CALIFORNIA'S FIFTH
CLIMATE CHANGE
ASSESSMENT



Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps

An Original Research Report for:

California's Fifth Climate Change Assessment

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About California's Fifth Climate Change Assessment

California's Climate Change Assessments are the state's scientific foundation for understanding future climate-related vulnerability across California's regions and systems. Senate Bill 1320 (Stern, 2020) requires the State to report the impacts and risks of climate change across California at least every five years, beginning with California's Fifth Climate Change Assessment (Fifth Assessment). Building on decades of climate research and previous Assessments, the Fifth Assessment presents new findings about California's climate future, with a dedicated focus on Tribal partnerships, public engagement, and communities most vulnerable to climate impacts.

The Fifth Assessment's research and tools are designed to fill knowledge gaps about California's climate future, inspire strategic climate actions, and shape planning, investments, and policies at the state, regional, and local scales. Guided by research priorities identified by state, Tribal, and local leaders, community representatives, and subject matter experts, its findings are designed to help illuminate potential climate futures, the challenges they may present, and the opportunities to build resilience through adaptation pathways.

For the full suite of Fifth Assessment research products, please visit: www.ClimateAssessment.ca.gov.

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Table of Contents

Introduction **1**
Goals **2**
TASK 1: Project Planning and Launch **3**
TASK 2: Experiential Learning and Seeding Native Knowledge **6**
- Identifying Areas of Wildfire Possibility 6
- Act Like Fire Training 7
- Plant Medicine, Craft, and Indigenous Scientific Research 7
- Elder and Culture Bearer Workshops 8
  - Traditional food and fire workshop 9
  - Willow & Tule cultural harvest workshops 9
- Collaboration with Partners 9
- New Partners 10
- Community Accessibility 11

TASK 3: Fieldwork **12**
- Ecosystem Workforce Training 20
- Project Conclusion and Ceremony 21

Future Plans **23**
Appendix **24**

Introduction

The **Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps** is dedicated to the restoration of the **Chief Ya'anna Regenerative Learning Village (Ya'anna Village)**, a Gabrielino-Shoshone Nation of Southern California land base where intertribal cultures, sciences, and traditions are promoted through praxis. Ya'anna Village's 12 acres sit within the boundaries of the ancestral village of *Ochu'unga*—the Place of the Wild Rose (El Sereno, Los Angeles, California). Tzicatl CDC, in partnership with Anawakalmekak and the Gabrielino-Shoshone Nation, facilitates essential student programming and establishes strategic partnerships to combat the climate crisis and promote Indigenous practices of ecological sustainability and ecosystem restoration. We dreamed that the student internship model would be the most effective way to provide an experiential leadership opportunity that supports students in creating tangible positive change both personally and environmentally. Through this model, student interns' firsthand experiences and hands-on training shaped local ecological knowledge, Indigenous regenerative architecture, ecological restoration, and cultural fire stewardship. This program was made possible by funding from California's Fifth Climate Change Assessment's Tribal Research Grant Program. The grants support Tribally-led initiatives that advance climate change research. This program is guided by a collaborative, multi-agency team that draws on the expertise and roles of several state entities, including the Governor's Office of Land Use and Climate Innovation, the California Natural Resources Agency, the California Energy Commission, and the California Strategic Growth Council.

Goals

- Establish a framework for how Indigenous cultural experts pass on their knowledge of Indigenous climate mitigation practices to Native students and interns.
- Implement a youth job corps model (youth stipends and certificates) that engages grades 9–12 students, teachers, and partners at Anawakalmekak through hands-on, experiential learning. This approach ensures these practices are passed to the next generation while providing no-cost vocational education and training.
- Leverage community partnerships and cross-sector collaborations to support widespread adoption of Native knowledge and practices while promoting city, local, and state buy-in.

TASK 1: Project Planning and Launch

Rematriation of our existing Tribal territory is the first criterion in planning and launching a program like the Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps. The Gabrielino-Shoshone Nation's autonomy over the 12-acre land base provided an ideal space for Gabrielino and Nahua knowledge transmission, ceremony, and experiential learning. Without rematriation of Tribally-owned lands, Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps would be impossible, as it is the autonomy of stewardship on our own terms that is the foundation of our work. Intern and community involvement in rematriation as an active process of ***returning to land*** is vital because they become direct facilitators of change in their communities and ecosystem. Curriculum planning for the program was built around seasonal responsibilities practiced since time immemorial by local Gabrielino communities based on guidance from Gabrielino-Shoshone culture bearers. Student interns' mindful participation in our cyclical calendar is a modality of resurgence of traditional ways of knowing and practicing reciprocity with local ecology.

Intern recruitment and outreach were sequential phases in implementing the Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps. Efforts ranged from tabling at local college and club fairs to in-class presentations. As the first program of its kind within our organization, recruitment was initially slow; however, as students became more aware of the possibilities, they began, unprompted, to share the program through word-of-mouth. In total, 33 youth requested to receive an application.

Figure 1.



Top left: The 2025 Masewaltlalpixkayotl Youth Cohort overlooking the terraced hillside of the Chief Ya'anna Regenerative Learning Village under their stewardship. Bottom left: Masewaltlalpixkayotl intern holding manzanita berries after learning that they can be used to make traditional crafts. Right: Birds-eye view of Ya'anna Village.

Student demand to participate in Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps resulted in a more competitive application process as program capacity was limited.. This created a motivating opportunity for students to put extra care and effort into their applications. Although students were very responsive to the program, some challenges prevented them from fully committing to the internship. Initially, each student was expected to complete two hours of internship work after school hours. Unfortunately, this did not work for all students' schedules, as responsibilities at home or at school conflicted with the internship. Accommodations were made to the internship schedule to allow the largest number of students to participate.

Once we onboarded our project manager and selected student interns, we focused on establishing partnerships that met the needs of the program. It was essential to build partnerships with leaders in the field of climate mitigation, ecological sustainability, and ecosystem restoration who were responsive and respectful of the needs and knowledge of intertribal Indigenous youth. We identified TreePeople, La Brea Tar Pits, and CA Nature Connection as ideal partners. Our first and most essential

relationship was with the Gabrielino-Shoshone Nation Tribal Council. This relationship was at the foundation and framework of the success of the Masewaltlalpixkayotl: Indigenous Youth Climate Resiliency Corps programming. With their guidance as the First Peoples of the region, students began to engage with land as an educational experience that was cultural, scientific, and multigenerational.

TASK 2: Experiential Learning and Seeding Native Knowledge

Masewaltlalpixkayotl Indigenous Youth Climate Resiliency Corps represents a culmination of 30 years of collaboration with and guidance from the late Chief Ya'anna Vera Rocha and the Gabrielino-Shoshone Nation of Southern California. During the early 1990s, the co-founders of Anawakalmekak and Tzicatl CDC formed a close relationship with Chief Ya'anna Vera Rocha through the shared struggle of protecting sacred Gabrielino sites under threat of development. This ongoing relationship resulted in the rematriation of 12 acres of open space land to the Tribe from Anawakalmekak and Tzicatl CDC with support from NDN Collective, Metabolic Studio, Xiuhtezcatl Martinez, The California Endowment, and TomKat Ranch Educational Foundation in 2022. Named after the late Gabrielino-Shoshone Chief, the land base is called Chief Ya'anna Vera Rocha Regenerative Learning Village and it facilitates an experiential learning model where tribal members, community members, students, partners, and interns engage Traditional Ecological Knowledge (TEK) as a means to both restore and connect to land. Masewaltlalpixkayotl was an opportunity for Tzicatl CDC to develop a disseminable youth job corps model that addresses the needs of Indigenous ecosystems and Indigenous students. Effective stewardship of the village requires that students prioritize tribal consultation; this process empowers students to collaborate with the Gabrielino-Shoshone Nation to identify a variety of experiential learning opportunities. These include identifying optimal areas of restoration possibility, Indigenous scientific research related to conservation of ecosystem health and cultural resources, culture bearer workshops, and collaboration with prominent local organizations and institutions.

Identifying Areas of Wildfire Possibility

Before the Gabrielino-Shoshone Nation and Tzicatl CDC stewarded the 12-acre property, it was covered in highly incendiary invasive weeds. To identify areas of the site most prone to wildfire, interns assessed native and non-native plant species and evaluated plant health and age by referencing research conducted by peers at Anawakalmekak. Furthermore, they completed a topographic analysis of the village using 3D slope imaging generated by drone mapping. This research was conducted in collaboration with the Anawakalmekak Advance Field Biology program, exemplifying advanced scientific techniques informed by traditional knowledge. Interns were also trained by our staff alongside TreePeople's master arborist and Associate Director of Community Forestry, Bryan Vejar. During this training, interns learned to identify dead or hazardous tree limbs and safely remove them using Indigenous land stewardship practices adapted for urban environments where cultural burns are prohibited.

"The best fire fuel and most seen in our area is dead brush from black mustard. It is important that we prevent the plant from growing and becoming new fuel. It is extremely invasive."

- Masewaltlalpixkayotl intern

Act Like Fire Training

The Ya'anna village staff and elders introduced students to "Act Like Fire," a teaching adapted to the prohibition of Indigenous prescribed fire in Los Angeles. This teaching was first shared with us by Chumash culture bearer Sarah Koyo and emphasized by Gabrielino-Shoshone culture bearers Rico Ramirez and Gabrielle Rocha-Crowe. Through ceremony and hands-on training, interns learned to take on the ecological function that fire has in the ecosystem. To take on this responsibility, interns learned to identify non-native plant species that are highly prone to igniting brush fires, understand how seasonal climate patterns influence the growth and fire risk of these hazardous plants, and study the historical origins of these species and their cultural importance in the communities where they are native. Interns were also trained in appropriate and respectful methods for removing invasive plants as part of Indigenous-informed wildfire mitigation and land stewardship practices.

"One thing I learned about brush clearance was the importance of clearing out the weeds and mustard, as they are a fire hazard, and how important land maintenance is, especially during the summer heat."

- Masewaltlalpixkayotl intern

Plant Medicine, Craft, and Indigenous Scientific Research

Rematriation is a living relationship that is not limited to returning land to a Tribe. It requires the restoration of the plant relatives that once healed and built Tribal nations. Ya'anna Village has dedicated extensive space to developing a comprehensive medicine and craft garden where Gabrielino-Shoshone Tribal members can harvest plants and interns can learn from culture bearers and staff about the species currently inhabiting the village, those that historically thrived there, and the contemporary roles of urban Indigenous Peoples in revitalizing the local ecosystem. Interns received hands-on instruction from Tzicatl CDC's team and from partner nurseries, including TreePeople's facilities in West Los Angeles. They learned the full process from seed to Earth, gaining a deep understanding of plant lifecycles and stewardship. They also learned about the critical role of fire in the regeneration of California native species and were able to germinate seeds using fire-based techniques in a nursery setting.

"One thing I learned about native plant nurseries was that keeping baby plants on a watering schedule is really important in the early stages, and it helps if we mimic the weather during those watering days to help the plants survive. I also learned that some plants need fire (or heat to mimic fire) to sprout and keep healthy."

- Masewaltlalpixkayotl intern

Interns also learned the traditional names and uses of plants, including making necklaces from toyon, using roses for tea as medicine, and sage for cultural smudging. They actively participated in tending and caring for cultural resources used for gifts and offerings during seasonal ceremonies, reinforcing the living cultural relationship among land stewardship, ceremony, and cultural revitalization.

Figure 2.



Tule harvest at La Brea Tar Pits led by Gabrielino-Shoshone Tribal Biologist Rico Ramirez and Co-Chief Nicholas Rocha. Alt text: Two hands pull apart a plant. A man with a hat harvests willow poles. A group of women assemble willow poles on a woven mat.

Elder and Culture Bearer Workshops

Since time immemorial, Indigenous communities have passed knowledge down from one generation to another via oral tradition. Hosting workshops with elders and culture bearers provided an opportunity for the Masewaltlalpixkayotl interns and staff

to continue this tradition and establish a disseminable framework that embraces oral tradition as a primary source for cultural and scientific learning. Our primary focus for this portion of the program was culturally informed land-tending techniques and land steward safety.

Traditional food and fire workshop

We began this workshop series with Lozen Orozco, a culinary leader with expertise in pre-colonial open-fire cuisine. She taught interns about personal health as land tenders and the traditional foods used to nourish active bodies from her community. This included pinole (corn meal), cacao, beans, squash, and corn, as well as drinks like atole and natural fruit waters. During our workshop, Lozen guided interns through the pinole-making process, teaching them how to toast, grind, and add complementary condiments to the dish. This workshop was extremely informative for students as it integrated both personal health and cultural cuisine. Students inherited this culinary knowledge and now carry the responsibility of maintaining their health as well as the health of future generations of land tenders. .

Willow & Tule cultural harvest workshops

Rico Ramirez, a biologist and certified arborist of the Gabrielino-Shoshone Nation, guided students and staff in harvesting Tule grass to construct a kiiy, a traditional Gabrielino willow house. Culture bearers Nicholas Rocha and Joseph Rocha subsequently led related willow pole harvesting workshops and kiiy construction workshops. Before harvesting, interns were always guided through a giving-thanks ceremony. Students cleaned their tools and hands with white sage smoke and acknowledged the four corners as a way to recognize the importance of our harvest. These experiences provided interns with the training to intentionally prepare themselves and their tools for a harvesting practice that is environmentally ethical and grounded in local Indigenous lifeways. The construction workshops that followed engaged interns as leaders and taught them the unfortunately rare skill of contextual willow house construction. Through this learning opportunity, they became young culture bearers themselves.

Collaboration with Partners

Outreach to local organizations and museums was highly successful. Many institutions and organizations expressed interest in partnering on projects centered on environmental education, especially following the devastating fires in Altadena and the Pacific Palisades.

The La Brea Tar Pits (LBTP), as a facility of the Natural History Museum of Los Angeles (NHMLAC), welcomed our interns to learn about paleoecology and prehistoric fire in Los Angeles. Curator Dr. Regan Dunn personally guided our interns through the

museum and provided access to laboratory spaces where remnants of historic burns are studied. The site's Lake Pit is also one of the remaining places in Los Angeles where tule reed grows abundantly, and LBTP generously permitted us to harvest it for the construction of Chief Ya'anna Village's first kiiy - a traditional Gabrielino willow house. Dr. Dunn subsequently sat on a speakers' panel at Masewaltlalpixkayotl's youth summit and engaged big questions from local Indigenous youth attendees related to paleoecology and climate change.

TreePeople offered meaningful educational experiences for our interns. The collaboration included multiple training sessions in Native plant and tree nursery 101. This training included the seed heat stratification process—using controlled fire to treat California native seeds—which encourages germination. Furthermore, students engaged in seed sorting, cleaning, and cataloging. Additionally, TreePeople's Certified Master Arborist Bryan Vejar and Certified Arborist Jack Smith visited Chief Ya'anna village to teach interns techniques and protocols for native tree care, trimming, growing, and maintenance. Vejar and Smith covered historical techniques used in California that were detrimental to ecosystems, such as deforestation to clear hillsides for cattle grazing. TreePeople also provided Expert Jack Smith to present at Masewaltlapixkayiotl Youth Summit.

Miguel Ordeñana of the Natural History Museum of Los Angeles County presented at the Masewaltlapixkayiotl Youth Summit on topics related to minimizing the impacts of climate and habitat change.

Nativestorytelling (Alan Slazar, Tataviam and Chumash) delivered a one-day Indigenous Traditional Ecological Knowledge training to our instructors and community members, sharing practical approaches to engaging with land as a Tribal person in restoration and conservation.

In partnership with Anawakalmekak , Masewaltlapixkayiotl interns worked with Anawakalmekak's Advanced Field Biology class and local universities, such as USC and UC Riverside, to understand methodologies and data analysis required for conducting independent student research. Interns were guided in their assessment by Anawakalmekak Biology instructors and Anawakalmekak's Ketsal Fellow, and they gathered data relating to air quality and soil health, both at their school campus and at Chief Ya'anna Learning Village. This data was processed and analyzed by Anawakalmekak students, staff, and interns.

New Partners

In May, we established a relationship with the newly-founded California Nature Connection located in Elyria Canyon. Through this relationship, we traded native seeds and initiated a "tiny seed library" at Chief Ya'anna Learning Village. This will

provide local youth and adults alike with the ability to take and give seeds to the library for native restoration in their homes and beyond.

Community Accessibility

Student interns identified a range of community accessibility needs and utilized cultural and scientific resources to address them. Physical accessibility for elders emerged as a primary concern, as elders played a key role in teaching students about land-tending responsibilities and techniques. To ensure elders could easily access the village, interns removed invasive plants and carved safe, stable trails. Interns recognized the limited access to authentic historical resources about Los Angeles as a significant concern. To bridge this gap, Masewaltlalpixkayotl connected with Ya'anna Village leadership and community organizations like TreePeople to deepen their understanding of deforestation and overgrazing in Northeast Los Angeles. Since time immemorial, Indigenous communities have built their homes using regenerative and sustainable construction methods. Tzicatl CDC provided students with the tools and materials to experiment with traditional adobe building techniques and a traditional willow structure (kiiy) at Chief Ya'anna Village. The time they dedicated to developing these skills coincided with the aftermath of the massive Altadena fire in January, highlighting the relevance of fire-resilient and regenerative construction practices.

> *"If we use adobe materials, our homes would be less prone to fire. Brush is fire fuel, and that's why it's important to clear it."*
>
> *- Masewaltlalpixkayotl intern*

TASK 3: Fieldwork

Masewaltlalpixkayiotl: Indigenous Youth Climate Resiliency Corps fieldwork focused on three major topics: Indigenous regenerative architecture, climate and wildfire resilience, and native tree and plant restoration. The following Summer 2025 schedule provides an example of the curriculum throughout the program:

Timeline:	**Monday, June 16**
Topic:	**Orientation**
Objectives:	Interns will: 1. Review program logistics 2. Create community agreements 3. Receive program packets
Materials Needed:	N/A

Timeline:	**Tuesday, June 17**
Topic:	**Basket and Wildlife Pond: Experiential Learning**
Objectives:	Interns will: 1. Receive an introduction to tolls and safety training 2. Create a habitat pond by propagating native plants such as Common Duckweed (Lemna Minor) and Common Rush (Juncus Patens) to combat heat at the village. 3. Receive instruction in milpa garden maintenance
Materials Needed:	• pond liner • water

Timeline:	**Wednesday, June 18**
Topic:	**Fire Mitigation - Brush Clearance**
Objectives:	Interns will: 1. Receive line trimmer handling protocol and personal protective equipment (PPE) 2. Clear brush by weed eating, mustard hand weeding 3. Collect brush for wildfire mitigation 4. Water and maintain restored zones
Materials Needed:	• all tools

Timeline:	**Thursday, June 19**
Topic:	**OFF**
Objectives:	Day off: Juneteenth
Materials Needed:	N/A

Timeline:	**Friday, June 20**
Topic:	**Native Tree and Plant Maintenance: Best Practices**
Objectives:	Interns will: 1. Learn about native vs. non-native plants 2. How to tent to resotred zones, including: a. pruning of dry sections native plants b. planting of milkweed and other native plants c. hillside maintenance (microforest and willow grove) - mulching, weeding, berm reinforcement, etc.
Materials Needed:	• watering cans, all shovels, all rakes, all pitchforks, all wheelbarrows, 20 bottom cages, 20 top cages.

Timeline:	**Monday, June 23**
Topic:	**Nursery Procedures & Phytosanitation**
Objectives:	Interns will: 1. Understand where our water comes from and Southern California's rainfall patterns to practice effective watering techniques for California native plants. 2. Identify diseases that threaten California native plants and how they are spread. 3. Prevent the spread of pathogens by practicing phytosanitation protocols. 4. Explain why sterilizing solutions need to be diluted at different proportions. Work groups: • Build work tables • Clean pots • Sow seeds
Materials Needed:	• isopropyl alcohol • spray bottles • buckets • bleach • gloves
Resources:	• Day of Agenda

Timeline:	**Tuesday, June 24**
Topic:	**Native vs. Non-native**
Objectives:	Interns will: 1. Understand terminology used to characterize trees, shrubs, forbes and grasses. 2. Identify the different invasive species found at the village. 3. Explain the importance of suppressing the growth of invasives and techniques for doing so. 4. Distinguish among weeds, non-native, and invasive plants. 5. Identify the different native species found at the village via scavenger hunt. 6. Explain the impact California native plants have on soil health, water quality, the fire regime, and air quality. Work groups: • Water willows and food forest • Conduct scavenger hunt • Identify shrubs/trees/forbes/grasses
Materials Needed:	N/A
Resources:	• Day of Agenda • Printouts of plant structure

Timeline:	**Wednesday, June 25**
Topic:	**Seed Collection, Processing & Storage**
Objectives:	Interns will: 1. Begin the day with nursery maintenance and transition to willow grove maintenance. 2. Describe the importance of scouting for seeds before collecting. 3. Distinguish between seed and plant material for the following species: • ***Encelia californica*** • ***Sambucus mexicana*** • ***Muhlenbergia rigens*** 4. Separate plant material from seeds using seed sieves for cleaning. 5. Effectively clean seeds using the appropriate cleaning solution and dilution formula. 6. Understand the adequate conditions for short- and long-term seed storage. Work groups • Collect seeds in different areas • Separate into seed processing groups by species
Materials Needed:	• seed sieves • dried seeds • clean buckets • whiteboard
Resources:	• Day of Agenda • Ethical Seed Collection Pamphlet • Seed Scouting Form

Timeline:	**Thursday, June 26**
Topic:	**Ecosystems & Soil Conditions**
Objectives:	Interns will: 1. Distinguish and identify biomes, ecosystems and plant communities. 2. Identify the ecosystems in Southern California. 3. Define the ecosystem Chief Ya'anna Village belongs to. 4. Assemble the soil mix for the different stages of a plant's cycle. 5. Describe why we use fertilizer and compost in our soil mix, and are able to distinguish between their uses. Work groups: • Begin at school to make ecosystem cases • Go to village to transplant
Materials Needed:	N/A
Resources:	• Day of Agenda

Timeline:	**Friday, June 27**
Topic:	**Land Practices**
Objectives:	Interns will: 1. List various techniques used for land restoration. 2. Distinguish between urban forestry, reforestation, gardening, restoration, seed farming, and horticulture. 3. Schedule: • 7:00-7:30 a.m. - Water nursery • 7:30-8:15 a.m. - Breakout (milpa maintenance, nursery structural maintenance) • 8:15-9:50 a.m. - Sow walnuts; if time allows, mulch zone around the kiiy • 10:00-11:00 a.m. - Ecosystem and biome activity at 4736 (map study)
Materials Needed:	N/A
Resources:	• Anatomy of Grass Crossword • Day of Agenda

Timeline:	**Monday, June 30**
Topic:	**Adobe Engineering Pre-elaboration soil testing**
Objectives:	Interns will: 1. Conduct a variety of noninvasive tests on the soil that will be used to make adobe bricks, including: a. Sedimentation Test to determine the percentage of clay, silt, and sand in soil. b. Adhesion Test to determine the strength of soil. c. Luster Test to determine the ratio of silt to clay. d. Washing Test to determine the stickiness of soil. e. Attenberg Limit Test to determine water retention. 2. Preparation (sifting, digging, leveling work area, mold/ frame finishing 55-75% percent sand for 25- 45% clay and silt.
Materials Needed:	water, knife, small cups or bowls, sifted soil

Timeline:	**Tuesday, July 1**
Topic:	**Adobe Form experimentation**
Objectives:	Interns will: 1. collaboratively engineer their ideal adobe mold/ frame, considering various components of the frame, including the material it is made of, the size of the mold/ frame textures, metal framing, and natural chemical applications. 2. Design and construct their models
Materials Needed:	wood from the village, sandpaper 220 grit, screws, drill, paint, bees wax, measuring tapes circular saw, clamps, seed oil varnish, right angel ruler

Timeline:	**Wednesday, July 2**
Topic:	**Finding Perfect Mix/Elaboration of bricks**
Objectives:	Interns will: 1. Understand soil texture and soil composition, as well as their ideal mold/frame finish. 2. find the perfect adobe mud mix considering bonding material (hay, grass, or pine needles), sourcing soil from different parts of the village, the quantity of water, the soil, and the bonding material. 3. Establish the mix 4. elaborate on adobe bricks, washed plaster, sand, and hydrated lime stucco.
Materials Needed:	pine needles, hay, grass, possibly soil from other places, estiercol, washed plaster sand and hydrated lime

Timeline:	**Thursday, July 3**
Topic:	**Elaboration of bricks**
Objectives:	Interns will: produce 50 bricks and make an adobe shed. A compression test may also be conducted.
Materials Needed:	canopies, all adobe tools, drinking water

Interns focused their research on environmental justice, a field that ensures the well-being of marginalized communities and their access to clean and healthy environments. Two of the main components central to the restoration of ecosystem health are soil and air quality. Students' research focused on identifying particle pollutants, including PM10, PM2.5, and PM1, in the air and heavy metals in the soil. To do this, students collected soil samples and air quality data. With support from Anawakalmekak's Advanced Field Biology class and graduate students at UC Riverside and USC, Masewaltlalpixkayiotl interns determined that the soil at the village has no pollutants the community should be concerned with, but local air quality is poor. Air quality around Chief Ya'anna Learning Village was found to be 40% worse than in most California cities.. Student findings were developed into an Urban Ecological Restoration report and are now accessible to students and the Anawakalmekak community.

Ecosystem Workforce Training

To introduce workforce training, interns learned the basics of tool safety, personal protective equipment (PPE) protocols, and research best practices. During multiple stages of programming, interns developed their understanding of the professional capacities of ecosystem restoration in various fields. One example is our visit to the TreePeople headquarters in Beverly Hills and working in their urban reforestation nursery. Interns completed various tasks, including seed sorting, seed cleaning, and heat stratification. It is important to note that interns were engaging in the aftermath of the Altadena fires, and the seeds they treated and sowed were intended to contribute to post-fire restoration. Training like this reinforced the interns' understanding of good fire versus dangerous fire, as seed stratification requires fire to break seed dormancy and cues sprouting. After interns completed their tasks for the day, TreePeople staff gifted Tzicatl CDC black sage, white sage, and black walnut seeds to take back to the village to treat and sow. Ultimately, Masewaltlalpixkayiotl interns utilized these seeds to demonstrate to other students the importance of good fire and the responsibility we carry to support a climate-resilient ecosystem.

"I would recommend this program because I feel like it teaches you, but also makes you act on it; it makes you work, but also makes you think about why you are doing your work."

- Masewaltlalpixkayotl intern

Figure 3.



Images of the destruction of the Ya'anna Village Kiiy (Gabrielino-Shoshone traditional home) before and after the historic 2025 Los Angeles wildfires. Interns, students, staff, and community members.

Project Conclusion and Ceremony

The program culminated with a cohort of 23 interns who prepared the ceremonial grounds for a two-day ceremony in honor of the winter solstice. On Friday, December 19, we celebrated the Tsintsini Tonalli (Nahua Winter Solstice) with more than 300 Indigenous youth, staff, and community members gathered to honor the Little Sun, commemorate the year we journeyed through together, and welcome in the new year. This first day marked the program's summit, engaging youth from transitional kindergarten through 12th grade.

The following day, we honored Tovaar Taamet (Gabrielino Winter Solstice), culminating in a graduation ceremony for interns hosted by the Gabrielino-Shoshone Nation of Southern California. Interns were formally recognized by Tribal Co-Chiefs,

biologists, and community members alongside our staff. Their work was also acknowledged by program partners, local organizations, and the broader community. Together, interns welcomed the new year through remembrance of the hard work, sweat, and reciprocity they invested in their labor at Ya'anna Village.

The Job Corps Training Survey and Feedback Form was distributed to all interns, and we are pleased with the responses received. Overall, intern feedback was very positive and demonstrated that participants learned extensively during their time in the program. The survey included two types of questions: one focused on the quality of the program and the other on what interns have learned. The responses provided valuable insight into what interns value and offered a glimpse into their professional aspirations. The Ya'anna Village team will use this information to tailor the program to meet the needs of interns—whether related to adobe work, reforestation, or fire management.

Key findings from the survey show that interns' interests lie at the intersection of science and culture. They clearly understand the connection between the scientific and ecological aspects of working in nature, while maintaining a strong foundation in their cultural traditions. This reaffirms the goals we set when designing the Masewaltlalpixkayiotl: Indigenous Youth Climate Resiliency Corps Internship—to create a program that preserves and promotes Indigenous lifeways while also advancing the most current understandings of ecology and fire science. This blend makes our program truly unique while still allowing us to collaborate with local organizations and institutions to provide interns with the highest quality learning experience within a disseminable framework.

Future Plans

Tzicatl CDC would love to continue Masewaltlalpixkayiotl: Indigenous Youth Climate Resiliency Corps to provide students with opportunities to learn from the land, guided by culture bearers. The partnerships we have strengthened throughout the program will enable us to continue to provide outdoor learning opportunities for students and the community at large. Chief Ya'anna Learning Villageoffers immense opportunities as a restoration site for students to continue learning, as our methods of restoration are multidimensional and invite both students and the community to engage in a variety of ways—from legal protection, designing and engineering infrastructure, to creating artistic installations. Ultimately, the Chief Ya'anna Learning Village will continue to be a space of Indigenous resurgence in Northeast Los Angeles and across the Americas.

Appendix

CEC-Ya'anna Village Field Guide.pdf