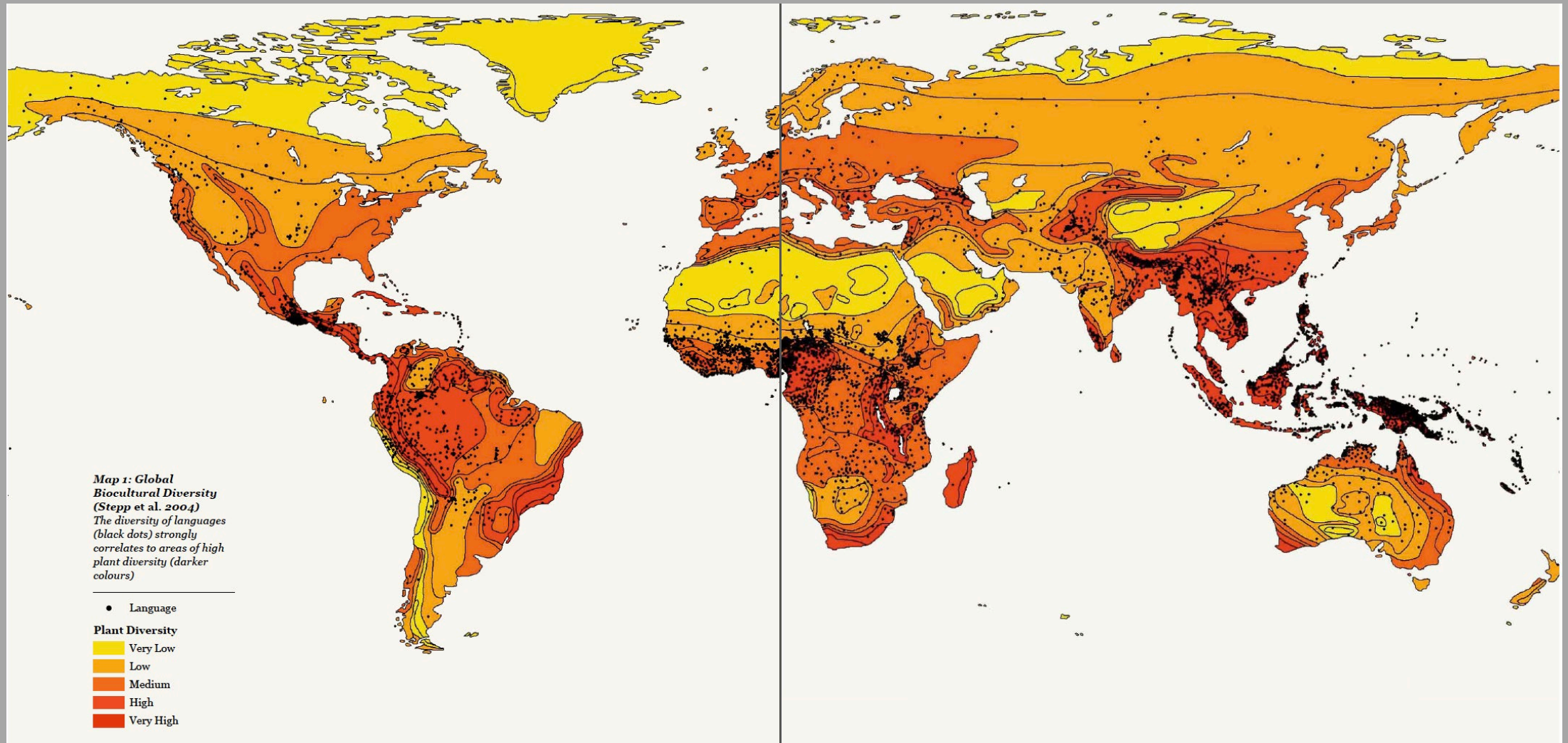


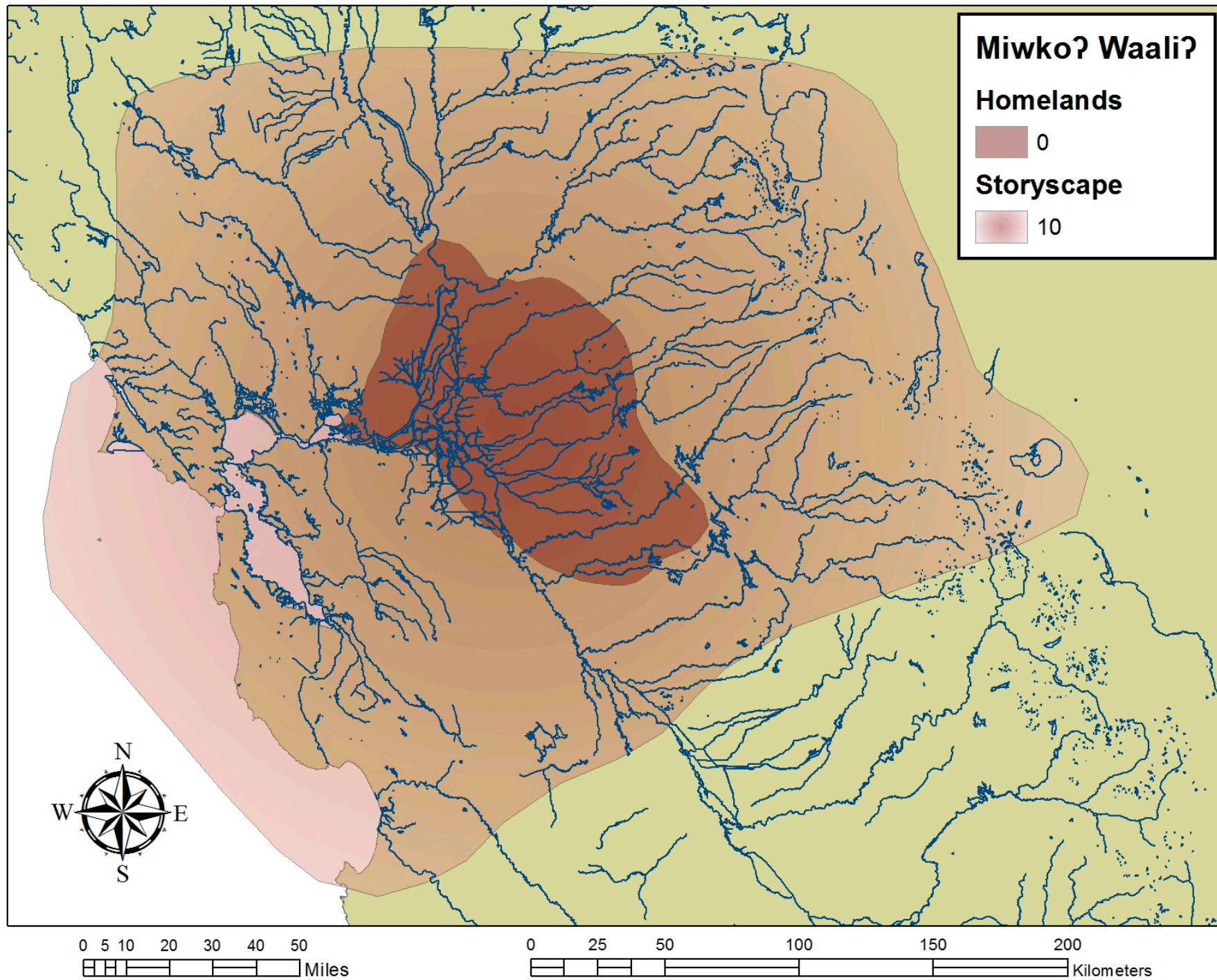
Culture is Ecology: Native Hands on the Landscape

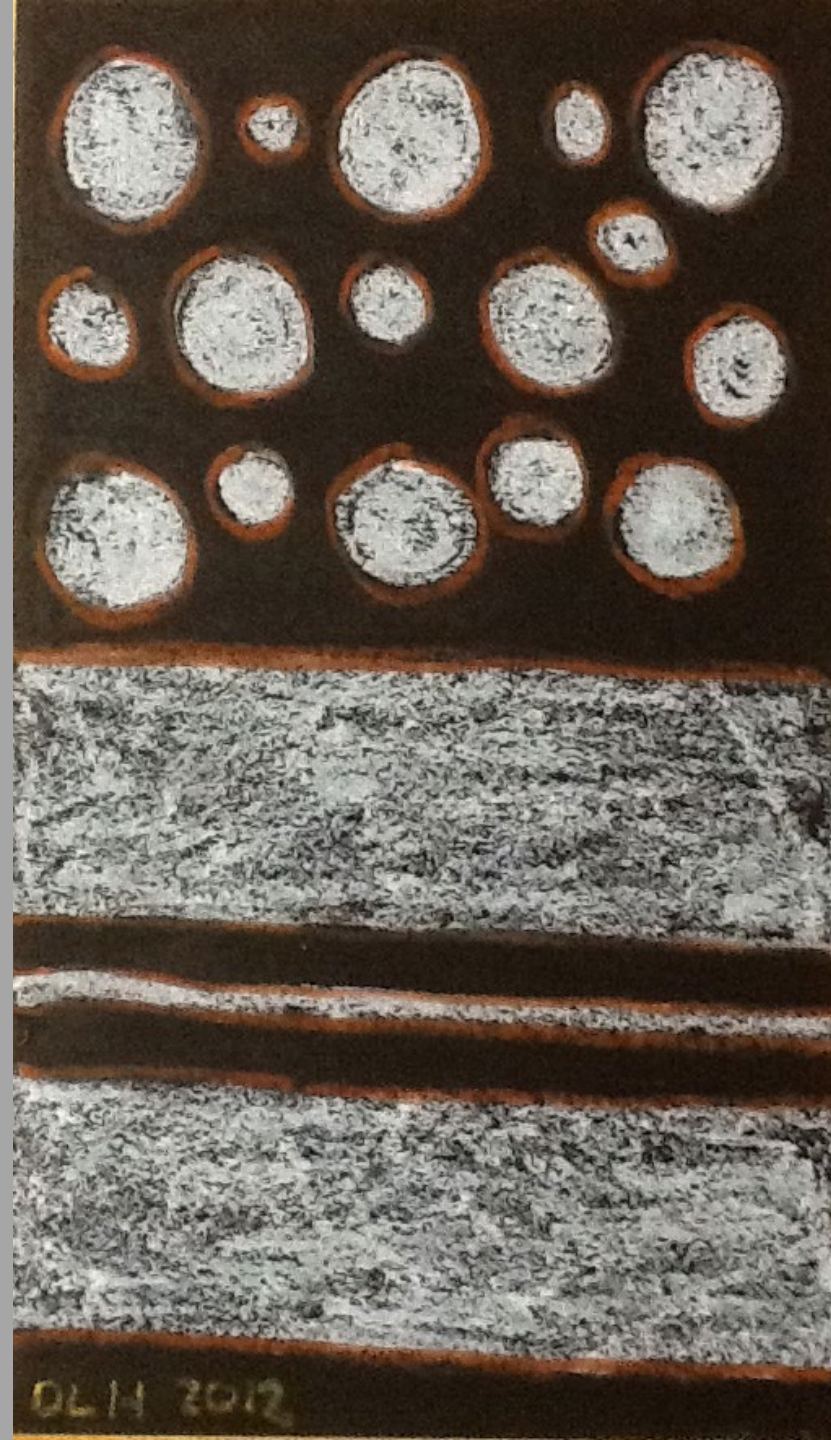
Don Hankins, Ph.D.



Biological and Cultural Diversity







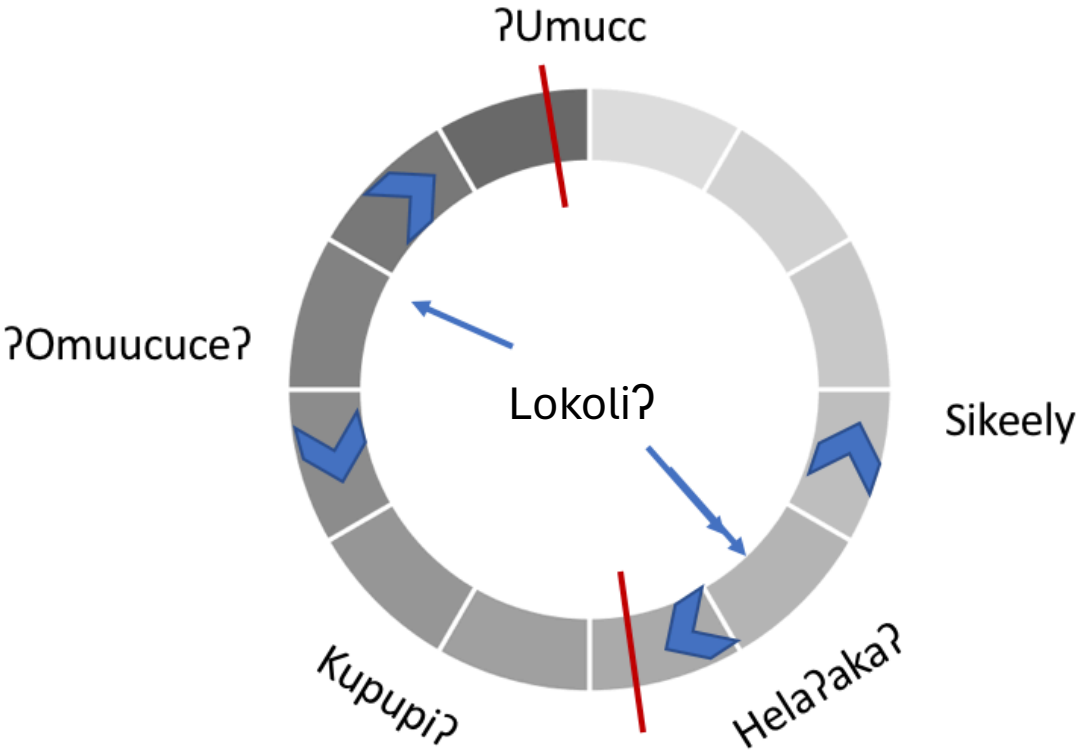
Story and Law



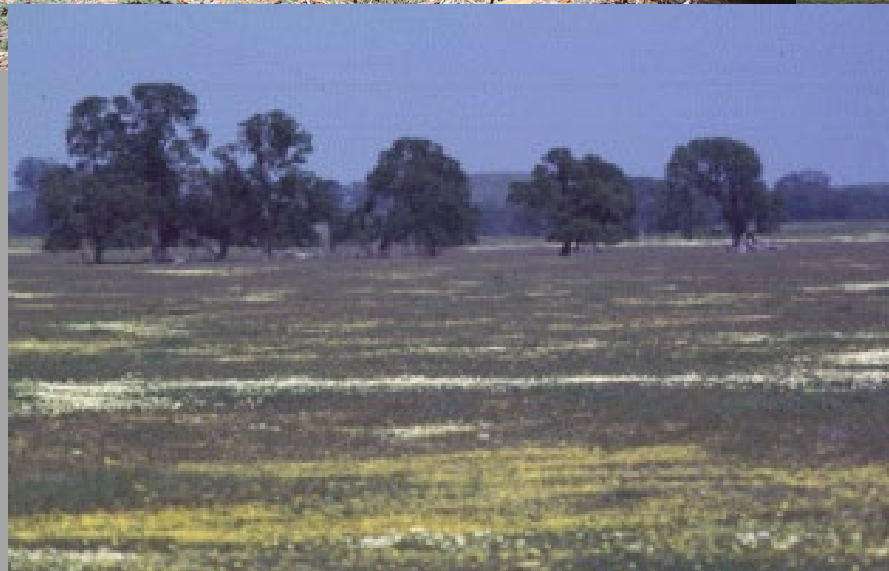
Indicators: Law, Lore, Kinship, and Stewardship



Indigenous Knowledge



The Broader Delta



Survival and Persistence



Galt Historical
Society

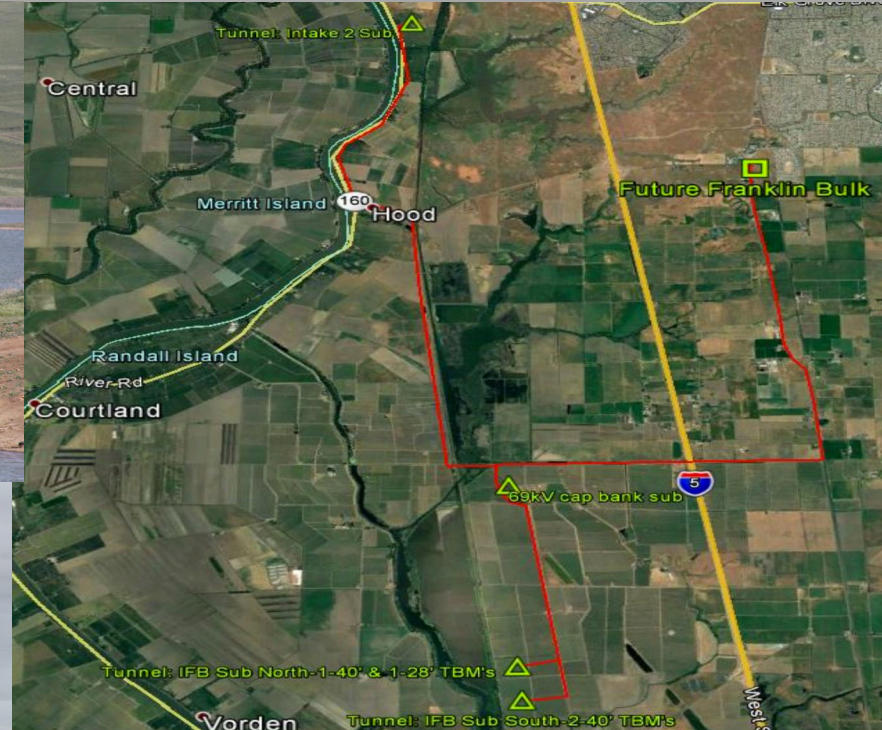
C. Hart Merriam
Collection



Maintaining Connection



Consultation and Conflict



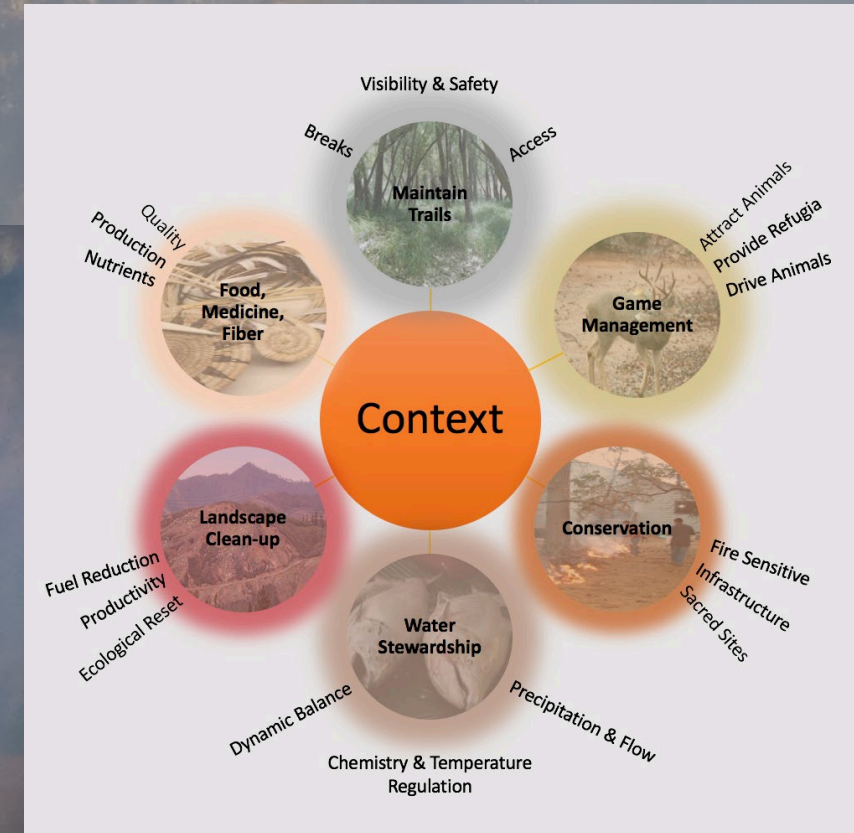
?Elelte-



?Eleltek Wyke?

Indigenous burning practices are distinguished from other fire management (e.g., Rx or firefighting) in the context of traditional law, objectives, outcomes, and the right to burn.

- Eriksen and Hankins 2014 Soc. & Nat. Resources

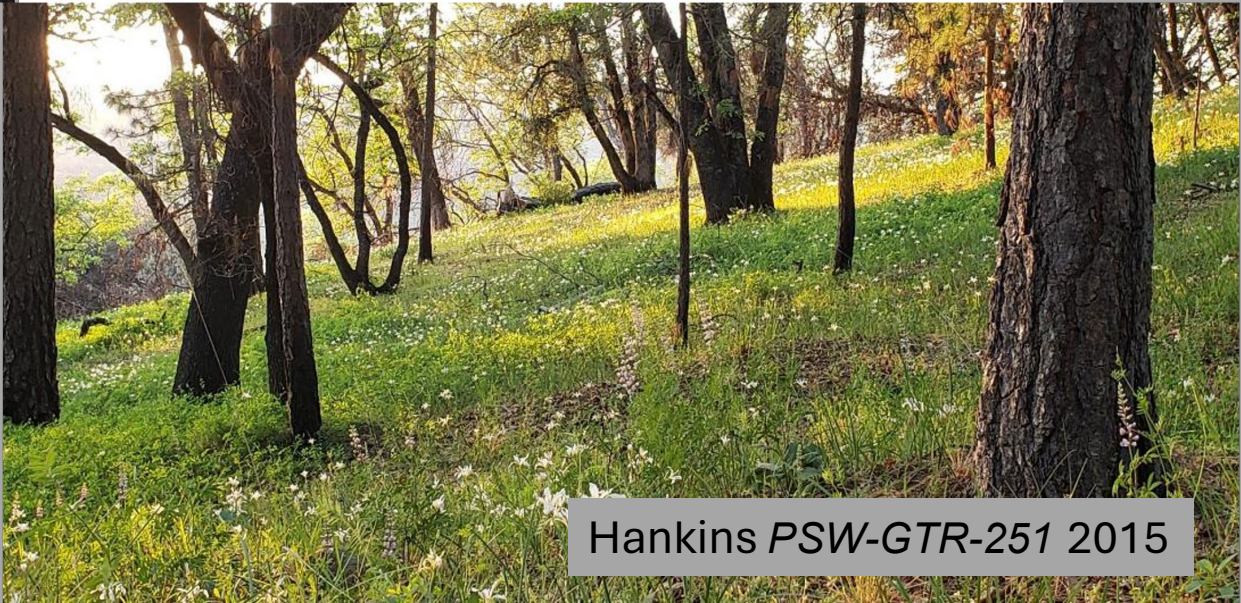
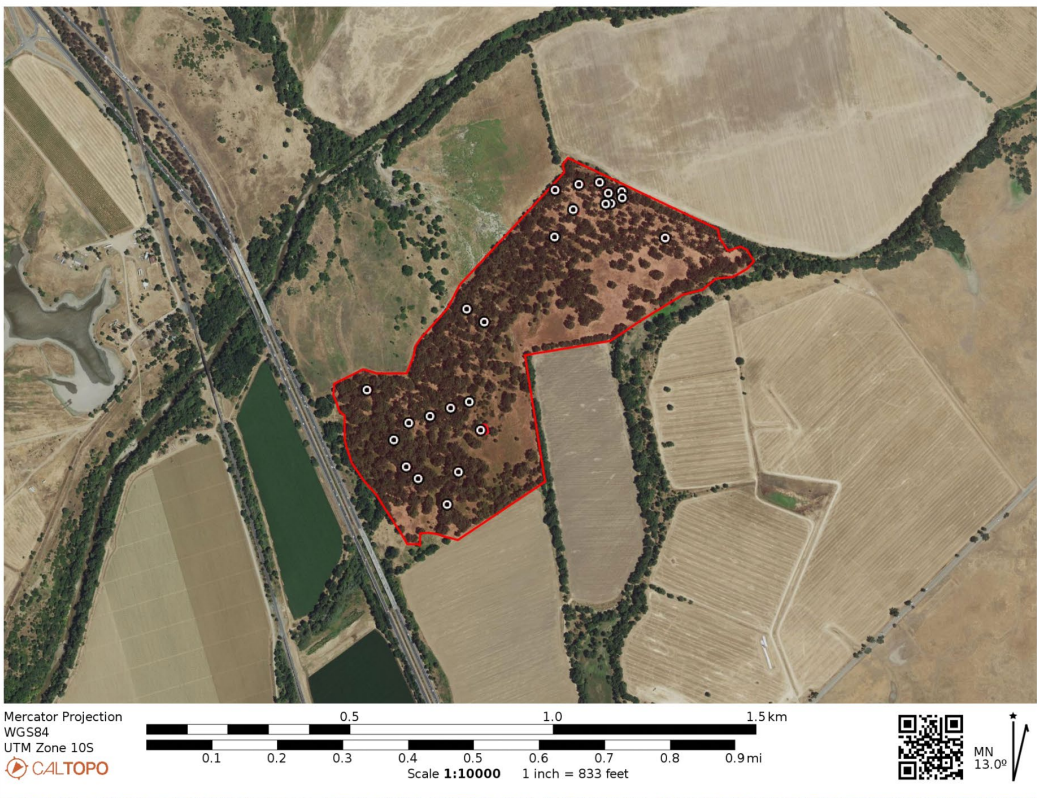


Riparian

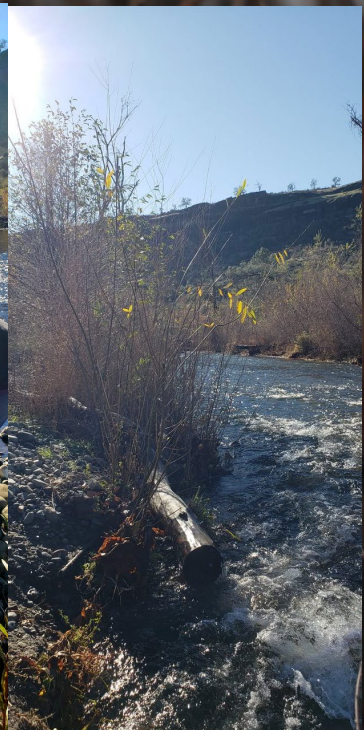


Hankins CA Geographer 2009,
Ecological Processes 2013

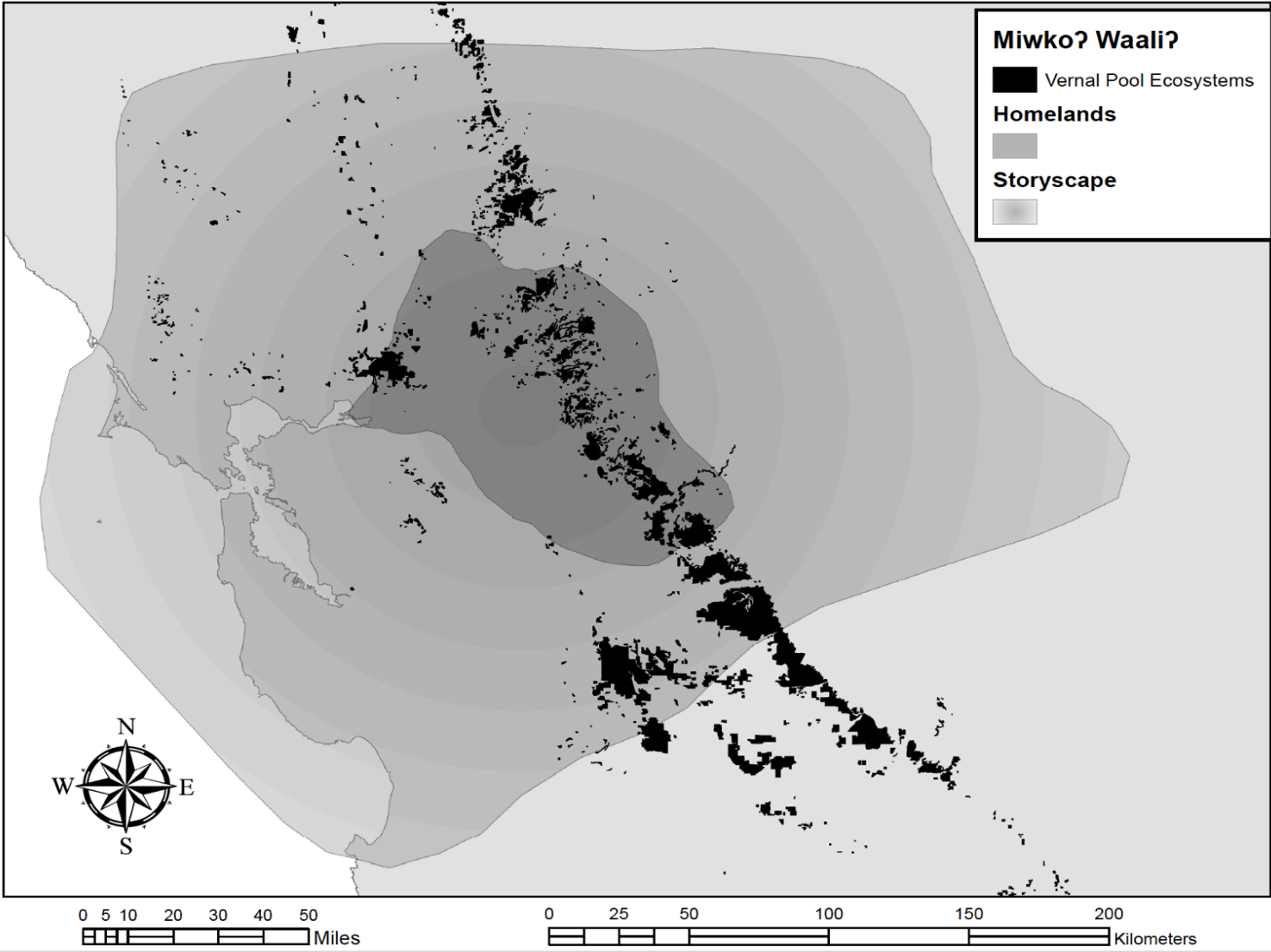
Oak Woodlands



?Eleltek Kiik



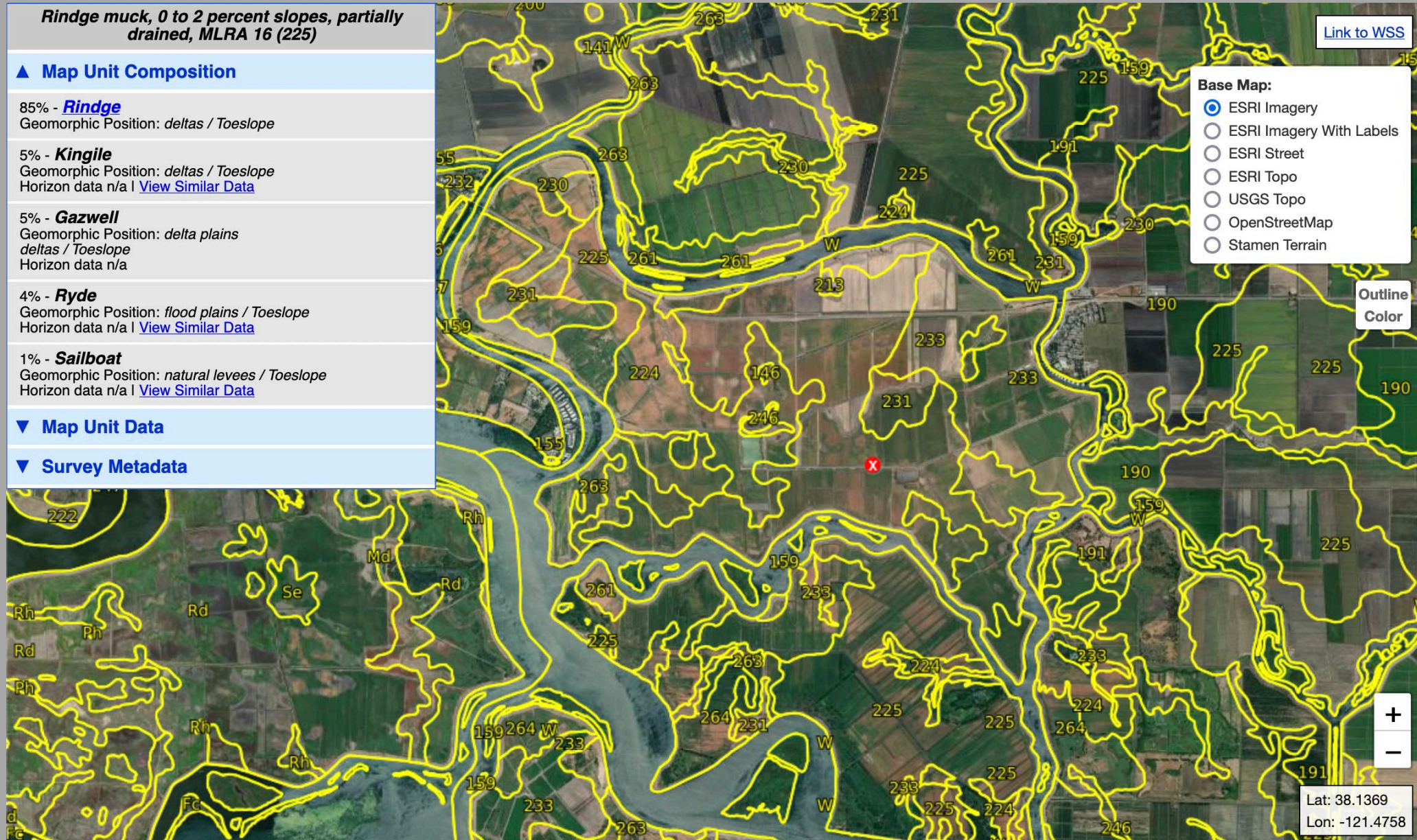
Ecocultural Vernal Pools and Species List



Delta Islands: Ecocultural

Objective	Evaluation Criteria	Units (Rating 1-10 for each)	Description	
Enable and support Indigenous ecocultural practices for stewardship, restoration, and revitalization	<ul style="list-style-type: none">General Ecocultural<ul style="list-style-type: none">Upholding responsibilities to place and kinship systemsMaintenance of remnant landscape features from pre-reclamation era and application of process-based approaches to ecocultural resilienceRestoration and enhancement to achieve ecocultural resilience	Functional ecocultural system exemplified by environmental and social conditions	Existing Island landscapes and new landscapes proposed in the project design (such as wetlands) will provide opportunities for Indigenous ecocultural restoration and stewardship developed with Indigenous knowledge and leadership	
			Consideration	Description
			Places of cultural significance	Opportunity to protect and/or enhance places of cultural significance for Indigenous peoples.
			Remnant landscape features	Opportunity to protect remnant landscape features from the pre-colonial or pre-reclamation era.
			Ecological habitats & species	Opportunity to protect and/or enhance valued ecological habitats and create reciprocal relationships with species of cultural and ecological value.
			Accessibility and privacy	Opportunity to provide sufficient accessibility while maintaining adequate privacy to carry out cultural activities without interference from the public.
			Traditional stewardship and cultural activities	Opportunity to support traditional stewardship or cultural activities such as burning, flooding, and gathering plants for weaving.
			Economic prosperity	Opportunity to support the economic prosperity of Indigenous peoples (e.g., by supporting subsistence activities, other traditional economies, and opportunities for Indigenous-led ecotourism).
			Other	Other relevant considerations as identified by Indigenous cultural practitioners through discussion and evaluation.

My Approach to Validating the Physical Landsacpe



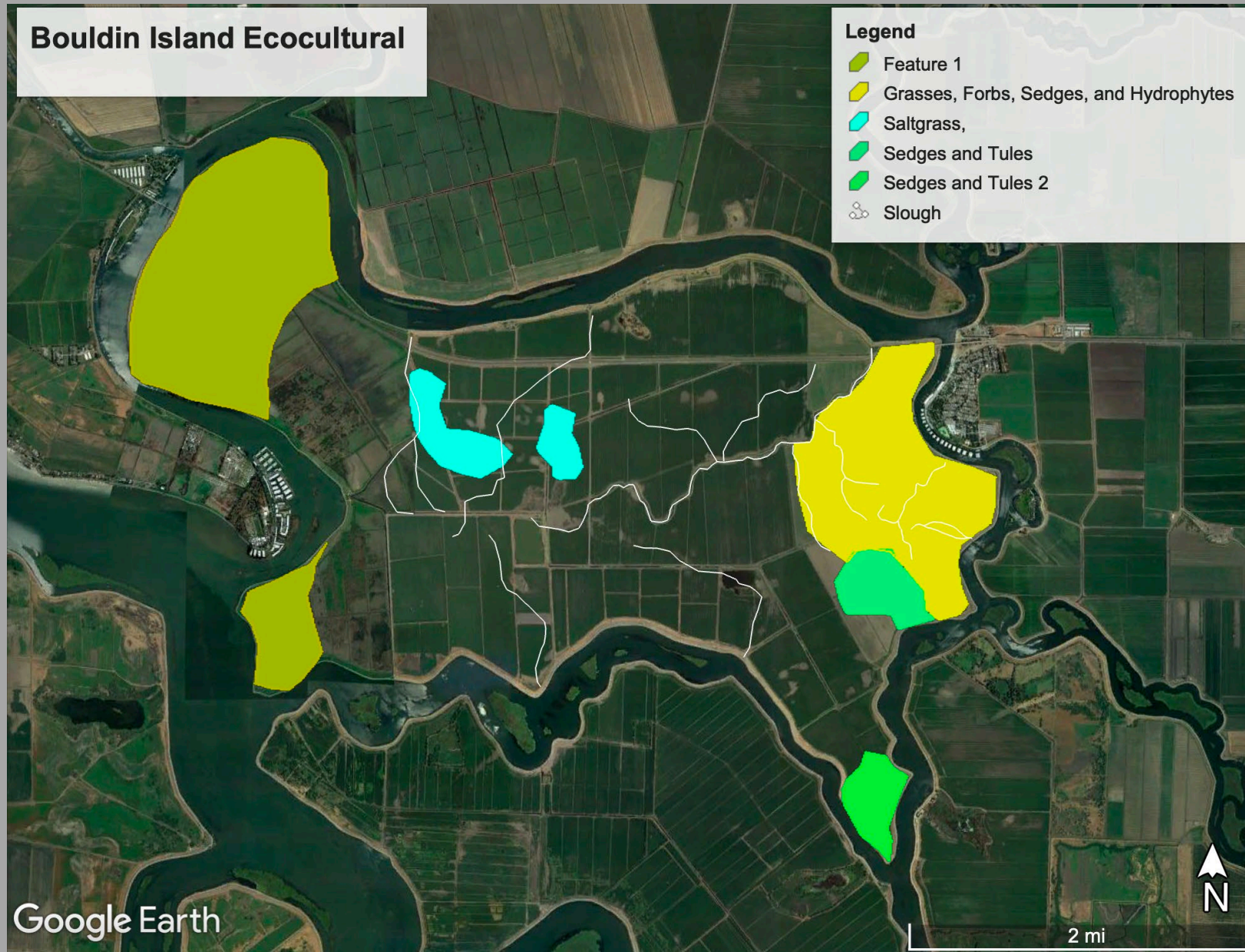
Historical Imagery



Existing Conditions and Native Habitat



Initial Output



DELTA ISLAND ADAPTATIONS

LONG TERM SCENARIO #5: *Eco Transition*

Climate adaptation and conservation incentives allow for full land surface habitat restoration to be economically viable. This scenario assumes all 3 types of wetlands provide different benefits and tradeoffs. Large areas of transitional and upland habitats are stewarded for the integrative eco, eco-cultural and recreational benefits they provide.

LEGEND

Wetlands
Priority on organic soils where they can reduce or reverse subsidence, decrease emissions, sequester carbon and provide needed ecological habitat, ecocultural restoration and primary aquatic food production

Floating peat wetlands

Managed/impounded wetlands

Open water pond/borrow pit

Tidal wetlands

Transitional Habitats and Uplands
Diversity of habitats with potential ecological and ecocultural benefits

Seasonal wetland/willow scrub

Riparian/grassland

Willow riparian

Levee grasslands

Restored sloughs (tidal and muted-tidal)

Levee habitat improvements

Wet Soil Agriculture
Rice and paddyiculture (wet soil agriculture) provide revenues without subsidence on land with high organic matter or that is currently too wet to farm.

Wet Agriculture (Rice)

Wet Agriculture (Paddyiculture)

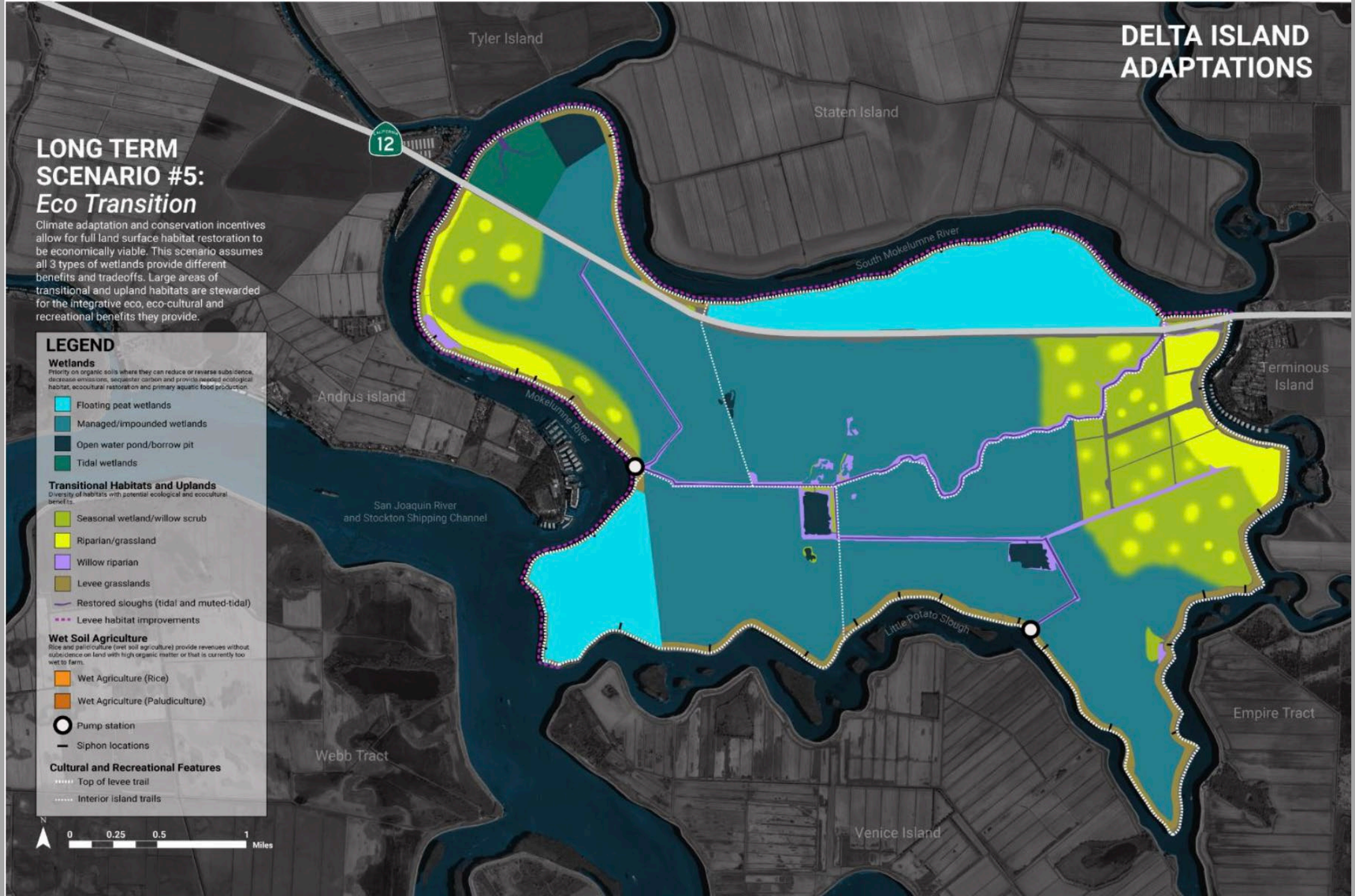
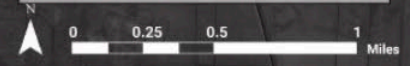
Pump station

Siphon locations

Cultural and Recreational Features

Top of levee trail

Interior Island trails



Webb Tract Proposed Map







SOGOREA TE' LAND TRUST

LED BY URBAN INDIGENOUS WOMEN



<https://sogoreate-landtrust.org>



Supporting Indigenous Stewardship

- Traditional Gathering Policy
- 4th Climate Assessment Report*
- Pathways to 30x30
- Mature and Old Growth Report



Wakaacekomne? - future facing

