



TEK



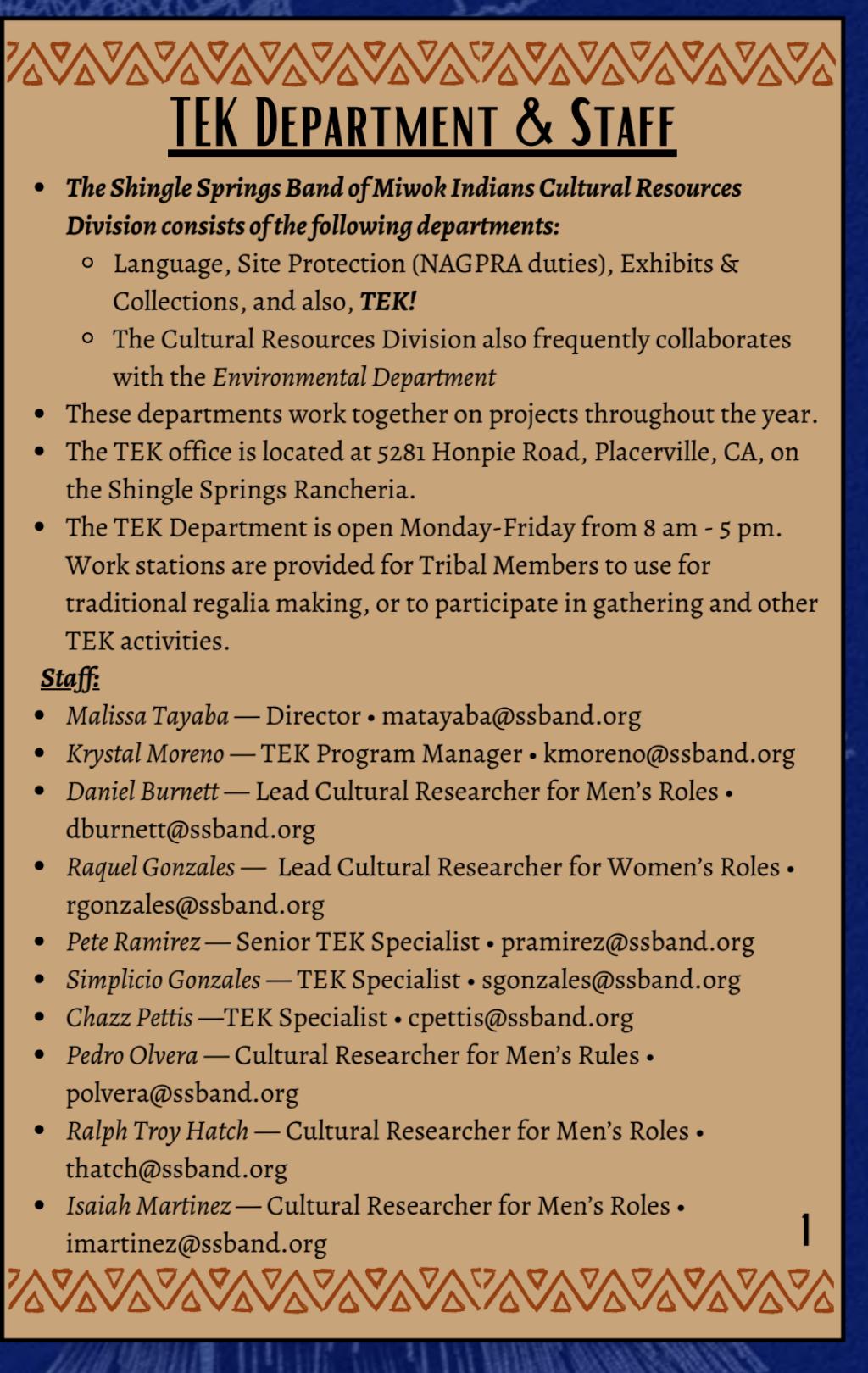
TRADITIONAL ECOLOGICAL KNOWLEDGE



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TEK DEPARTMENT & STAFF

- *The Shingle Springs Band of Miwok Indians Cultural Resources Division consists of the following departments:*

- Language, Site Protection (NAGPRA duties), Exhibits & Collections, and also, **TEK!**
- The Cultural Resources Division also frequently collaborates with the *Environmental Department*
- These departments work together on projects throughout the year.
- The TEK office is located at 5281 Honpie Road, Placerville, CA, on the Shingle Springs Rancheria.
- The TEK Department is open Monday-Friday from 8 am - 5 pm. Work stations are provided for Tribal Members to use for traditional regalia making, or to participate in gathering and other TEK activities.

Staff:

- *Malissa Tayaba* — Director • matayaba@ssband.org
- *Krystal Moreno* — TEK Program Manager • kmoreno@ssband.org
- *Daniel Burnett* — Lead Cultural Researcher for Men's Roles • dburnett@ssband.org
- *Raquel Gonzales* — Lead Cultural Researcher for Women's Roles • rgonzales@ssband.org
- *Pete Ramirez* — Senior TEK Specialist • pramirez@ssband.org
- *Simplicio Gonzales* — TEK Specialist • sgonzales@ssband.org
- *Chazz Pettis* — TEK Specialist • cpettis@ssband.org
- *Pedro Olvera* — Cultural Researcher for Men's Roles • polvera@ssband.org
- *Ralph Troy Hatch* — Cultural Researcher for Men's Roles • thatch@ssband.org
- *Isaiah Martinez* — Cultural Researcher for Men's Roles • imartinez@ssband.org

SHINGLE SPRINGS RANCHERIA



Pamela
Cleanso

In 1916, special agent John Terrell helped assist in the purchase of 160 acres of land for the Sacramento — Verona Band of Homeless Indians (now called Shingle Springs Band of Miwok Indians). He worked with a Tribal Member, named Mike Murray, to finalize the purchase in 1920.

Due to lack of resources on our land, such as water, power, and roads, it took several years for Tribal Members to occupy the Rancheria. Tribal families began receiving homes around the late 1970s and by that time much of our culture and language were lost, except for the stories passed down by our Elders.



Tom Cleanso
(a.k.a. "Blind Tom")

WHAT IS TEK?

Traditional Ecological Knowledge refers to the evolving cultural information learned by Indigenous people over hundreds of thousands of years. More specifically, this knowledge is acquired directly through contact with the environment and nature.

TEK is about establishing a relationship with nature and knowing when and where it is appropriate to gather cultural materials such as plants, regalia materials, traditional foods, and animals.

WHY IS TEK IMPORTANT?

TEK was created to teach tribal people how to identify, gather, process, and use natural materials for traditional regalia, clothing, food, shelter, and more.

TEK involves learning what each season has to offer culturally.

Learning our traditions is essential for our culture and our future generations.



TEK WORKSHOPS & ACTIVITIES

- Acorn Processing
- Basketry & Weaving classes
- Jewelry Making
- Cordage making with Dogbane or Tule
- Abalone Cutting
- Clapper Stick Making
- Regalia Making (Men's & Women's)
- Soaproot Brush Making
- Collecting and Gathering Traditional Materials

Year-round For:

- Food
- Projects
- Regalia
- And more!
- Boating & Fishing
- Tule Boat Making
- Village Site Visits
- Traditional Dance Practice
- Water Advocacy
- Plant Restoration
- Tribal Collaboration
- 4 • Planning Traditional Ceremonies
- Cultural Research



BASKETRY INITIATIVE, WEAVERS ARE BORN!

In 2019, the TEK Department and Exhibits & Collections planned various trips to research baskets from California. These departments visited California State Parks Collection Repository, UC Berkeley, and UC Davis to view and learn about baskets and different basketry styles from various regions. These visits familiarized staff with traditional basketry plants and watertight baskets of our ancestors. With learning more about basketry, we have successfully made many baskets and attend basketry classes at least once a month. We have gone even further than learning only basket construction and managed to construct two Tule Boats.

Basketry was an important way of life for Indigenous people, which makes it even more important for the revitalization of basketry skills within our community. Baskets were used daily for preparing food, gathering materials, cooking, catching food, for traditional ceremonies, and family gatherings.

BASKETRY SUPPLIES ARE VITAL!

Making a basket requires having access to gather specific plants. To name a few:

- Bracken Fern
- Juncus
- Redbud
- Sedge
- Tule
- Willow



GATHERING & PLANT AVAILABILITY

It has been a challenge to gather the necessary plants and supplies for basketry. Plants are hard to access because most of the land is owned by state, county, or privately owned agencies.

Gathering materials can sometimes be dangerous; safety is very important. Plants cannot simply be taken from anywhere, especially since a majority are covered in dangerous pesticides.

GATHERING SOLUTIONS!

- Establishing and maintaining healthy relationships with state, county, and local park agencies
- Forming agreements, seeking permits, and speaking to agencies to gain access to land that contains traditional plants
- We currently have a permit from Sacramento County, that gives us access to the American River Parkway, Dry Creek Parkway, and Indian Stone Corral
- Permits allow us to gather necessary materials for traditional practices and activities.
- In addition, we have been able to make many traditional items and regalia pieces with plants and animals from our original village site



THE ROLE OF PLANTS IN TEK



Plants have traditional, cultural, medicinal, and spiritual value. Through TEK, we teach Tribal Members how plants were used culturally in the past and how they can be used in our daily lives.

In addition to basketry, plant materials are also used for:

- Ceremony — medicinal plants used (light fire and smudge)
- Clothing — everyday wear, traditional regalia
- Food — Manzanita, Oak Trees, Pine Trees, Rose Bud, Toyon, Madrone, Wild Strawberries, etc.
- Shelter — Tule, Willow, Sycamore, Grapevine, grass dirt
- Medicine — Mugwort, Tobacco, Angelica (bear root), Willow (bark), Cedar, Elderberry, Vetch
- Transportation — tule boats, barge (two logs)



WHAT IS REGALIA?

Regalia is our ceremonial clothing. When we put on our regalia, it puts us in the Spirit World so we can pray for our people.

Animals and humans have always been connected culturally, spiritually, and ecologically. Animals are primarily used for regalia making, tools, and food. TEK has learned about animals and migrating birds of our geographic region, and how each are used to make traditional regalia. TEK is constantly teaching Tribal Members how to properly care for and handle animals, safely and respectfully. We are learning how to identify our traditional animals, and how to use them appropriately for cultural uses. Animals also play a major role in our Tribe's creation story and connect us to our ancestors.

How to Store Regalia/Regalia Care:

- Always put Regalia back in your box nicely
 - Make sure to always wrap up or tie items that need it
 - Everything should have a place
 - Store any hides or feathers with bay leaves to prevent bugs
- 8 • Never leave your Regalia lying around by itself
- 

IMPORTANT TRADITIONAL REGALIA MATERIALS

- **Pine Nuts** (Jewelry, Belts, Aprons)
- **Olivella Shells** (Jewelry, Belts)
- **Clam Shells** (Jewelry, Patsunis)
- **Abalone Shells** (Jewelry, Belts, Patsunis, Hair Sticks)
- **Beads** (Jewelry, Belts, Sash, Patsunis Hair Sticks)
- **Otter Hides** (Patsunis)
- **Deer Hides** (Women's Skirts, Men's Regalia, Jewelry)
- **Mallard Head/Hides** (Belts, Hair Sticks)
- **Woodpecker Heads** (Belts)
- **Geese Heads** (Belts)
- **Flicker Bird Feathers** (Flicker Band, Patsunis)
- **Goose Feathers** (Men's Cape, Wotsoli)
- **Turkey Quill Feathers** (Feather Boa)
- **Hawk Feathers** (Women's Botsawi, Men's Guide Stick, Hair Stick)
- **Bird Bones/Bamboo** (Men's Whistle)
- **Owl Feathers** (Women's Botsawi, Hair Stick)
- **Eagle Feathers** (Men's Cape)
- **Egret Feathers** (Feather Boa)
- **Tule** (Skirt, Patsuni)
- **Bark** (Skirt)
- **Elderberry** (Clapper Stick, Hair Stick, Men's Guide Stick)
- **Mugwort** (Medicine)



MEN'S & WOMEN'S REGALIA

Women's Regalia:

- Cotton skirt
- Leather skirt
- Tule skirt
- Bark skirt
- Pine nut & shell necklaces
- Belt
- Feather Boa 
- Beaded sash
- Patsuni
- Botsawi 
- Pine nut apron

 - must have started moon to wear



Men's Regalia:

- Flicker band
- Feather cape
- Leathers
- Belt
- Whistle
- Guide Stick
- Head net
- Pine nut & shell necklaces



Elderberry

Scientific Name: *Sambucus*

Nisenan Translation: *k'ak'*

- Grows in moist habitats
- Can grow up to 30ft tall & wide
- Protected Plant
 - Elderberry Longhorn beetle solely lays its eggs under the bark
- Wood can only be harvested when leaves are fully gone:
 - They contain poisonous chemicals that cause vomiting.
- Wood is used to make:
 - Whistles
 - Flutes
 - Clapper Sticks
 - Guide sticks (Male Dancer Regalia)
 - Medicine & Tobacco Carriers
- Flowers
 - Bloom March-July
 - Used to make a tea that helps lower a fever
- Berries
 - Harvested in Summer
 - Used to make syrup & jelly
 - Act as defense against Bronchitis & the Flu when eaten



Tree



Berries

(Nisenan: *aantay*)

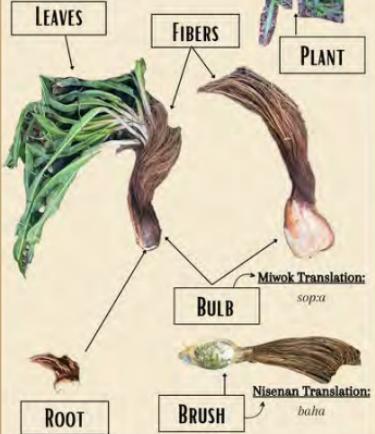


Flowers

SOAPROOT

Nisenan Translation: *hoo*

Miwok Translation: *sakazi*



Hair Pin/Hair Stick

Worn by young women

- Used to put hair up
- Used to secure Botswai

Materials needed to make one:

- Straight Stick
 - Willow
 - Manzanita
- Thin Cotton String
- About 30 Feathers

Storage & Care

- Store in an upright container with feathers facing upwards
 - Don't want the feathers to bend or get messed up
- Store with Bay leaves
 - Prevents bugs from eating the feathers (Ex. Moths)



Clapper Stick

Nisenan Translation: *Wadada*

Used by men, women, and children to sing traditional songs when:

- Attending Ceremonies/Dances
- Loved ones cross into the Spirit World
- Praying

Materials needed to make one:

- Straight stick of Elderberry
- Cutting/Carving Tool (Knife or Box Cutter)
- Sand paper

Storage & Care

- Needs to be treated with respect just like your regalia
- Do not lay it down in random places. Always have a place to put it up/away
- If not using it, keep it wrapped up and put away in a safe place.
- Do not play with it like a toy or rattle it just for fun (Rattling the clapper calls to the spirit world).



SOAPROOT

SCIENTIFIC NAME: *CHLOROGALUM POMERIDIANUM*

- HARVEST DURING SPRING/SUMMER
- ONLY FOUND AT HIGH ELEVATIONS
- URNS INTO GLUE WHEN COOKED
- CONTAINS A CHEMICAL GOOD FOR MAKING BUBBLES
- GOOD SOURCE OF FIBER
- BULB IS EDIBLE (DOESN'T TASTE GOOD THOUGH)
- Poisonous to fish
- Medically used to cure sores, aches, and pains
- Juice from the leaves can be used to make tattoo ink

TRADITIONAL USES:

- Glue (Baskets, Weapons, Brush Handles)
- Brushes (Acorn Processing)
- Soap (Washing, Cleaning, Shampoo)

Let's all go Fishing!

Nisenan Translations:

p'ilik'oypel

dipnet	<i>lima</i>
Salmon	<i>maya</i>
Sturgeon	<i>helemai</i>
Tule Perch	<i>tulpa</i>
Suckerfish	<i>hoya</i>
Eel	<i>kwewis</i>

Verona (Wóllok)

Toward the end of 2020, we were able to reclaim the Verona/ Wóllok village site by purchasing the Verona Marina in Sutter County. This village, in addition to being where the Tribe's original name was derived from, is where our ancestors lived together creating a haven for our Nisenan grandmothers (Pamela Cleanso) and Hawaiian grandfathers (John Kapu). This site is culturally significant since it was both a Nisenan village site and then, later, the Hawaiian fishing village of Verona.

On April 17, 2020, the Tribe held our Spring Dance and brought ceremony back to Verona, back to our land, and back to the rivers. Being back at the river gives us an opportunity to teach Tribal Members about our traditional ways. More specifically, the importance of passing down this knowledge, and how our people originally utilized the waterways and the ecosystem to help continue to our cultural revitalization.

This original village site is located along both the Feather River & Sacramento River.

**Tom Cleanso's
name for the
Feather River:**

Óota

Some traditional plants found at this village site are:

- Elderberry
- Walnut
- Willow
- Mugwort
- Cottonwood Trees
- Wild Grape

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**Tom Cleanso's
name for the
Sacramento River:**

Táamom



OTHER ABORIGINAL VILLAGE SITES

K'ADEMMÁ & PUSÚUNE

Two of the Tribe's original village sites, **K'ademmá & Pusúune**, are located on opposite sides along the American River.

*Tom Cleanso's name for the
American River:*

Nótowmom

Traditional Plants at *K'ademmá*

- Willow
- Mugwort
- Wild Cucumber
- Rose hips
- Vetch
- Cottonwood Trees

Traditional Plants at *Pusúune*

- Mugwort
- Cottonwood Trees
- Sedge
- Willow
- Grapevine
- Alder trees
- Elderberry

SOME INDIGENOUS FISH OF OUR RIVERS

Salmon



Scientific Name:

Oncorhynchus

tshawytscha

- Grows up to 34-40 inches long
- Weigh 20-40 lbs
- Found far upriver
- Fished during Winter, Summer, & Fall

American Shad



Scientific Name:

Alosa sapidissima

- Grows up to 20-24 inches long
- Found in estuaries
- Fished during Spring & Summer (Apr - Jun)

Striped Bass



Scientific Name:

Morone saxatilis

- Grows up to 22-28 inches long
- Found throughout rivers
- Fished during late spring and mid-summer

Sturgeon



Scientific Name:

Acipenser transmontanus

- Grows up to 6-10 feet long
- Found in deep pools of large rivers
- Fished during Springtime

Rainbow Trout



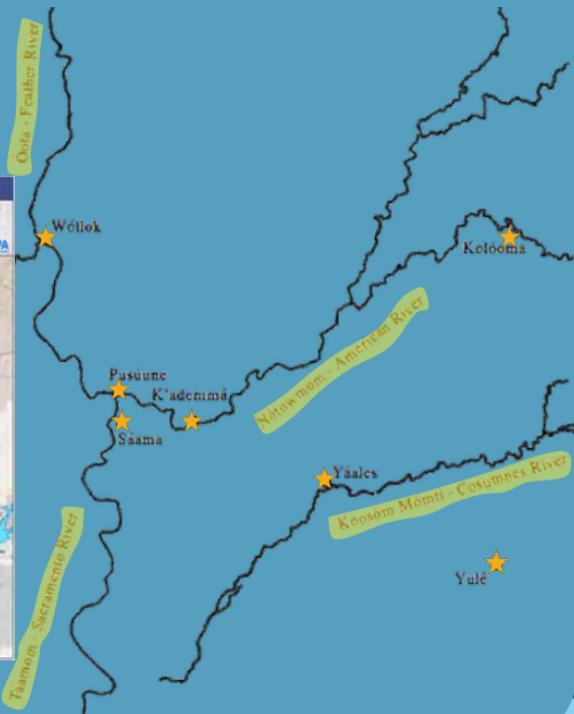
Scientific Name:

Oncorhynchus mykiss

- Grows up to 18-22" long
- Carnivores
- Fished during Spring, Summer, & Fall
(Best times are early morning or late evening)

OUR RIVERS & WATER QUALITY

Water Quality Map of the Sacramento, American, & Feather Rivers



The water quality in our rivers and the Delta is toxic to the traditional plants and wildlife species that live in and along these waterways. Without access to these materials many Indigenous, cultural practices cannot be done, and the knowledge of how to perform these practices cannot be properly passed on to future generations.

Water advocacy is essential, because without healthy waterways, Indigenous plants and wildlife will continue to become decimated and extinct.

THE TRIBAL COALITION AND THE DELTA

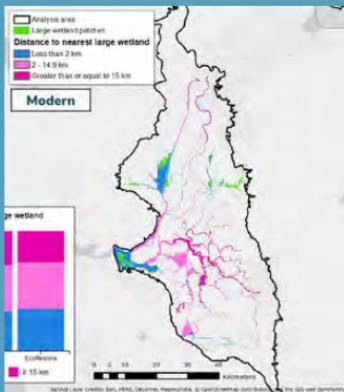
CONVEYANCE PROJECT

- Farming and agriculture have taken over the natural state of the Delta and, on top of that, failed water management strategies threaten the health of the rivers.
- One of our biggest concerns regarding the Delta right now, is the Delta Conveyance Project.
 - This project, proposed by Governor Gavin Newsom and the Department of Water Resources, involves the development of a tunnel project that would potentially divert millions of feet of water from our rivers.
- ***CA Tribal Engagement Coalition (TEC)***
 - In 2021, we began convening a group of local "Delta Tribes," called the CA Tribal Engagement Coalition (TEC), due to our mutual concerns about the Delta Conveyance Project.
 - Participating tribes include the Shingle Springs Band of Miwok Indians, Wilton Rancheria, Ione, Buena Vista, Central Valley Miwok, United Auburn and Yocha Dehe.
 - Our common goal is to stop the Delta Conveyance Project from moving forward because the construction of the tunnel and facilities will destroy our cultural resources, sacred sites, traditional plant life, traditional foods, and will further threaten the existence of our fish and wildlife.

TEK AND OUR RELATIONSHIP WITH THE DELTA



Map of Historical Delta



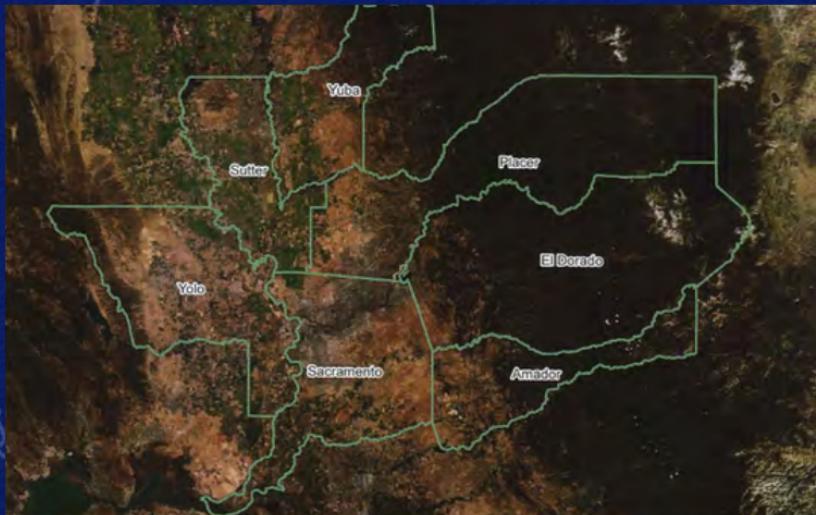
Map of Modern-Day Delta

The Delta is the heart of the Region that has sustained the numerous plant, animal, and natural resources since time immemorial. Historical ecology and land management in the Delta, by Native peoples, is well documented. The Delta was used constantly, by tribes, for ceremony, hunting, fishing, gathering food, basketry materials, housing materials, medicinal materials, and clothing materials. However, due to current unhealthy conditions, the Delta's resources are diminishing. Due to the poor water quality, we continue to see a major decline of native plant life, fish, and animal populations.

Native people once harvested over 500 species of plants in the Delta, but today, only 14% of the Delta's 725,600 acres support native trees, shrubs, and herbaceous plants.

For example:

- Tule was an important part of the Delta ecosystem because it acted as a natural water filtration system, helped clean the rivers and waterways, and improved water quality. Native peoples now struggle to find Tule along the rivers in a region that was, historically, about a million acres of marshland.
- Where the floodplains once grew an abundance of sedges, that were tended to produce long straight rhizomes for baskets, it is very difficult to find any sedge beds at all.
- Salmon that were once so plentiful, you could walk into the rivers to catch them, are now endangered and on the brink of extinction.
- The tribal people of this area have and will always continue to be stewards of these resources for the communities that they represent, as well as the communities that live in these areas.



Span of *Shingle Springs Band of Miwok Indians*' Aboriginal Territory by County



Shingle Springs Band of Miwok Indians' Dance Group (SSR's Annual Small Time 2024)



Traditional Tule Boat Built by the TEK Department & Tribal Youth Interns



Traditional Tule House Built by the TEK Department