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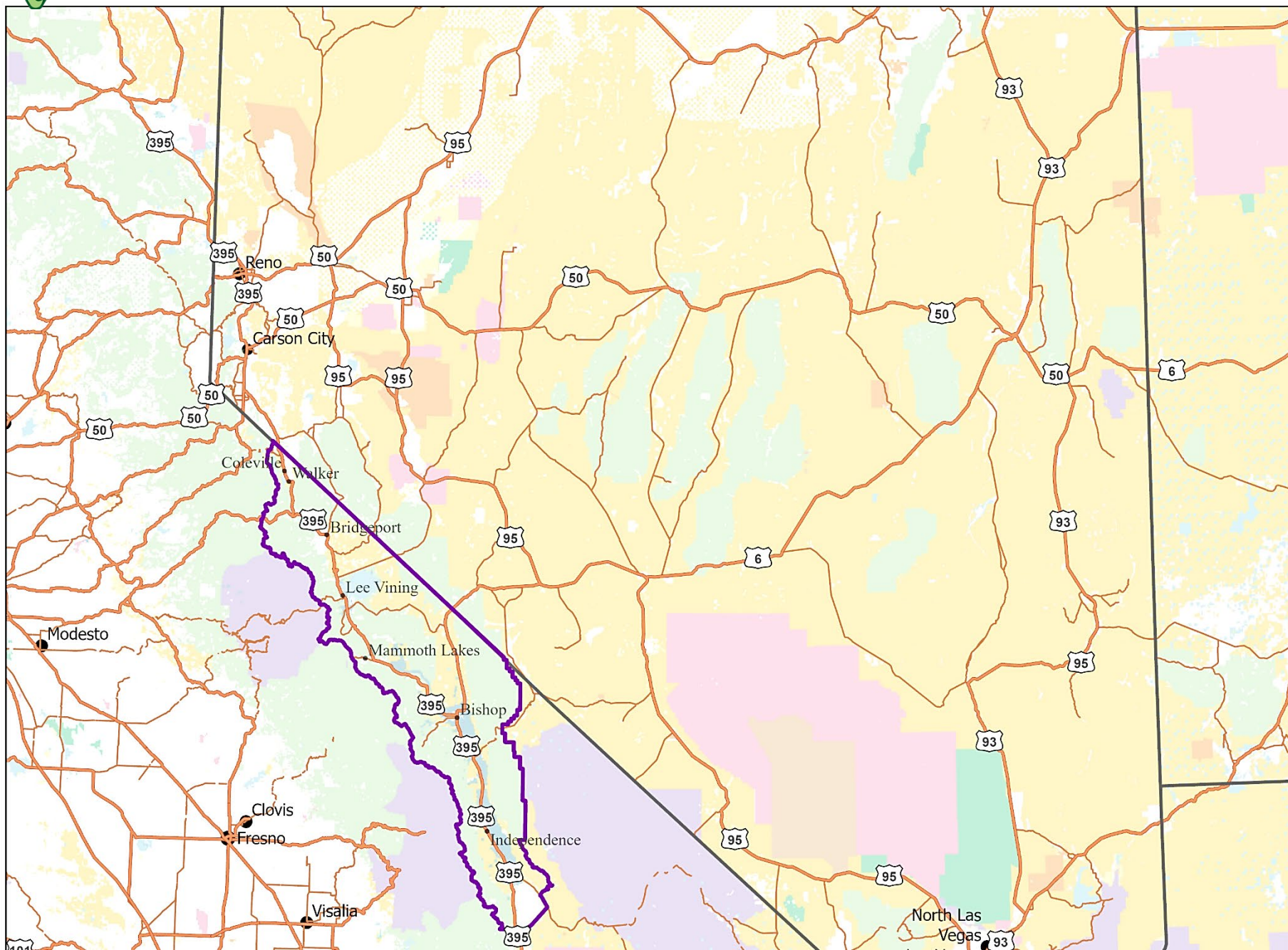
Learning to manage pinyon woodlands

Working together with Tribes, a perspective from the Interagency Bishop Field Office-Inyo National Forest Vegetation Management Program





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Evolution of our thinking about managing pinyon* woodlands as a part of the entire landscape

- Working together with Tribes, developing trust, blending traditional methods and knowledge with western forestry
- Incorporating pinyon woodland health as a goal in all projects in and near woodlands
- Mitigating threats to pinyon woodlands (fire and climate change)
- Creating edges of woodlands that are good for wildlife
- Making very site-specific plans based on what we can learn about that site
- Working with researchers to learn more about response to treatments and wildlife use including pinyon jay

*In the eastern Sierra region managed by the Bishop Field Office and Inyo National forest most of the pinyon-juniper woodlands are dominated by pinyon so this presentation will focus on pinyon.



Starting point 15-20 years ago

- Pinyon projects were driven by one of two objectives:
 - fuel reduction/ community wildfire protection goals or
 - sagebrush restoration goals
- Tribes were informed of project design and given an opportunity to consult as required by law and policy but not a part of the project development.
- Projects were treated using a relatively uniform prescription derived from forestry methods in other forest types (individual tree spacing or clumps with uniform spacing)



Example old treatment with fuels reduction and community protection goals





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Example old treatment with sagebrush restoration goals

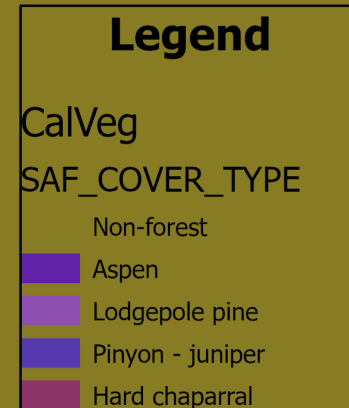


A treatment area where pinyon expanding into sagebrush was cut but the patch of woodland adjacent was left with a hard line at the edge.



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Pinyon woodland patterns in the Bodie Hills



Calveg Map showing a landscape in the Bodie Hills managed by the Bishop Field Office



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Complex patterns of pinyon, sagebrush, aspen, and riparian

Aerial imagery of a landscape on the southeast side of the Bodie Hills



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Field surveys to understand the structure and history of the stand.

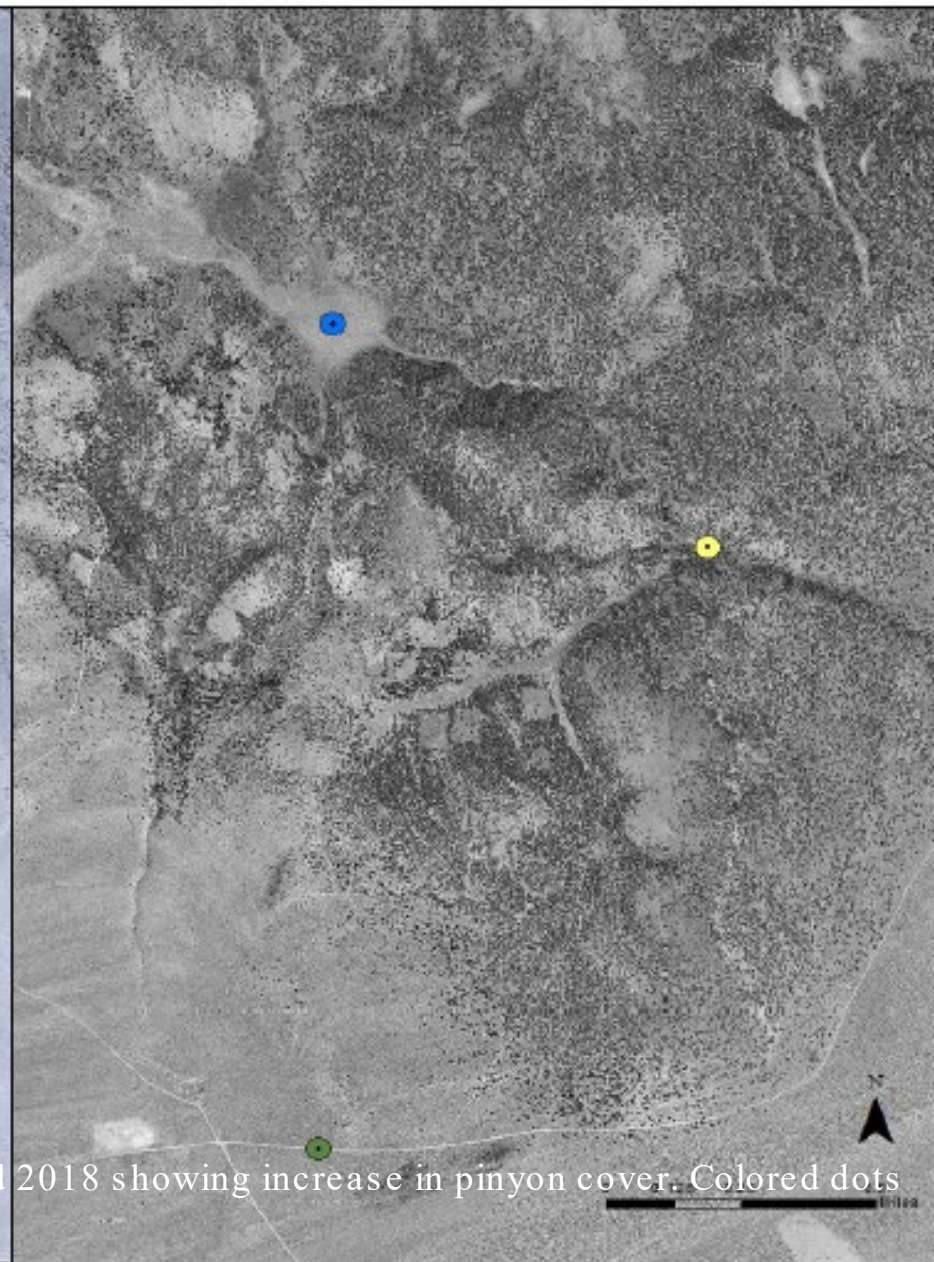
Bishop Field Office employee ages a pinyon using a core to understand local age structure and history of the stand.



Rancheria Gulch Area in 1940



Rancheria Gulch Area in 2018



Aerial photo comparison of the same area in 1940 and 2018 showing increase in pinyon cover. Colored dots are visual guides to the same location in both photos.



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Realizing the local threats to pinyon woodlands: Wild fire



Slinkard Fire 2002



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Realizing the threats to pinyon woodlands: Drought and climate change



Pinyon mortality on east side of the White Mountains, 2023



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Tribes and local Native people made their voices heard

The first Traditional Ecological Knowledge Summit group at Sweetwater Summit. The Summit was planned to bring Tribes and the Agencies together to start talking about the importance of pinyon.



It takes a long time and a lot of listening





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Pinyon Co-Stewardship Area with Mono Lake Kutzadika'a



View of pinyon co-stewardship area being managed collaboratively with the Mono Lake
Kutzadika'a Tribe



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Mono Lake Kutzadika'a Tribal Council Members with BLM Staff and State Director



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Adjacent sagebrush project also designed to benefit woodlands

View of completed sagebrush restoration project also designed to protect the woodlands and provide edge habitat



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Pinyon stewardship project on the Inyo National Forest



Families working to clean a pinyon grove on the Inyo National Forest



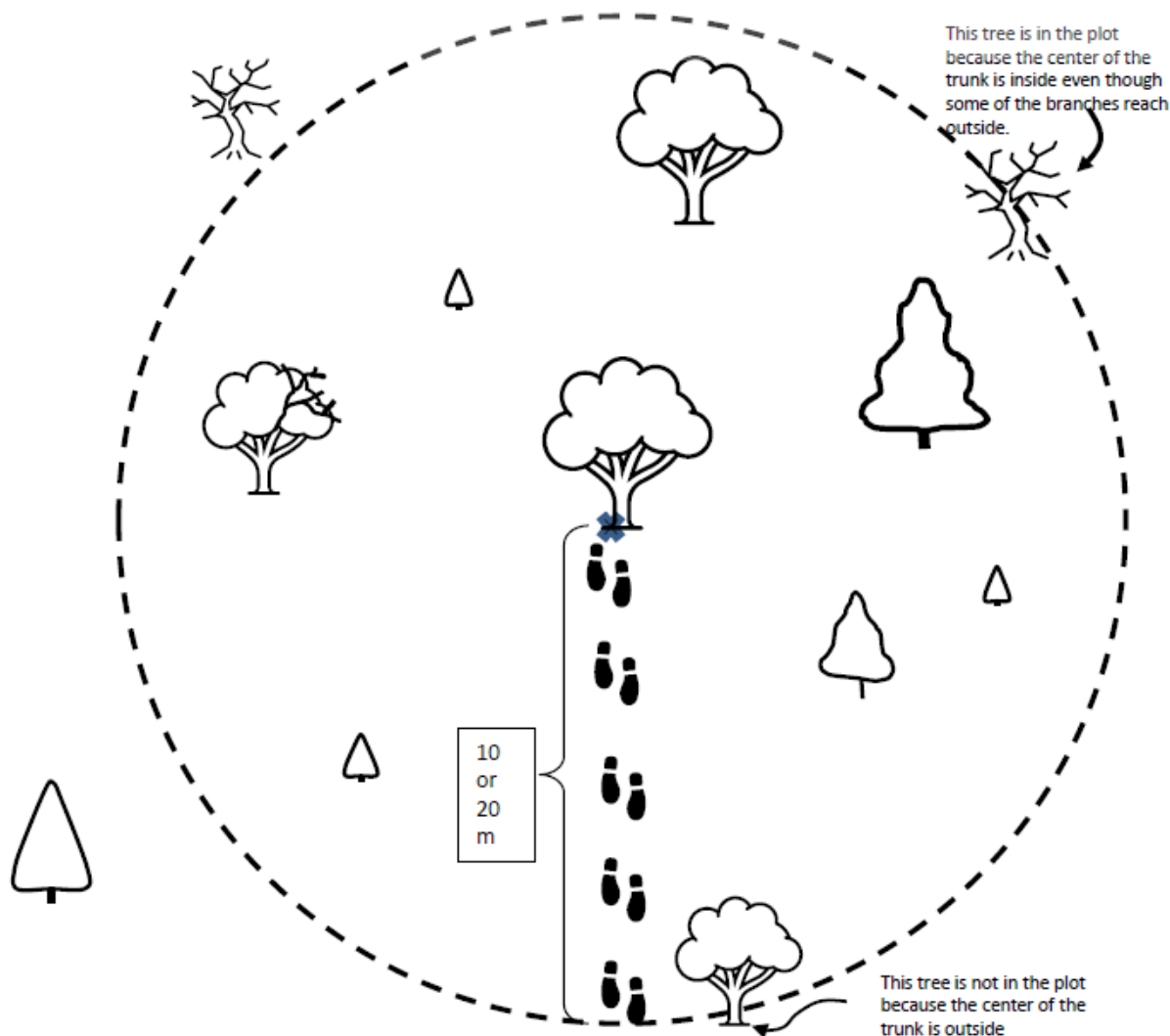
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Some of the families who worked to clean the grove



Tribal citizen science pinyon monitoring protocol developed with the Bishop Paiute Tribe



Plot Layout:

- Pick a center point
It is good to use a tree to avoid having your plot be mostly a natural opening.
- Use your paces (steps) to measure out your plot.
If you know how many steps you have in 10 meters, use that. If you don't know, assume that you have about 20 steps (one foot at a time) in 10 meters.
- If you have 3 or more mature trees in circle 10 meters from your center, use that. If you have too few trees, use a 20-meter (approx. 40 step) plot.
Trees are in the plot if the center of the trunk is inside your paced distance. If the center of the trunk is outside, then don't count that tree even if the branches reach over the plot.



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