

California Native American Tribal GIS 2026
DRAFT AGENDA - V3 - 4/2/2026

Time	Duration (Min)	Organization	Presentation Lead	Description
DAY 1 - May 21, 2026 (Thursday) - Grove Hall				
8:00am	10	Welcoming / Nora and Donna - Day 1		
8:10am	20	Cultural Opening - Day 1		
8:30am	10	Univ. of Redlands President - Krista Newkirk		
8:40am	5	Keynote - Video: CNRA Secty Wade Crowfoot - Day 1		
8:45am	30	Keynote - Speaker Tribal Chairwoman, Erica Pinto (Jumal Indian Village of California)		
1 9:15am	25	Yuhaaviatam of San Manuel Nation	Alexander Paz	The presentation describes how the Yuhaaviatam of San Manuel Nation is modernizing and decentralizing their GIS operations through the GIS Champions program, a structured initiative that trains Tribal departments to self-manage geographic data using ArcGIS tools. It covers the Tribe's background, current GIS infrastructure, motivations for adopting a self-service model, and the development of the program through Esri partnerships, SOP creation, outreach efforts, and the "Where in the Why" podcast. The slides highlight training tiers, the workflow for creating empowered GIS users, and numerous cross-department success stories that demonstrate how GIS Champions are strengthening data stewardship and improving operational efficiency across the Tribal enterprise.
2 9:40am	30	Karuk Tribe Sipnuuk Division	Leece Oliver LaRue	Tribal Spatial Data Repatriation: Using Historical Maps to Manage Contemporary Resources
10:10am-10:25am	15	Break Morning - Day 1		
3 10:25am	45	Kwaaymii Laguna Band	Carmen Lucas	After years of research, site visits, consultation, and mapping, in 2025, the Team submitted to SCIC an updated site form for the Southeast Lake Cahuilla Active Volcanic Cultural District (SELCAVCD) in Imperial County, California. This was followed in 2026 by the submission to California SHPO of a nomination of the property to the National Register of Historic Places. The SELCAVCD is an approximately 10,000 acre traditional cultural landscape and tribal sacred area at the southeast edge of the Salton Sea, California's largest lake. The area is also targeted for further geothermal facilities and novel direct lithium extractive industries. The presenters were awarded the 2023 Governor's Historic Preservation award for the Traditional Cultural Property (Place) Evaluation Report for Ah-Ha' Mut-ta-ti'e (Water Mountain) San Diego County, California, which also took a multidisciplinary approach to documenting a tribal cultural landscape.
4 11:10am	25	Indigenous Futures Society	Louis Curson-Mayorga	Nations across the Sierra Nevada bioregion, partners with Tribes to build GIS ecosystems grounded in data sovereignty, where governance, control, and long-term stewardship of data remain with the Tribe. Within that framework, we collaborate around OpsReady as one tool in a broader suite, developing individualized Tribal workspaces structured around Tribal priorities and governance processes rather than agency-driven models. At the infrastructure level, we support enterprise GIS deployments that place server administration and data control directly in Tribal hands, including options for local hosting on Tribal property to create secure, sovereign systems. This session will share both the technical architecture behind this approach and the relational work required to make it successful, centering trust-building, long-term partnerships, and respectful engagement with Tribal communities so that technology strengthens sovereignty rather than complicates it.
5 11:35am	30	Pala Band of Mission Indians	Shasta Gaughen	Based on the work of the FAIR+CARE Cultural Heritage Network, this presentation will discuss the importance of Tribal data and knowledge sovereignty through application of the FAIR+CARE framework.

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6	12:05pm 12:35pm-1:35pm	25 60	Kootzaduka'a Tribe of California and Nevada Lunch - Day 1	Dean Tonenena (No recording)	Tubabe Mabetsea Natuneddooe, which is translated as the Pinyon Pine Traditional Stewardship Study, is a project to document how traditional indigenous stewardship practices within pinyon pine forests promote ecological health of pinyon pines by producing optimal environmental conditions that protected pinyon pine from catastrophic wildfire and infestations of viral and insect pests. Over generations of time, indigenous stewardship practices created distinct and identifiable stand characteristics, that allowed for a greater understory species diversity which created habitats for a variety of wildlife needs. Indigenous lifeways within pinyon forests resulted in fuels reductions that protected forests from excess woody fuels that lead to devastating fires. This presentation is designed to share the results of this three year project.
7	1:35pm	30	SDSU Collaborative of Native Nations for Climate Transformation and Stewardship (CNNCTS)	Gabriela Morales	We will present the development of a web-based GIS data portal called the Plant Explorer, an ecological modeling product built using ArcGIS Online applications. The Plant Explorer is an interactive adaptation tool designed to organize and visualize habitat data, species distributions, and restoration-relevant attributes. This presentation will highlight how ArcGIS tools can be harnessed to build user-friendly platforms that support stewardship and restoration planning. Additionally, interactive tools like this can serve Tribal partners and local communities by providing spatial tools that support land-based knowledge, restoration priorities, food systems, and culturally significant plants. While the presentation will mainly showcase the Plant Explorer, we will also briefly introduce our other interactive tools built with ArcGIS Online applications that can also aid in land-stewardship and natural resource decision-making.
8	2:05pm	40	California Indain Basketweavers' Association	Starla Madrigal	We will present the California Indian Basketweavers' (CIBA) vision to preserve, promote and perpetuate California Indian basketweaving traditions while providing a healthy physical, social, spiritual and economic environment for basketweavers'. We will share the history of how and why CIBA was established. The presentation will focus on the following topics: traditional ecological knowledge, dangers of pesticides, gathering policy, and cultural burns. Lastly, we will share about how we continue the CIBA legacy by having annual gatherings that bring the weaving community from all the state of California to share, learn, laugh and reconnect with each other and the community.
9	2:45pm 3:05pm-3:20pm	20 15	SC Wildlands (Science & Collaboration for Connected Wildlands) Break Afternoon - Day 1	Kristeen Penrod	How to effectively use GIS in grant applications (e.g., land acquisition, habitat restoration, cultural burning) to make the connection between culturally significant species and resources and protecting and restoring landscape scale connectivity and wildlife movement corridors. SC Wildlands worked with the Yurok Tribe and Western Rivers Conservancy for several years on grant proposals to raise funds for the 47,000-acre acquisition from Green Diamond within Yurok Ancestral Territory, and with Yurok Wildlife, Fisheries, and Cultural Resource Departments on the vision documents for the Blue Creek Sanctuary and Yurok Community Forest. Conserving and restoring connectivity for culturally significant species, such as coho and other salmonids, species dependent on late seral forests (condor, murrelet, NSO, marten, and fisher) and coastal prairies (condor, Mardon skipper, elk, deer), and for climate adaptation (inland to coastal connections), through a melding of traditional ecological knowledge and cutting-edge science, was a major emphasis of the successful grant proposals and the vision.

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10 3:20pm-3:50pm	30	The Office of Environmental Health Hazard Assessment (CalEPA)	Zoe Varner	CalEnviroScreen, developed by the Office of Environmental Health Hazard Assessment (OEHHA), identifies California communities that are most affected by multiple sources of pollution, and where people are especially vulnerable to the effects of pollution. This presentation will provide an overview of the updated draft CalEnviroScreen 5.0, highlighting updates to existing indicators, new indicators suggested by tribal partners, and accessibility updates to the mapping interface. OEHHA staff will demonstrate proposed new features in the map and describe collaboration with California Tribes to address data gaps. OEHHA will share updates on the CalEPA designation of disadvantaged communities map, which uses CalEnviroScreen and tribal lands for targeted investment of Cap-and-Invest funds. OEHHA will demonstrate how tribes can use the CalEnviroScreen tool and the CalEPA designation and will demonstrate the process to update the representation of their lands in the tool. This session is intended to both inform and solicit feedback from participants on the latest version of CalEnviroScreen 5.0.

DAY 1 - May 21, 2026 (Thursday) - Break Out Room(s)

1:15pm - 3:15pm	120	EPA Region 9, Indian Health Service	Travis Robinett, EPA Region 9; Shari Wendt, IHS	This will be a hands-on training workshop for how to use the IHS ArcGIS Field Maps application, an electronic tool used by EPA, tribal, IHS, and contractors to assess open dump sites to identify and document size, contents, and health risks to determine the level of deficiency of the site. The Indian Health Service is responsible to provide safe water supply, wastewater facilities, and solid waste facilities to existing, renovated, and new Indian Homes. As part of this mission, the IHS works with tribes to identify and assess open dump sites on lands owned by tribes and Native Americans. In this session, IHS and EPA representatives will provide information on the app, how it's used, how to obtain an account, and provide hands-on training with opportunities to practice using the app for open dump mapping.
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DRAFT AGENDA - V3 - 4/2/2026

Time	Duration (Min)	Organization	Presentation Lead	Description	
DAY 2 - May 22, 2026 (Friday) - Grove Hall					
Session	Time	Duration	Organization	Presentation Lead	Tribal or Organization Name(s) involved with presentation
	8:00am	10	Welcoming / Nora and Donna - Day 2		
	8:10am	20	Cultural Opening - Day 2		
	8:30am	30	Keynote - Carmen Lucas, Kwaaymii Laguna Band and Governor's Office - Truth and Healing Council		
11	9:00am	40	Fernandeño Tataviam Band of Mission Indians, Tataviam Land Conservancy, Climate Resolve, Council for Watershed Health	Miguel A. Luna	This presentation highlights the Fernandeño Tataviam Band of Mission Indians' development of the Tataviam Environmental and Cultural Data Mapping Portal, a sovereign Tribal GIS platform designed to advance climate resilience, cultural stewardship, and data driven decision making. Developed in partnership with Climate Resolve, Council for Watershed Health, and Tataviam Land Conservancy, the project centralizes more than 100 environmental, cultural, and climate datasets and incorporates findings from the State's Fifth Climate Change Assessment. The session will walk through the project's structure, including public facing climate hazard map applications, internal tribal sensitive datasets with tiered access controls, and interactive atlas tools designed for non GIS staff. Presenters will share lessons learned in data cleanup, cultural resource protection, metadata standardization, and cross agency coordination. The presentation demonstrates how Tribal data governance, traditional ecological knowledge, and climate science can be integrated within a secure, scalable GIS framework that strengthens long term resilience planning.
12	9:40am	30	Robinson Rancheria, Big Valley Rancheria, Northeastern University, UC Berkeley	Jeremy Sorgen	We will present the Hitch Stories ArcGIS StoryMap and animated film. Hitch Stories is an intergenerational storytelling project with Pomo Elders and youth to share stories about the hitch, an ecocultural keystone species of minnow endemic to Clear Lake that is currently at risk of extinction. Youth recorded Elder's stories, which are housed in Tribal Archives and a selection of these stories are featured in the StoryMap, which tells the story of Clear Lake (Xabatin) from Pomo perspectives.
	10:10am-10:25am	15	Break Morning - Day 2		
13	10:25am	20	US Geological Survey	Cynthia Ritmiller	The U.S. Geological Survey (USGS) National Geospatial Program (NGP) has a broad portfolio of programs and initiatives, offering a suite of geospatial data and services that advance science, support government, enlighten citizens, and enable decision-making. The National Map provides a foundation of digital geospatial data representing the topography, natural landscape, and constructed environment of the United States. The National Map includes a diverse array of geospatial products and services that support and enhance planning, mapping, analysis, and response. The 3D National Topography Model (3DNTM), includes the 3D Elevation Program (3DEP) and the 3D Hydrography Program (3DHP), through the Data for the Nation cooperative projects. This presentation will showcase National Map products, services, and applications. USGS can provide free GIS data or products (US Topo maps). USGS honors Tribal Sovereignty and would like to ensure Tribal Members know how to contact us with any questions
14	10:45am	30	California Department of Transportation (Caltrans), Cultural Studies Office in Sacramento	Julia Huddleson	Caltrans has developed a GIS layer to help facilitate NAGPRA/CalNAGPRA by identifying collections and cultural resources information to assist with repatriation consultation. This layer contains GIS information and associated resource documents which have proven to be an effective tool for facilitating NAGPRA/CalNAGPRA consultation by identifying collections within the appropriate geographic areas of interest for each specific tribe. Each cultural resource in the GIS is linked to a confidential document database that contains previously gathered information about the recorded resources and any associated reports. Tribes often request geographic mapping information to start repatriation consultation. Caltrans has found that the collections GIS layer provides an efficient way to facilitate the transmission of this mapping and other pertinent cultural resource information in those repatriation efforts as required by NAGPRA/CalNAGPRA.
15	11:15am	15	California Department of Water Resources	Christina McCreedy	Presentation will include discussion of State implementation of the Open and Transparent Water Data Act of 2016 (AB 1755, Dodd), advancements in data sharing, and partnership opportunities to put water and ecological data to work.

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16 11:30am	30	State Water Resources Control Board - Tribal Affairs, Division of Drinking Water	Tara Ouitavon	Geographic Information Systems (GIS) support how the California State Water Resources Control Board's Division of Drinking Water (DDW) understands public health risk and infrastructure conditions across California. Spatial tools are used to identify failing and at-risk water systems, assess disadvantaged community status, evaluate consolidation feasibility, and reflect infrastructure vulnerability documented through the SAFER Needs Assessment. This session will provide an overview of DDW's core GIS tools, including the Needs Assessment, Aquifer Risk Map, and System Area Boundary Layer, and how these tools inform regulatory coordination and funding prioritization.
17 Noon - 12:15pm	15	California Department of Forestry and Fire Protection	Helen Lopez	CAL FIRE works with California Native American Tribes in a variety of ways. This presentation will give an overview of CAL FIRE's mission, discuss recent accomplishments in enabling Tribal leadership on cultural burns, go into the nuts and bolts of the cultural burning program, highlight specific efforts currently being carried out with our Tribal partners in Southern California, and provide a roadmap of what's next for CAL FIRE and its Tribal partners.
12:15pm-12:30pm	15	CalEPA Office of Secretary - Intergovernmental Relations	Maurice Lyles	Cal/EPA - Plastic Pollution Mitigation Fund (PPMF) Tribal Funding Opportunity and Cal/EPA Tribal Advisory Committee (TAC) update.
12:30pm-1:30pm	60	Lunch - Day 2		
18 1:30pm	15	California Department of Forestry and Fire Protection	Thomas Crimmel	CAL FIRE publishes various datasets related to wildfire activity in California. In this presentation, we will review how and why wildfire and prescribed fire perimeter data is collected, where to view and access fire perimeters data, how and why vegetation burn severity data is being produced, where to view vegetation burn severity data, and what is next for the vegetation burn severity program.
19 1:45pm	45	Cal OES	Alex Shariatmadari	This session will explore how GIS technology and mapping tools are used in emergency management to analyze risk, visualize disaster impacts, and improve operational coordination. Examples will include real-world applications used by emergency managers to support response operations and disaster recovery planning.
20 2:30pm	15	Riverside University Health System - Public Health	ANDREA PEREZ	"American Indian/Alaska Native Health in Riverside County" This presentation will highlight health outcomes of American Indian and Alaska Native Residents in Riverside County. Another approach was aggregating the population for tribal reservations and calculated rates to identify possible health outcome differences in comparison to countywide population. Geocoding data, and joining by the correct boundaries plays an essential role in calculating the health outcome rates.
2:30pm-2:45pm	15	Break Afternoon - Day 2		
21 2:45pm	30	Riverside University Health System - Public Health	Andrea Perez	1) Native Youth and Early Career Networking in GIS (share opportunities for students and early-careers, free resources, best tips (SCAG, LA Geospatial Summit, volunteering and submitting to conferences/scholarships (GIS-Pro)), I am the Southern California Representative for CalGPN, my qualification: "young/early-career professional" I took advantage of submitting to conferences, put myself out there and strengthened my skills. 2) Skills Demo to share how to use R for GIS (open-source software), or other opensource software for webmapping, conversely I can present on ArcGIS Dashboards, Experience Builder, ArcGIS Pro if that's what's needed
22 3:15pm-3:45pm	30	Office of Environmental Health Hazard Assessment, California Environmental Protection Agency	Susannah Cohen	Brief introduction to the CalHeatScore Tool, including recent and upcoming updates, as well as resources designed to support its use in heat-vulnerable communities.

DAY 2 - May 22, 2026 (Thursday) - Break Out Room(s)

	35	Northeastern University	Hitch Stories	We will present the Hitch Stories ArcGIS StoryMap and animated film. Hitch Stories is an intergenerational storytelling project with Pomo Elders and youth to share stories about the Hitch, an ecocultural keystone species of minnow endemic to Clear Lake that is currently at risk of extinction. Youth recorded Elder's stories, which are housed in Tribal Archives and a selection of these stories are featured in the StoryMap, which tells the story of Clear Lake (Xabatin) from Pomo perspectives.
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Time	Duration (Min)	Organization	Presentation Lead	Description
DAY 1 & 2 - May 21 & 22, 2026 Break Out Room(s) - Planning in progress for dates/times (Afternoon sessions)				
	30	Coastal Defenders - Coach Jackson		Coastal Defenders Guardianship Pathway: Indigenous Leadership Youth + Young Adults (ILY)
	30	University of Redlands - GIS Workshop 1 Lisa Benvenuti	Telling Stories With Your Data Using Story Maps:	Telling Stories With Your Data Using Story Maps: ArcGIS StoryMaps is an easy-to-use web tool from Esri that lets people create and share interactive stories using maps, images, videos, and text. It helps users explain data and present ideas in an engaging way. In this session, you'll learn what ArcGIS StoryMaps are, how to make one, and best practices for presenting your research and maps.
	45	University of Redlands - GIS Workshop 2 Will Wagner	Collecting Data with Survey123, Field Maps, & Quick Capture	Collecting Data with Survey123, Field Maps, & Quick Capture - There are many ways to collect data out in the field. In this session, you will see a demo of three of those ways: Survey123, Field Maps, and QuickCapture. Survey123 is a simple form-based data gathering application, while ArcGIS Field Maps and QuickCapture are map-centric mobile apps that help you collect and use data in the field, even without internet. See how to create Survey123, Field Maps, and Quick Capture apps, and understand how data collection can be built into geospatial workflows.
	30	University of Redlands - GIS Workshop 3 Julia Lenhardt	Presenting Data with Dashboards	Presenting Data with Dashboards - Dashboards let you display complicated tabular or location-based data using clear, interactive visuals on one screen. These types of interactive visuals can be useful for monitoring projects or demonstrating progress, and are especially helpful for presenting to partners or audiences. In this session, you'll see how to turn your spatial and tabular data into a dashboard using ArcGIS.
	120	Redefined Horizons Survey - UAV Workshop 1	Managing Your UAV Data with GIS	Collecting drone data is the easy part. The hard part is organizing, naming, storing, and finding it 6 months later. This 2-hour workshop focuses on the data management side of UAV operations — the part most programs neglect until they have terabytes of imagery scattered across hard drives with no consistent naming convention. We will cover file naming standards, folder structures, metadata tagging, storage and backup strategies, and how to catalog UAV deliverables (orthomosaics, point clouds, elevation models) inside your GIS software so your team can search, discover, and use the data without calling the person who flew the mission. Participants will work through a sample data organization workflow using tools they already have. Familiarity with GIS software is helpful but not required.
	120	Redefined Horizons Survey - UAV Workshop 2	UAV LiDAR: What It Is, What It Costs, and 6 Questions to Ask Before You Hire a Provider	UAV-mounted LiDAR (Light Detection and Ranging) sensors can see through tree canopy and map terrain that cameras cannot. But LiDAR projects are expensive, the terminology is dense, and it is difficult to evaluate proposals when you do not know what to ask for. This 2-hour workshop gives participants a plain-language introduction to UAV LiDAR technology — what it measures, how it differs from camera-based photogrammetry, and when it is worth the cost. We will walk through 6 specific questions you should ask any LiDAR provider before signing a contract, covering topics like point density, accuracy specifications, deliverable formats, and ground control requirements. Participants will see a live demonstration of LiDAR data and learn how to evaluate whether a vendor's proposal matches their project needs. No technical background in LiDAR or surveying is required.
	120	Program Earth - GIS Workshop 1 Manisha Priyadarshini	Hands-On Tools for Sovereignty, Storytelling, and Shaping Environmental Decisions	A hands-on workshop empowering Tribal youth to build and own their community's mapping infrastructure using open-source GIS workflows in QGIS and GitHub. The workshop centers on building story maps hosted where youth learn to centralize and pull in state data while looking at practices that ensure all internal data remains under Tribal hosting. Working with datasets from CAL FIRE, Cal OES, Caltrans, and the California State Water Resources Control Board, participants will learn how to bring state data into their own systems to identify where projects cross Tribal lands and where Tribal environmental input is critical. Tribal IT administrators are encouraged to attend and help define use cases, ensuring the infrastructure built is fully owned and governed by the Tribe. Participants leave with real skills, a working project, and a pathway into continued development through hackathons and peer mentorship networks.