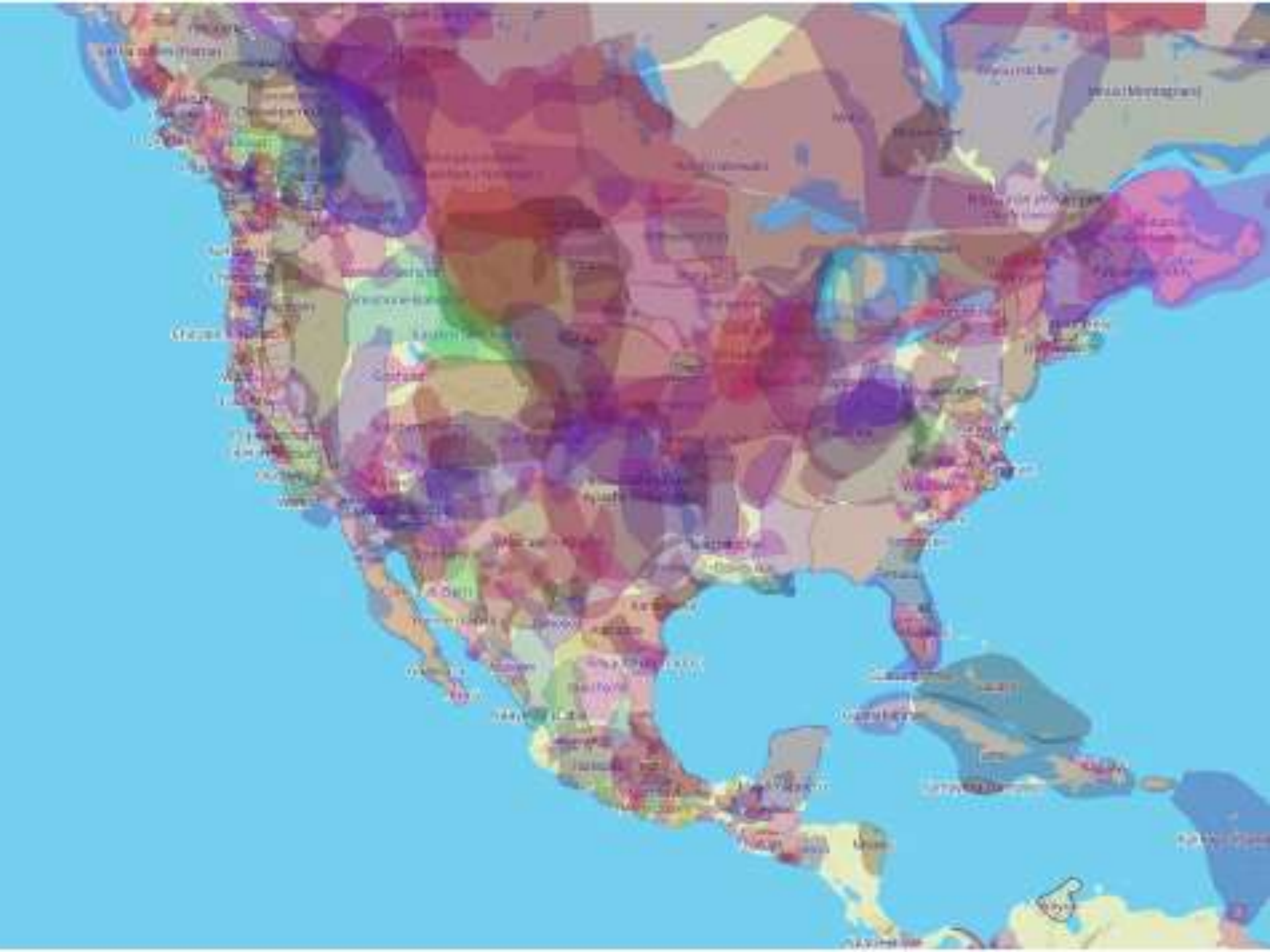


Indigenous Environmental Justice: Context and Cases

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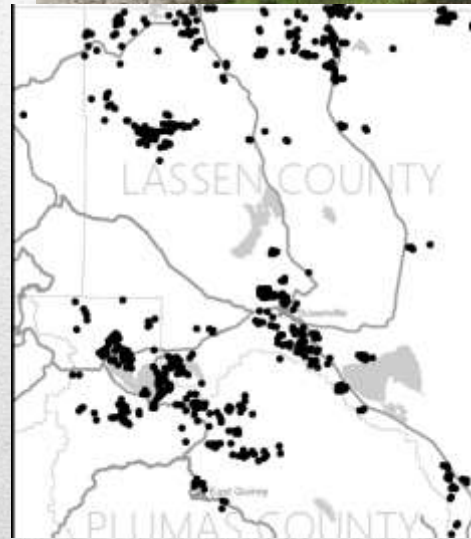
- Disruption of Indigenous land tenure
 - Broken treaties, “encroachment,” allotment, violent land seizure, government-led removal and land re-distribution
- ...and all that Indian land tenure includes
 - Relationship, responsibility, stewardship, identity
- Continued denial of Indigenous rights and responsibilities to tend homelands has real consequences
 - Indigenous people today are still criminalized for exercising their responsibilities to care for their homelands
 - Indigenous peoples face health issues stemming from lack of access and/or contaminations

EJ: Facing colonial legacies

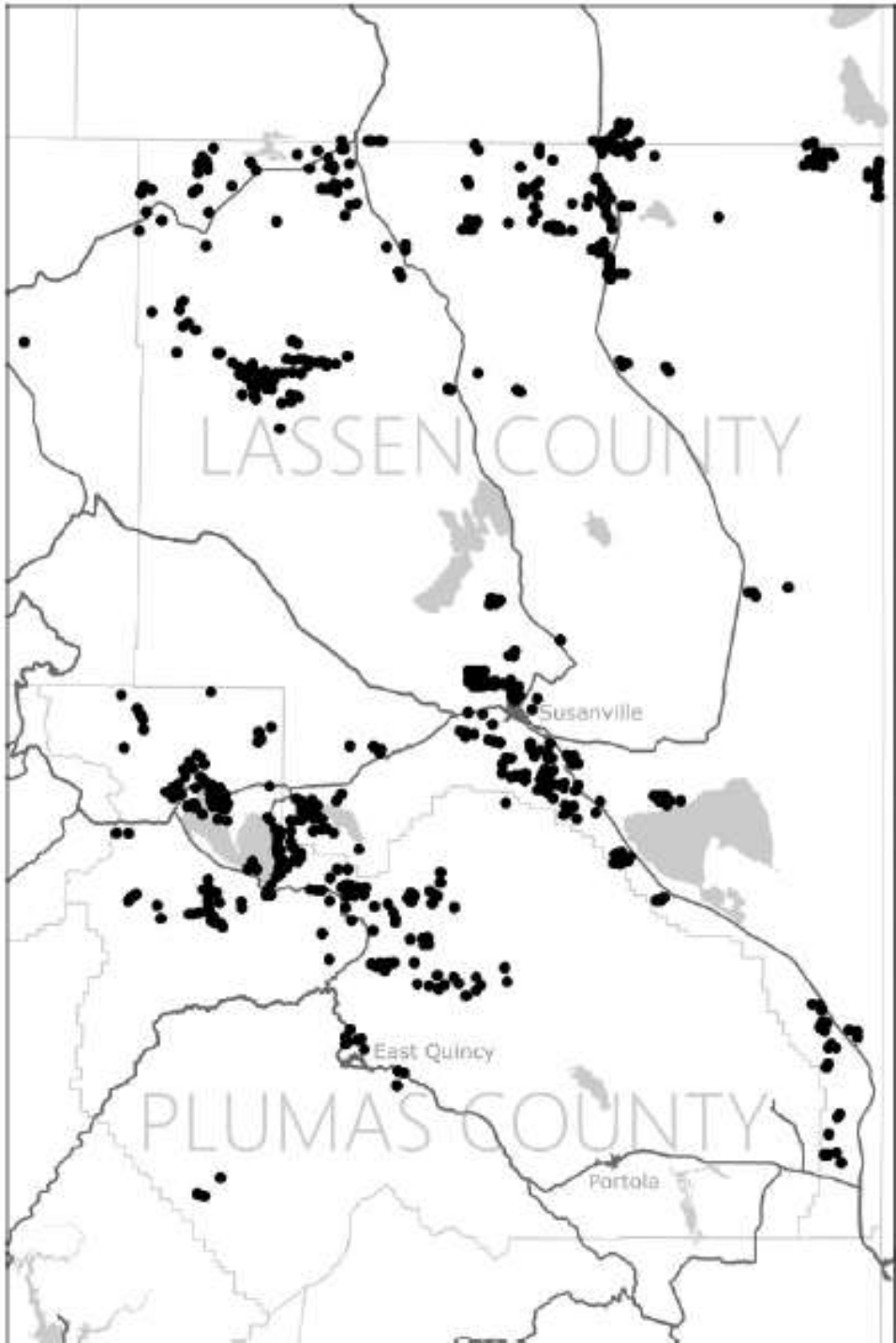
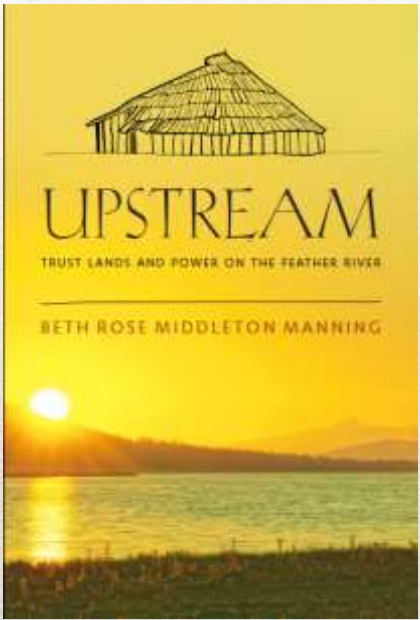


CA IEJ Context

- Specific research on the history of tribal lands and waters, link to contemporary exclusions in policy and practice
- Research on contaminants, their sources, and how to address them
- Advocacy to address land restitution, land/water cleanup, co-management



Education & Empowerment: Research and Advocacy



Individual Indian Allotments in Plumas and Lassen counties, California
Cartography by Michelle Tobias

INDIAN ALLOTMENT APPLICATION FOR LANDS OUTSIDE OF ANY INDIAN RESERVATION.

(Act February 8, 1887, Stat. 24, p. 388, as amended by act February 28, 1891, Stat. 26, p. 794.)

United States Land Office,

Susaville Cal

March 27, 1894

APPLICATION No. 163

1. John Jenkins, being an Indian of the Big Meadows tribe, do hereby apply to have allotted my minor child Goodseener Jenkins Age 16 years, under the provisions of the fourth section of the act of Congress, approved February 8, 1887 (Stat. 24, p. 388), as amended by act of February 28, 1891 (Stat. 26, p. 794), the

SW^{1/4} of SE^{1/4}
~~SE^{1/4} of SW^{1/4} Sec 15~~
~~E² of NW^{1/4} of Sec 22~~
T²⁷ R 8 E 7 N D M
Paid to Master
Brown Co.

This land is valuable only for grazing purposes.

containing 160 acres.

John Jenkins

Witnesses:

W. P. Call
L. A. Rosebery

United States Land Office,

Susaville Cal

March 27, 1894

1. L. A. Rosebery, Register of the Land Office, do hereby certify that the above application is for Susaville lands, and that there is no prior valid adverse right to the same.

L. A. Rosebery, Register.



Big Meadows dam construction 1925 (Huber, WRCA)

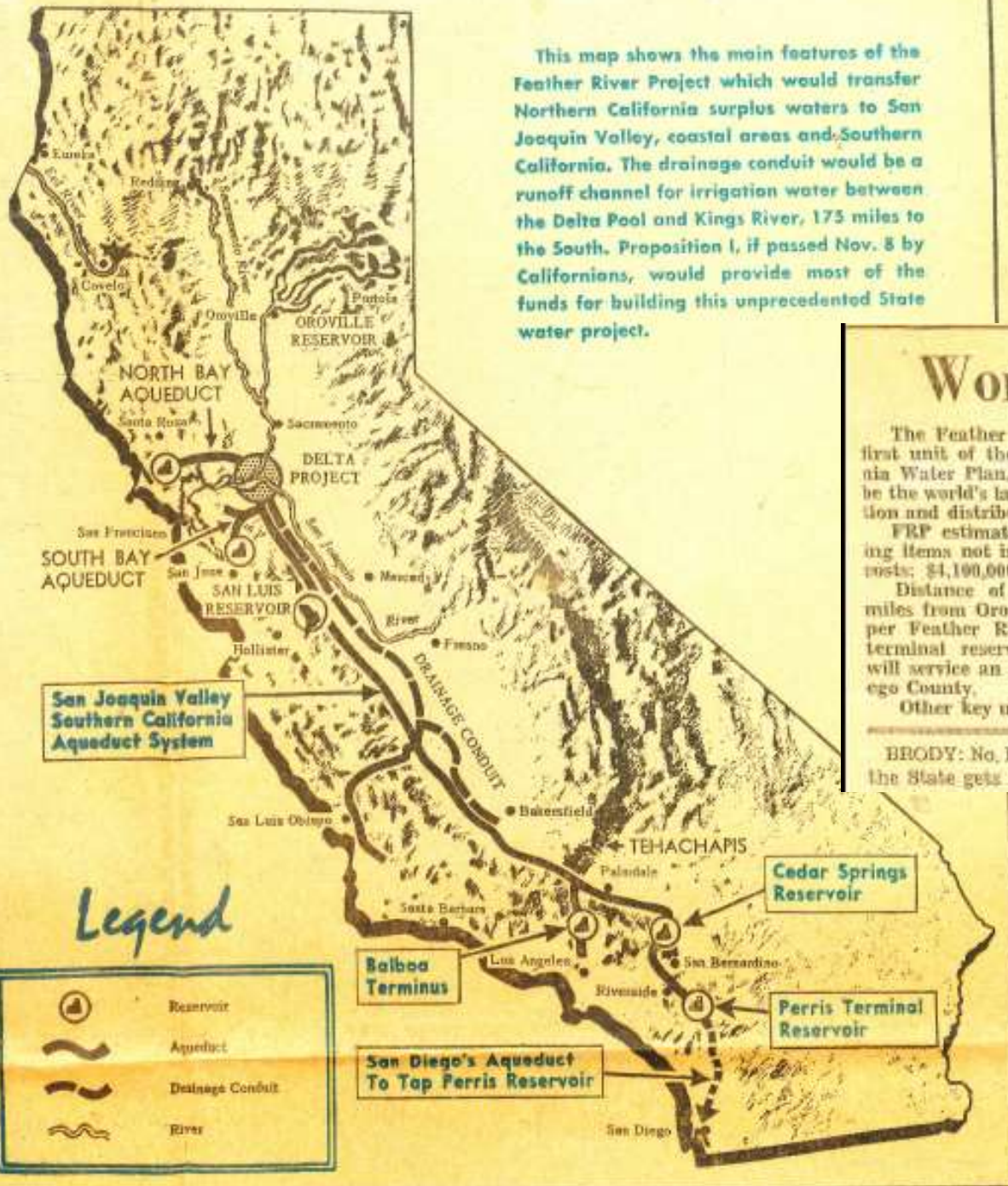


Great Western's

largest power development in 282,000 H. P., the largest single hydro-electric project in California. It is probably exceeded only by Niagara at a lower output.
 The High Tension plant, approximately 30,000 H. P., and the new Cedar Bluff plant 10,000 H. P., are two of the largest power plants in the West.
 Great Western is situated across the backbone high voltage transmission.
 The entire hydro-electric generating system is regulated by Lake Alameda, the largest artificial power reservoir in the world.



This map shows the main features of the Feather River Project which would transfer Northern California surplus waters to San Joaquin Valley, coastal areas and Southern California. The drainage conduit would be a runoff channel for irrigation water between the Delta Pool and Kings River, 175 miles to the South. Proposition I, if passed Nov. 8 by Californians, would provide most of the funds for building this unprecedented State water project.



World's Largest System

The Feather River Project is the first unit of the long-range California Water Plan. The FRP alone will be the world's largest water conservation and distribution system.

FRP estimated total cost, including items not in actual construction costs: \$4,100,000,000.

Distance of water transfer: 740 miles from Oroville Dam on the upper Feather River to an aqueduct terminal reservoir at Perris which will service an area down to San Diego County.

Other key units: The great aque-

duct system, with branches at north and south ends of San Francisco Bay; the Delta Pool (convergence point of northern rivers) San Joaquin Valley-Southern California Aqueduct, with East and West Branches serving Southern California.

Also San Luis Reservoir, a state-Federal unit to impound water in San Joaquin Valley for storage and flow regulation; master levees, drainage and hydroelectric facilities and pumping plants.

BRODY: No. Revenues the State gets from wa-

tern in the North where they want the dam to

Q.—Now, any final word, Governor?

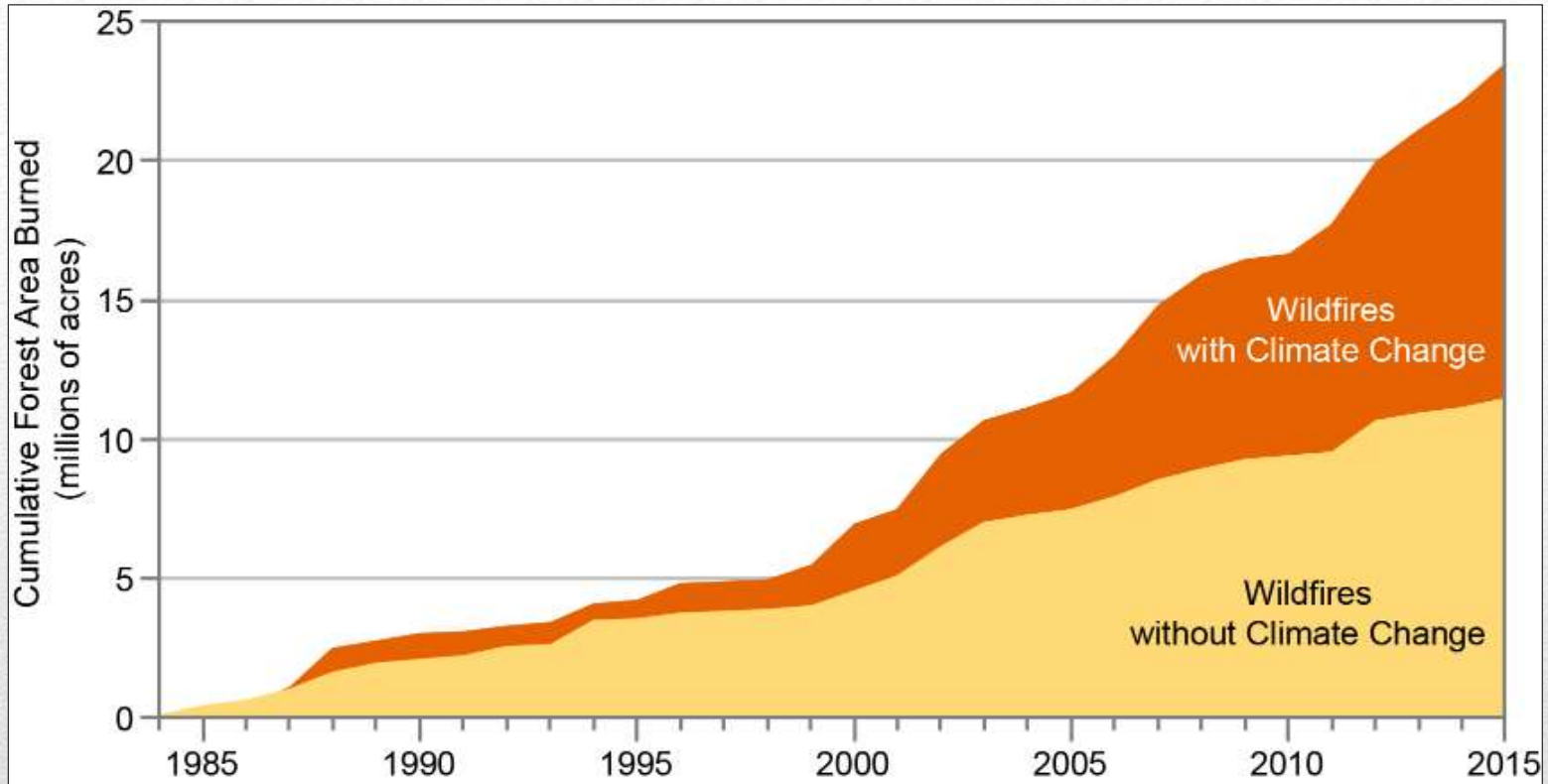






Left: Maidu Summit Board Chair Ben Cunningham, Sr. (Maidu), planting and tending seedlings; *Right:* UCD ESP alum Ellen Sanders-Raigosa (Nomlaki) with Reina Rogers (Tohono O’odham), NRCS Tribal Liaison (retired) and Maidu Summit volunteer

- Students and collaborators grow the plants from seed and may also assist with site prep (raking, burning, preparing soil) and tending after planting
- Goal to have students and collaborators make a respectful contribution to long-term, tribal community-led work

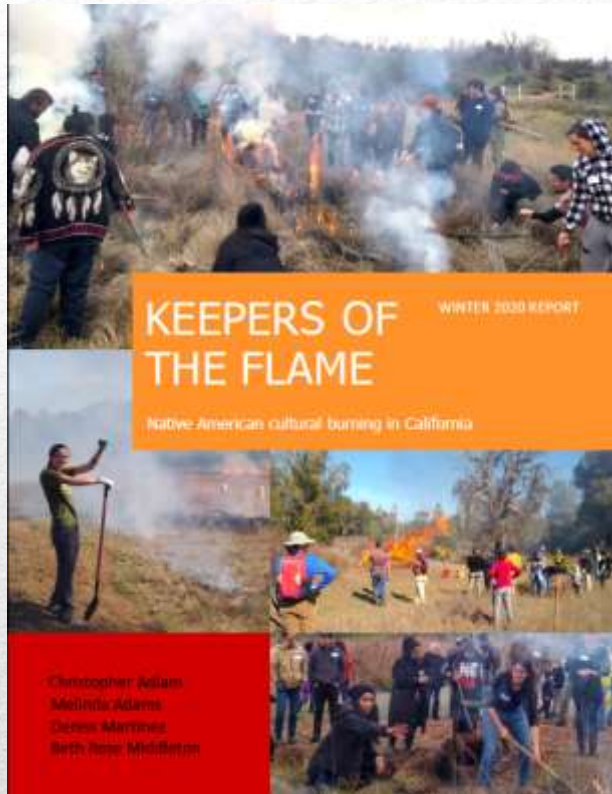


Abatzoglou, J.T. and A.P. Williams, 2016: Impact of anthropogenic climate change on wildfire across western US forests. *Proceedings of the National Academy of Sciences of the United States of America*, **113** (42), 11770-11775.

A century of fire suppression and active exclusion of Indigenous land stewardship has contributed to increasing risk of catastrophic fire.

- Leading academic and practitioner science shows the effectiveness of cultural burning for increasing habitat, raising the water table, improving ecosystem health, reducing the risk of catastrophic fire, and other co-benefits
- Some of the many resources on the science of cultural burning:
 - Marks-Block T, F Lake, L Curran. 2019. Effects of understory fire management treatments on California Hazelnut, an ecocultural resource of the Karuk and Yurok Indians in the Pacific Northwest. *Forest Ecology and Management* 450.
 - David, A.T., J.E., Asarian, F. Lake, 2018. Wildfire Smoke Cools Summer River and Stream Temperatures. *Water Resources Research* 54, 7273–7290.
 - Hankins, D. 2017. Restoring Indigenous Prescribed Fire to California Oak Woodlands. General Technical Report PSW-GTR-251, pp. 123-129.
 - Hankins, D. 2018. Ecocultural Equality in the MiwkoJ WaaliJ . *San Francisco Estuary and Watershed Science* 16(3).
 - Lake F., V. Wright, P. Morgan, M. McFadzen, D. McWethy, C. Stevens-Rumann. 2017. Returning Fire to the Land: Celebrating Traditional Knowledge and Fire. *J. of Forestry* 115(5): 343-353.
 - Long, Jonathan W.; Anderson, M. Kat; Quinn-Davidson, Lenya; Goode, Ron W.; Lake, Frank K.; Skinner, Carl N. 2016. Restoring California black oak ecosystems to promote tribal values and wildlife. Gen. Tech. Rep. PSW-GTR-252.
 - Aldern, Jared, and Ron Goode. 2014. These Stories Hold Water: Learning and Burning in North Fork Mono Homelands. *Decolonization: Indigeneity, Education, and Society* 3(3)

Cultural Burning



- The field course and public workshops require extensive collaboration, supportive funding, committed organizers
- Guiding Principles include:
 - Hands-on learning
 - Recognizing Indigenous expertise
 - Reciprocity
- Learning outcomes:
 - Ecological importance of fire
 - Policy context for cultural burning
 - Cross-cultural relationship building for land stewardship

Education and Cultural Burning: “Keepers of the Flame”



Winter 2018:
North Fork
Mono Elder
Ron Goode
leading a
group of
UCD
students in a
burn to
reinvigorate
the health of
basketry
plants.







Winter 2020:
Dunlap Mono
weavers Gladys
McKinney, Julie
Tex, and Florence
Dick work with
community
members, faculty,
and students, to
harvest and process
sourberry and
redbud.



- Equity and engagement in the 30x30 initiative: application of policy and practice to support Indigenous land stewardship (including burning), linking the Apology in EO N15-19 to land policy
- Expansion of application of cultural and subsistence beneficial uses of water throughout the State

State IEJ projects/ issues

- State Water Board defines beneficial use categories
- Regional Water Boards designate specific water bodies with beneficial uses
- Water quality objectives specify level of protection to protect a beneficial use (if needed), and place limits on pollutants (these can be developed regionally or statewide)



Implementation overview



Agricultural
Supply



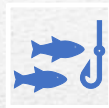
Aquaculture



Preservation of
biological habitats
of special
significance



Cold freshwater
habitat



Commercial and
sport fishing



Estuarine habitat



Freshwater
replenishment

- Shellfish harvesting
- Navigation
- Hydropower generation
- Marine habitat
- Groundwater recharge
- Municipal and domestic supply
- Industrial process supply
- Non-contact water recreation

Examples of BUs

- Tribes sent letter to the SWRCB in July 2013, stating that existing beneficial uses did not protect their cultural uses or tribal subsistence fishing practices
- Review, consultation, development of language 2013-2015
- 2/16/16 SWRCB adopted Resolution directing staff to develop proposed beneficial uses categories pertaining to tribal traditional and cultural uses, tribal subsistence fishing, and subsistence fishing by other cultures:

Tribes

The State Water Board recognizes the importance of identifying and describing beneficial uses unique to California Native American tribes. Tribes have cultural practices and ways of life that they wish to preserve and pass on to future generations. Changes to California's waters, along with new sources of contamination and pollution to those waters, which are part of their native heritage, present distinctive challenges to the tribes and their members. In many of these areas, tribal members are unaware of issues with water quality and the dangers they may present. Providing beneficial use categories and descriptions designed to protect Native American uses of waters is an important step in ensuring that tribes have the opportunity to continue to practice their culture.

Process Overview


- Objective: quantify tribal fish consumption throughout the state, in order to adjust water quality standards (which set pollution discharge limits) to protect tribal members
 - The higher the rate of consumption, the lower the pollution limit; the lower the rate of consumption, the higher the pollution limit
- Modeled after a tribal fish use study conducted in Oregon by the Columbia River Inter-Tribal Fish Commission (CRIFTC) in 1994: Oregon DEQ had estimated consumption at 20-30g/day; actual tribal consumption was over 140 g/day
- Two surveys (historical and contemporary fish use), found widespread, culturally important harvesting and consumption, albeit impacted by development and species decline



Shilling's Tribal Fish Use Study

Uses of water that support the cultural, spiritual, ceremonial, traditional rights and/or lifeways of California Native American Tribes, including, but not limited to: navigational activities, and fishing, gathering, and/or consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials, as supported by California Native American Tribes.

Tribal Traditional & Cultural Use



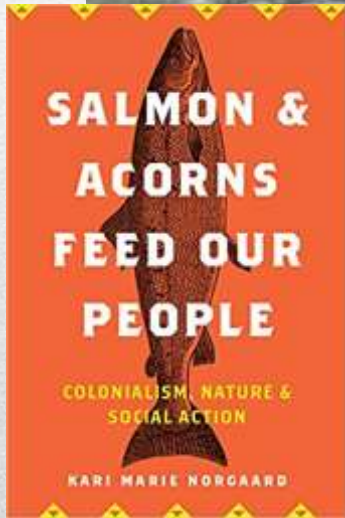
Uses of water that support the catching or gathering of natural aquatic resources, including fish and shellfish, by California Native Americans, for consumption by individuals, households, and/or communities to meet fundamental needs for sustenance.

Tribal Subsistence Fishing Use

- Conduct studies to make the case for the application of BUs to waterways
- Regional Water Boards designate BUs to waterways
- Data-based water quality objectives may need to be developed to protect BUs
- No new regional water boards (aside from Region 1, whose categories recognizing cultural use pre-dated the state recognition) have adopted T-SUB and T-CUL
- Region 5 is interested in exploring this process and applying the Tribal BUs to water bodies in its jurisdiction



How/where will BUs be applied?



- Tribal BUs are a key tool; a way to insert tribal values into the water quality regulatory process
- Tribes use new BUs to argue for expanded water quality– not only seasonal, with previous BUs focused on habitat for a fish that migrates, but also year-round b/c use, access, is continuous
 - Susan Corum of Somes Bar quoted in Norgaard 2019: *Look, every month of every year, the water needs to be good. Every month, every year. Every minute of every day, this place needs to be rock solid. Because what they'll do is they'll chart, if all they're going off of is salmon...life cycles, then normally the only times they're worried about is June to August or September. So you can pollute the [river] the rest of the year and nobody cares. So this says to them, you have to protect it all year round.*

Beneficial uses

- Lack of staff/ departments to do the data gathering work to support the protection of tribal values and interests (i.e., the living river)
- Length of time to introduce, investigate, and call for the designation of BU; length of time required for study of the River, impairments, species, human exposure pathways, etc.— pollution can continue in this time!
- Once the BU is in place and the accompanying water quality objective is established, with the TMDL approved, what about enforcement?



Remaining concerns

- Education
 - Hands-on learning guided by respect, reciprocity
 - Acknowledge racism and settler colonial violence embedded in accepted institutions
- Policy
 - What are the barriers to the development of Indigenous-led projects and/or the application of traditional methods for land restoration? What are the opportunities? Where are the policy levers?
 - What are the incentives to land repatriation/ rematriation? What are the barriers? What policy levers will enable removing barriers and increasing incentives?
- Research
 - Assessing barriers
 - Monitoring impacts
 - Contributing to Indigenous-led policy change and projects

IEJ Interventions



Thank you

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