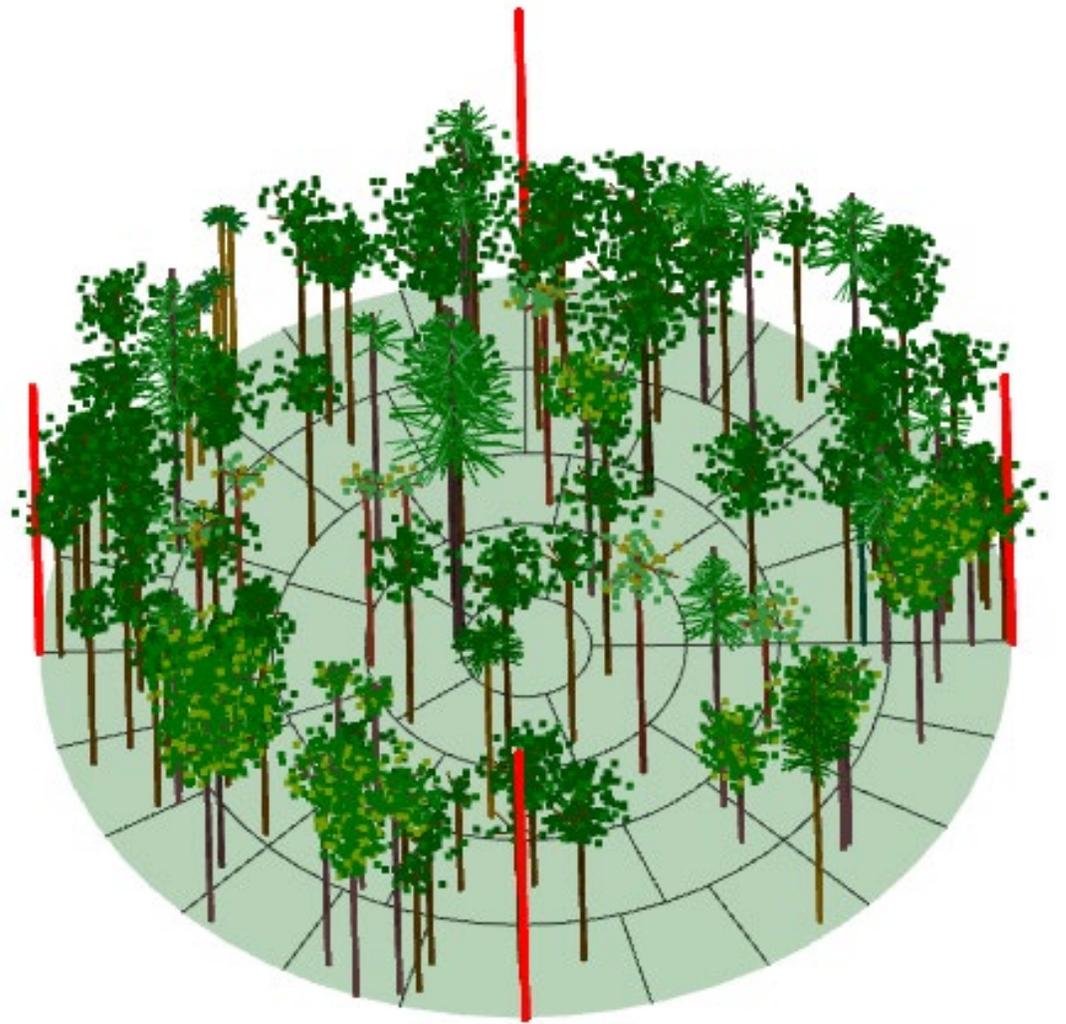


0 10 Miles

Although information was used in the creation of this map, it does not constitute a land survey. The lines and areas shown are only approximate and their actual location on the ground may vary. While every effort has been made to assure the accuracy of this information, it should be understood the data is intended to be used for general planning purposes only. The Yurok Tribe assumes no liability or responsibility in the use or misuse of this map and the information within.









Challenges

From deforestation and clearcutting

Protection of trees

Now there are trees where they shouldn't be...

The product and byproduct is problematic

Logs --- Insufficient Mills

The byproduct --- Slash

Chips --- how much can you chip? Equipment is a year out on order



Questions?



Chile Pepper

Free Concert in the high school gymnasium

Amazing set list

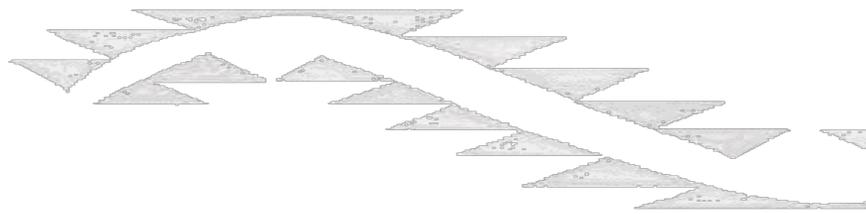
The Children and Community in awe

1-2 weeks later Anthony Kiedis commented
on experience

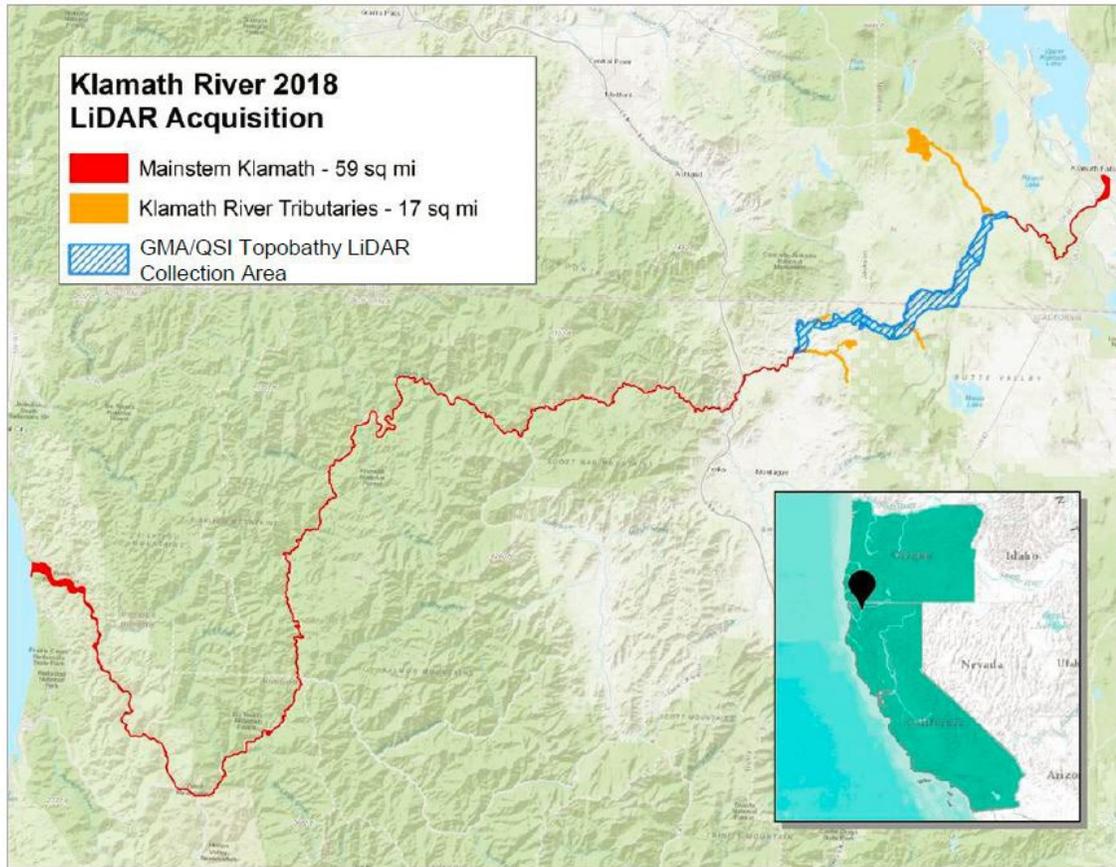


LIDAR

Iron Gate Dam before water released.



Yurok LIDAR



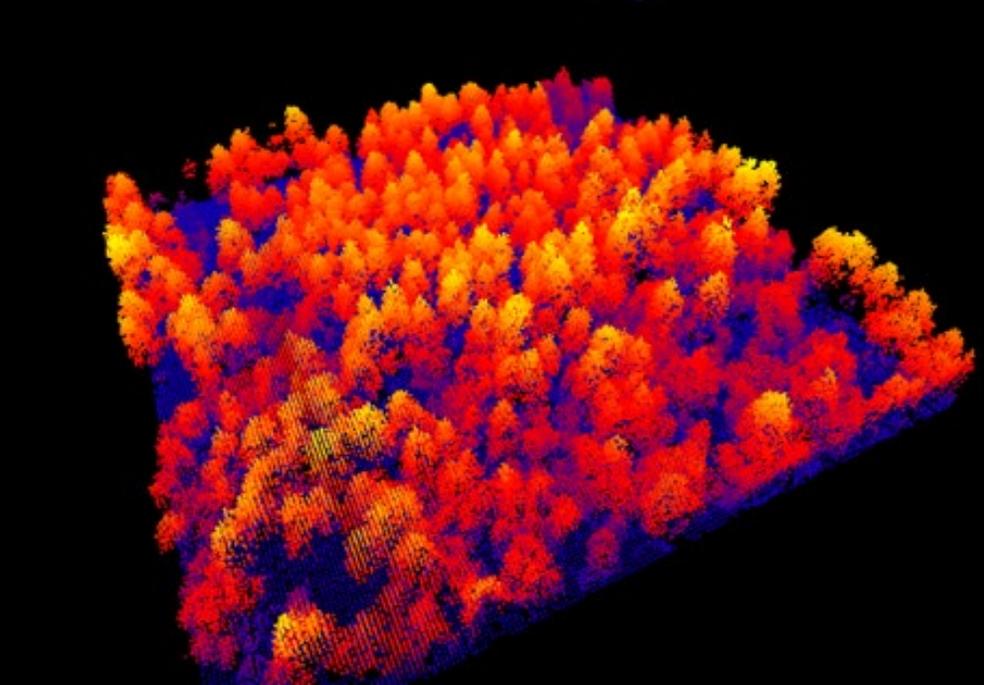
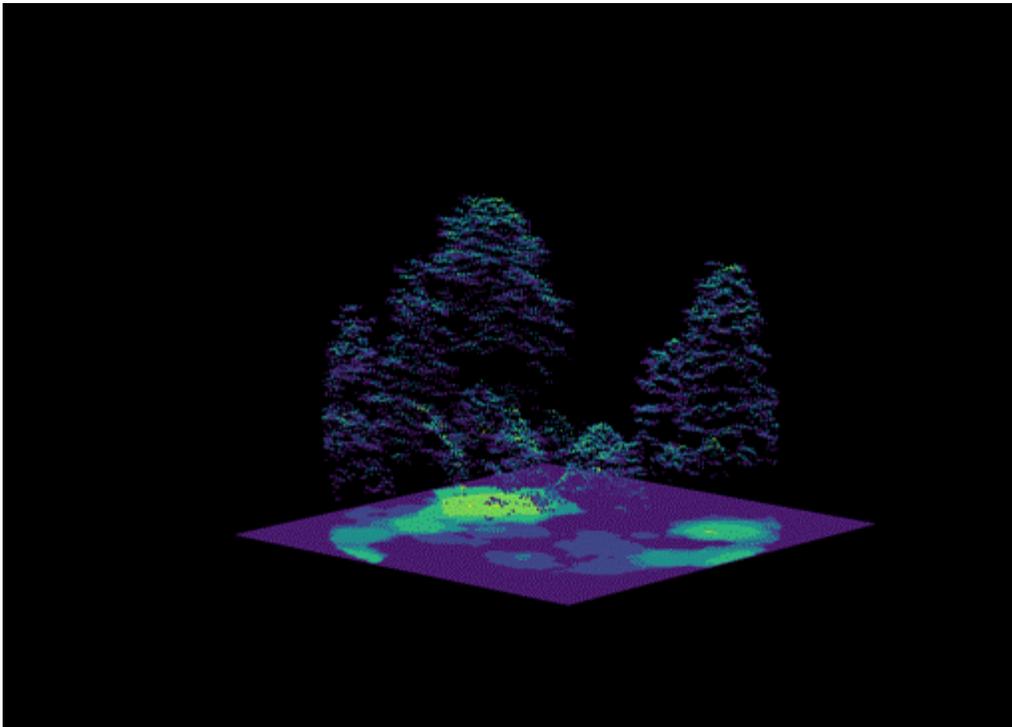
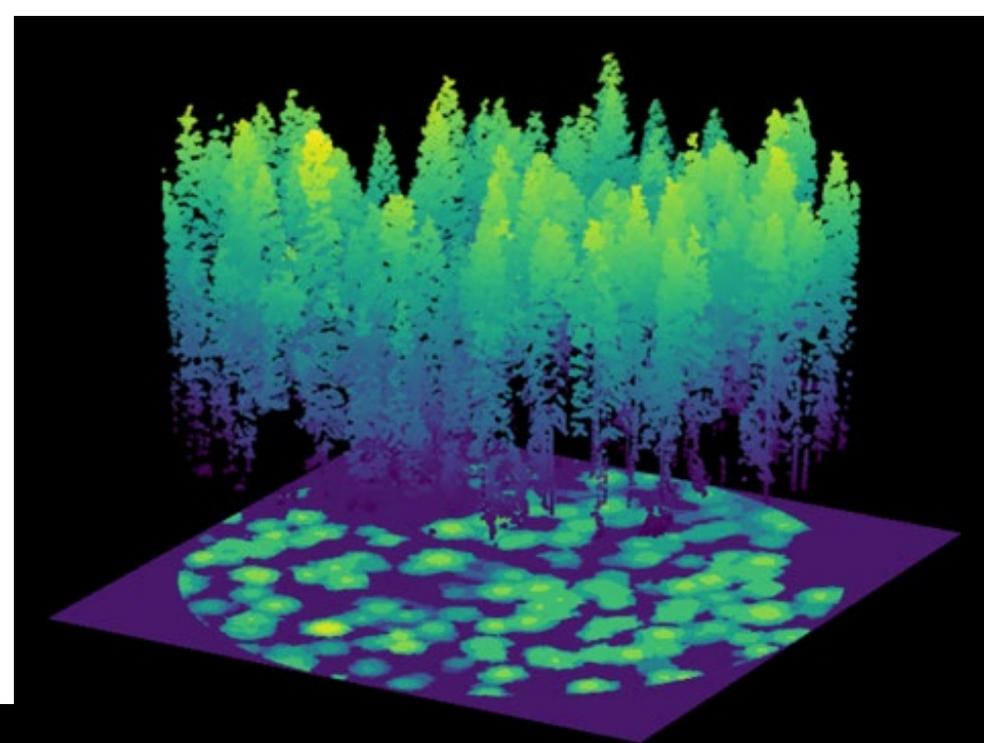
- Existing Coverage
- Klamath watershed
- Yurok reservation and acquisitions

Point Cloud

Raw data

Analysis

Capacity development



Yurok Drone

Collects high resolution data

Maneuverable

Capable of a snapshot of data

Visual Distance

400 ft

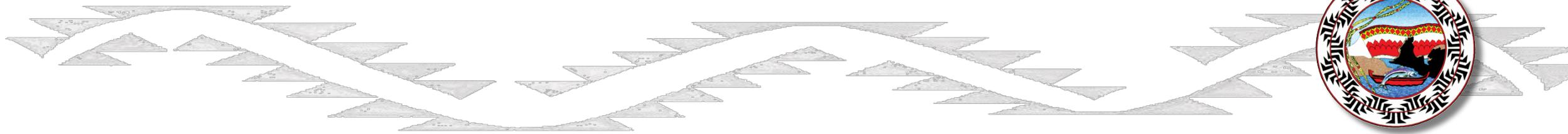


Grand Caravan EX

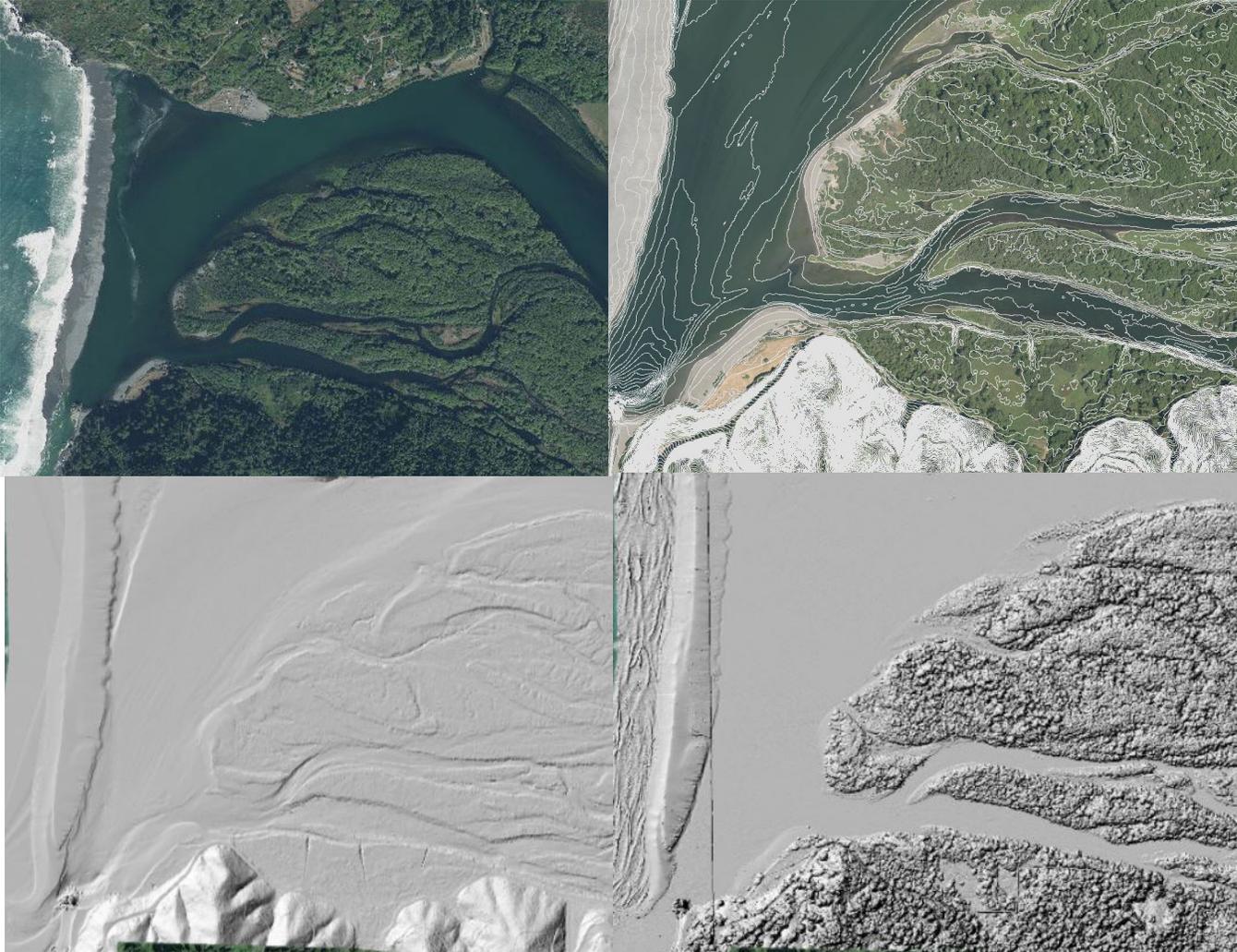


LIDAR

thermal signature
imagery



LIDAR Data Set



- High Resolution Digital Image
- Image with vector
- LIDAR Hillshade (1st hit)
- LIDAR Hillshade bare ground