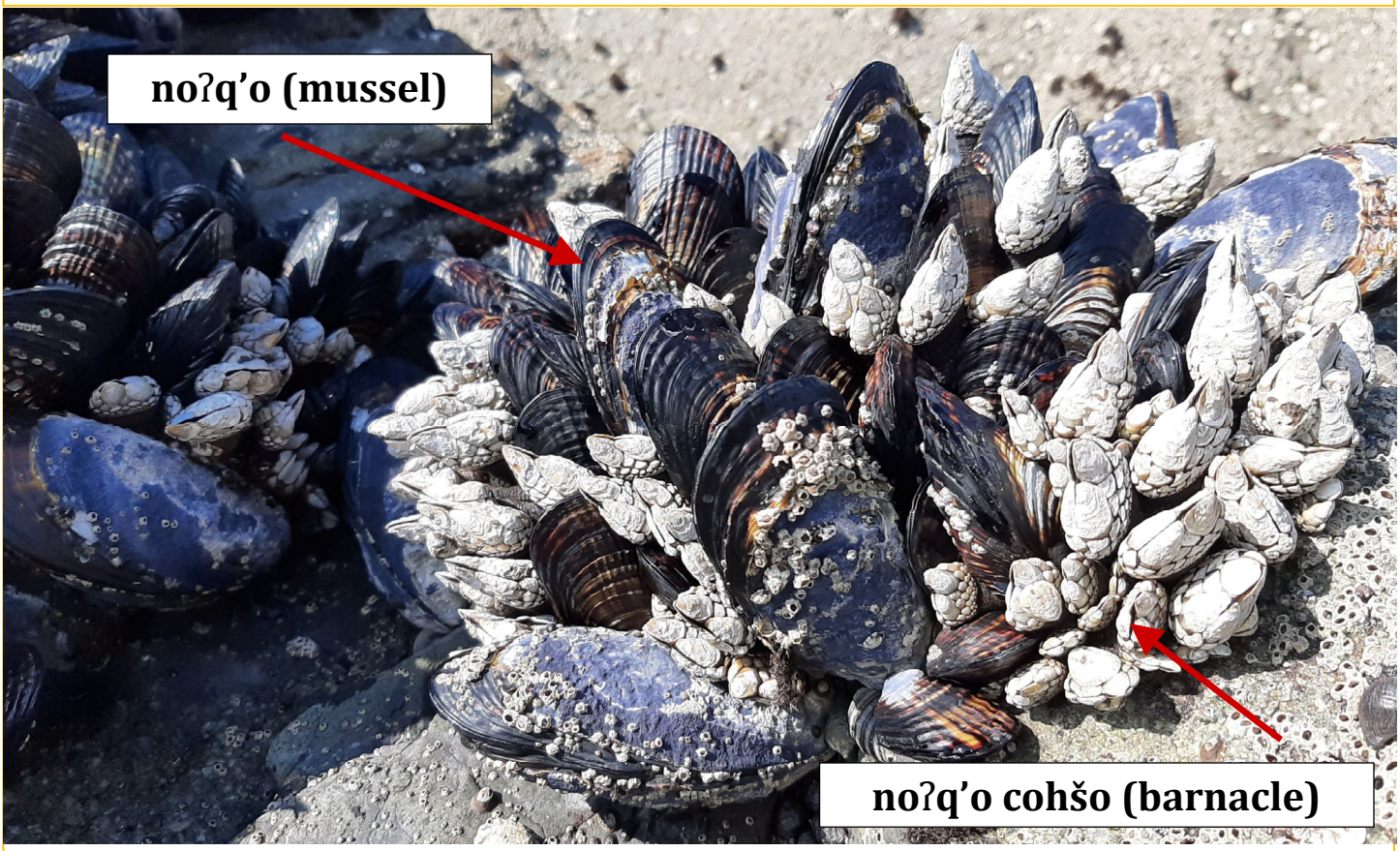
KDEP

Kashia Department of Environmental Planning

Environmental Newsletter

Issue 4

Spring 2021



Contents

KDEP is now on Instagram! Follow "kashiaepa" to receive updates and information on job/internship opportunities, events, activities, contests and more.

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Tribal Marine Stewards Network (TMSN) Pilot Project

Kashia Band of Pomo Indians is one among 4 California Tribes to receive funding from the Ocean Protection Council (OPC) to support a Tribal Marine Stewards Network Pilot Program. Partner Tribes include

- Tolowa Dee-ni' Nation
- Resighini Rancheria
- Amah Mutsun Tribal Band
- Kashia Band of Pomo Indians

The project is supported by non-profit organizations California Indian Environmental Alliance (CIEA) and Ecotrust. Initial planning sessions were held in March of 2020 to connect partner Tribes with CA Ocean Protection Council, CA Department of Fish and Wildlife and CA Fish and Game Commission. Funding for the project was approved in October 2020.

Tribal Marine Stewards Network Planning Session - March 2020

The two year project supports establishment of a Tribal Marine Stewards Network in California which will provide the technical, political and social support necessary to grow the collective capacity of Tribal partners to monitor and mange their own lands and waters. Working collaboratively the TMSN will identify shared priorities, build Tribal capacity, conduct research and monitoring activities to improve an understanding of ocean and coastal health, engage with the broader Tribal community, conduct outreach, collect/store/share data and knowledge and create a plan for scaling up to include additional Tribal partners.

Continued...

Beach Watch Survey Monitoring

Kashia Department of Environmental Planning is working with the Greater Farallones Association (GFA) to implement a beach watch monitoring program for the Kashia Coastal Reserve (KCR). Surveyors collect data along the coast every month on human use activities and marine/wildlife presence. Photos are taken at designated spots throughout the survey to keep track of erosion. Data is used as an indicator of wildlife and ecosystem health, changes in climate and wildlife/marine life distribution.

KDEP Interns Conducting Beach Watch Surveys at the Kashia Coastal Reserve

Through the TMSN Pilot Project, KDEP plans on implementing a continuous monitoring program for the KCR which collects data currently managed by GFA and data of special interest to the Tribe.

ARE YOU INTERESTED IN GETTING INVOLVED AND BEING APART OF OUR SURVEY TEAM?

If you are interested in learning more or participating please contact Abreanna Gomes, abby@stewartspoint.org or Nina Hapner, nina@stewartspoint.org.

For more information on the program visit GFA's Beach Watch Website.

https://beachwatch.farallones.org/

Rocky Intertidal Monitoring, 3D Modeling & Ocean Water Quality

Another project KDEP plans on working on is gathering a baseline dataset of species which exist in the rocky intertidal zone. Photos will be taken to create a resource inventory list for the KCR. Staff will ID species with the associated Kashia name and cultural use. Part of this project will include exploring the use of 3D modeling to create a time series of data which

Continued…

will inform the health of the marine ecosystem and reveal how the ecosystem is being impacted over time. KDEP will expand their water quality monitoring program to include the ocean and build a relationship with the CA Department of Public Health to begin marine biotoxin monitoring of shellfish. Data collected will assist in the protection and management of marine resources.

Traditional Ethnographic Knowledge Database (TEKD)

Kashia retains a rich history and knowledge regarding the local plant populations, fauna and landscape along the Sonoma county coast. Part of the TMSN pilot project includes the collection of traditional ecological knowledge and its migration into a centralized database system. KDEP will work with Ecotrust to install a Traditional Ethnographic Knowledge Database (TEKD) and provide technical training for Tribal staff. Built in collaboration with the partner Tribe Tolowa Dee Ni Nation, this database is designed to help Tribes retain and organize their traditional knowledge and share it with future generations.

KDEP will work in close association with the Cultural Resource Department to gather and upload archived materials into the database, conduct interviews and create video documentation. Once the database is ready for use it will be made available for Tribal members to research and explore.

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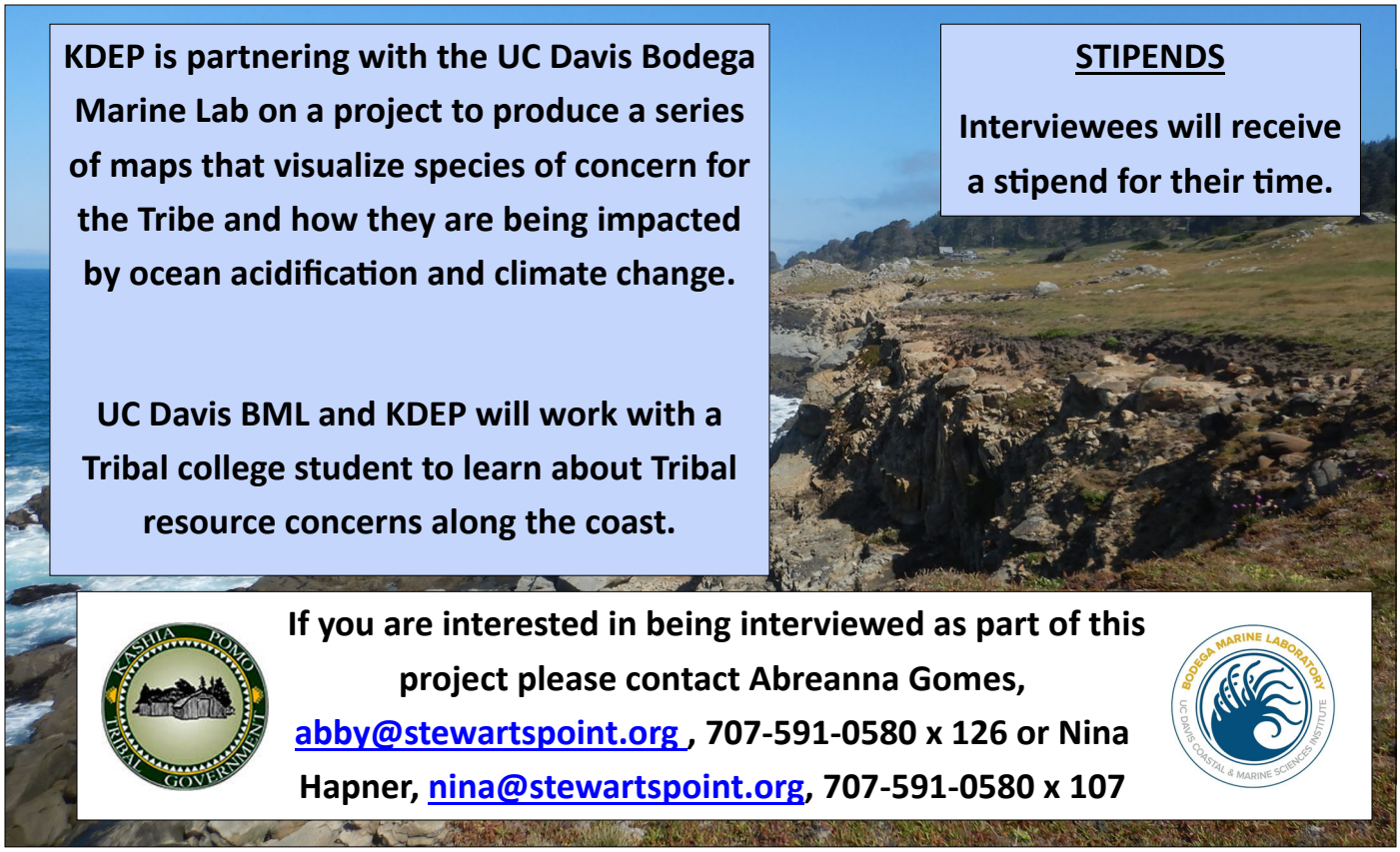
UC Davis Bodega Marine Lab Partnership Project

PROJECT PURPOSE



KDEP is partnering with the UC Davis Bodega Marine Lab on a project to produce a series of maps that visualize species of concern for the Tribe and how they are being impacted by ocean acidification and climate change.

UC Davis BML and KDEP will work with a Tribal college student to learn about Tribal resource concerns along the coast.

STIPENDS

Interviewees will receive a stipend for their time.

If you are interested in being interviewed as part of this project please contact Abreanna Gomes, abby@stewartspoint.org , 707-591-0580 x 126 or Nina Hapner, nina@stewartspoint.org, 707-591-0580 x 107

The primary goal of this project is to understand where and how ocean acidification and climate change are impacting marine organisms that are important to coastal residents. Recent research reveals a number of negative consequences of reduced ocean pH (termed '***ocean acidification***') for marine life. Decreasing pH and related changes in seawater chemistry impact the growth, reproduction, and survival of many culturally important species harvested by California tribes. Marine species that are of particular concern for this program include abalone, Dungeness crab, sea urchins, oysters, mussels, and clams. This project relies on publicly available datasets generated by different agencies (for example, NOAA and the Central and Northern CA Ocean Observing System). Data from Bodega Marine Laboratory-led projects will be included as well.

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Kashia Indoor Air Project

Kashia Department of Environmental Planning (KDEP), Kashia Housing Authority (KHA) and the California Tribal Epidemiology Center (CTEC) are collaborating to conduct an **Indoor Air Project** on Kashia Tribal households. That means you have Kashia Tribal Members living in the household, regardless of where you live. Indoor Air Quality (IAQ) in our homes impacts our health and in this last year, many of us have spent a great deal of time indoors from the "shelter-in-place" mandate. There may be things that you have noticed that you didn't before. How can we help? Information gathered can inform the Tribe where we can assist with resources, information, assistance, etc. All information is confidential. It will not include any personal information.

What is Indoor Air Quality?

Indoor Air Quality (IAQ) refers to the **air quality** within and around buildings and structures, especially as it relates to the health and comfort of building occupants. Understanding and controlling common **pollutants indoors** can help reduce your risk of **indoor** health concerns.

Before we distribute the questionnaire, we are looking for five (5) members of Kashia Tribal households (18 and older) to pilot the questionnaire and provide feedback. The participation comes with a ***$25 gift card***. A copy of the questions can be found on the Tribe's website at www.stewartspoint.org if you'd like to view them ahead of time.

If you would like to participate in testing the questionnaire and/or being more involved in this project, please contact Nina Hapner, Director of Environmental Planning at nina@stewartspoint.org or (707) 591-0580 x 107. *Yahwiy*

CTEC California Tribal Epidemiology Center

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Pollinators - Bumble Bees (cehéy)

Bombus caliginosus

Bumble bees are among the most important and conspicuous of native pollinators, both for wildflowers and agriculture. Of the 3,000 described bee species in the United States, all but a handful are native to North America. Of these, about 40 species belong to the genus Bombus. These are the bumble bees. Bumble bees have pollen baskets on their hind legs. They are social bees that live and work in colonies headed by a single queen who is the mother of all the other nest residents. Bumble bees have large bodies and are generally furrier than most other bees and have physiological adaptations that allow for flight in cold and cloudy conditions when other bees are inactive.

Bombus nevadensis

Bumble bees do not produce commercial quantities of honey, but are arguably more important in the pollination of native flowers in natural ecosystems of the United States, and have evolved in a broad array of habitats, from the Puget Sound in Washington to the deserts of the Southwest.

When looking for bumble bees it is best to go to areas where flowers are blooming. Do not expect to find a nest as they are often underground in abandoned rodent burrows; instead focus on bumble bees visiting flowers. In forested areas, we most commonly encounter bumble bees along stream courses, in meadows, recently burned or logged areas, or on flowers by roadsides.

Bombus mixtus

Bumble bees are generalist foragers, feeding on a diverse suite of pollen and nectar resources. In the course of foraging for floral resources for the nest, an individual bumble bee will move pollen within a plant, or from one plant to another, affecting pollination success. For the bumble bee this is incidental, but ecologically important nonetheless. The bumble bee collects extra pollen and consumes nectar which it transports back to the nest to feed the developing larval bees.

(Information excerpted from Bumble Bees of the Western United States. A product of the USFS and the Pollinator Partnership.

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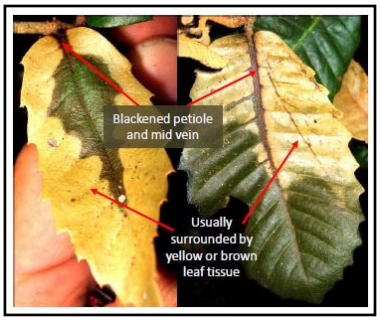
Department Events & Activities

Sudden Oak Death (SOD) Blitz—2021

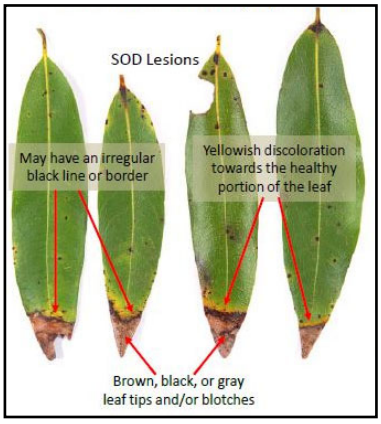
KDEP hosted a SOD Blitz on May 2, 2021 on the Kashia Coastal Reserve. SOD is a serious exotic disease caused by the pathogen *Phytophthora ramorum* which is threatening California's native oaks and tanoaks. California bay laurel leaves are mostly responsible for spreading the disease. Samples are collected and sent to UC Berkeley for testing.

Previous sampling years can be viewed on the free SODmap mobile app. The app allows you to visualize both SOD positive and SOD negative trees, based on laboratory results.

Environmental Director Nina Hapner discussing SOD identification



SOD Symptoms on Tan Oak

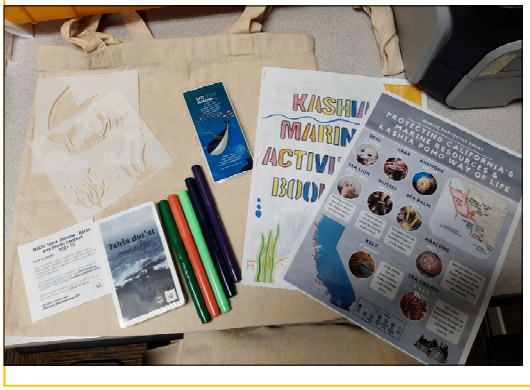


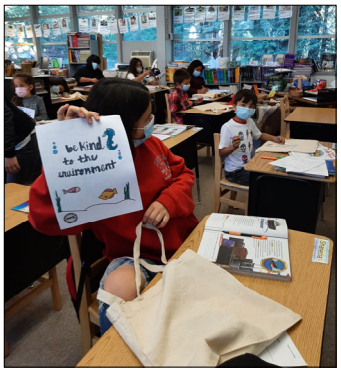
SOD Symptoms on Bay Laurel

UC Berkeley Forest Pathology and Mycology Laboratory—http://www.matteolab.org

Earth Day Activity—Kashia Elementary School

In celebration of Earth Day KDEP put together activity bags for students at Kashia Elementary School. Students were encouraged to decorate their own reusable bags as a way of reducing waste.





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“ʔAmaˈtˊiˈ bakʰe ʔacaʔ ahqʰa” - Water Is Life Art Contest WINNERS

K - 2nd Grade Winner

Kendall Pinola, Grade K

“Don’t put trash in the ocean”

Jeremiah Patrick, Grade 1

3rd - 5th Grade Winner

Rosalena Barrera, Grade 4

6th—8th Grade Winner

Serina Azbill, Grade 8

“We get our food from the ocean”

“seaweed”

“clams”

“crab”

Ava McCloud, Grade 1

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Announcements and Reminders

KDEP is now on Instagram!

Follow Kashia Department of Environmental Planning on Instagram

- *Department updates*
- *Upcoming events*
- *Internship/job opportunity postings*
- *Marine/coastal news*
- *Participate in youth/community contests (photo, art, video, etc.)*

Search "**kashiaepa**" and keep up to date

Machi ʔama· mimáw - Earth Day Photo Contest 2021

How to Enter:

❖Get Outside! Take a photo of nature on a hike, neighborhood walk, in your backyard or submit a photo showing how you are taking care of the earth.

❖Upload photo to instagram or by email to abby@stewartspoint.org. Tag **@kashiaepa** and enter the hashtag **#kashiaearthday2021**

❖Entries will be entered into a raffle for a chance to win 1 of 4 ***$25 gift cards***.

All ages welcome!
Contest Deadline May 31st

Fishing & MPA Mobile Resources

Do you fish along California's coast? Despite what you may have heard, some marine protected areas (MPAs) allow certain kinds of take, just make sure you have your fishing permit and know the rules before you go!

Check out some of the awesome mobile resources for MPA boundaries, regulations and more!

- CDFW MPA Mobile Site
- CDFW Ocean Sport Fishing Interactive Web Map
- FishLegal (free downloadable mobile app) - Saltwater Fishing Maps & Regulations

Visit this link for more information: http://californiampas.org/fishing-mpas

If you have any questions regarding the articles in this newsletter, are interested in providing suggestions for the next Environmental Newsletter, or interested in signing up for an email subscription please contact Abreanna Gomes, Water Resource Technician

Phone: (707) 591-0580 x126

Email: abby@stewartspoint.org

Kashia Band of Pomo Indians

Kashia Department of Environmental Planning

1420 Guerneville Road, Suite 1

Santa Rosa, CA 95403