



PYRAMID LAKE PAIUTE TRIBE NATURAL RESOURCES NEWSLETTER

From the Natural Resources Director

-Donna Noel, Natural Resources Director

Greetings from the Natural Resources Department!

We have had an interesting year in the Natural Resources Department with the COVID-19 pandemic finally receding and begin to make up for all the lost time. We still have protocols in place but most of our grant tasks can be finished except for the Youth Camp as it was too risky to take on that responsibility. We did manage to have a wonderful composting Earth Day event with the Natchez 6th grade class. The class learned about composting and made up several composting totes. The mixed compost was used to grow a sunflower for each child to take home. It is hard to not have a great time when worms are involved. In August we will be having an electronics collection event so watch your emails for the date. We are looking forward to having more outreach events next year as the pandemic becomes more under control. The Natural Resources department is committed to getting the youth and community involved in learning about the protection of our natural resources and help clean up the reservation. The Natural Resources Department is compelled to promote public outreach and opportunities to get the community involved in environmental activities. We are planning next year's events, so if you have any suggestions please call or email us and let us know.

The Natural Resources Department is entirely funded by grants. Our continuing grants help us to achieve our objectives in monitoring water and air quality, minimizing non-point source pollution, eradicating noxious weeds, inspecting for aquatic invasive species, evaluating Brownfields sites, assessing wetlands, scheduling water deliveries, overseeing the irrigation systems, exploring renewable energy projects, improving fish passage, supporting summer college interns, monitoring illegal dumping, restoration of river streambanks, and buying water rights for Pyramid Lake. These tasks are very important in the protection of Tribal resources, but we are always building capacity within the department to include sustainable programs to address other environmental concerns. To help determine where the department will focus in the future, we are assessing and prioritizing the critical issues impacting the Tribal environment. It has been better this year performing these important tasks but certain protocols are still in place to protect our employees from the COVID-19 variants still looming over the country. By regular communication with all staff and ensuring that everyone follows strict social distancing, taking advantage of the vaccine, wearing masks in common areas, and other preventative measures, we hope to continue to perform our duties in a safe manner. By continuing our work, we're able to protect the environment and Tribal resources.

Aquatic Invasive Species

The Environmental Specialist and 2 technicians working on the program have developed standard operating procedures for monitoring the river and...

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...lake, assess the invasive species present, developing management plans, developed Ordinances, and the boat inspection/decontamination station was opened and we are working on building the capacity to have it open more often. Fisheries is an integral part of the program and they have been supportive in making the program a success. As the program builds capacity, we hope we can make it self-sustaining after a few years.

Water Quality

The department was sad to see the manager Kameron Morgan leave the position this year but we have a great new Water Quality Manager Aaron Bill who will do an excellent job. The department intends to address some important issues in the next few years including Total Maximum Daily Loads for nutrients, water quality modeling, and metal deposition from industrial growth in the area and its effect on the lake. The Water Quality Program is currently reviewing the Tribe's water quality standards for the Tri-annual review, to look for improvements to further protect Pyramid Lake, Truckee River, and the ecosystem. Please join the process and learn about the water quality criteria on the reservation by attending the public workshops and give your input. They will also be looking into the conditions that promote cyanobacteria blooms in the lake and restoration activities at Numana Wetlands.

Fish Passage

The Fish Passage project at Numana Dam completed the design and cost analysis which was significantly higher than anticipated. The work began in 2020 with Stetson Engineers, the consultant for the project, and is scheduled to begin construction in 2023. The funding needed to complete the project came from the US Fish and Wildlife Service fish passage grant as part of the infrastructure bill. The project includes building a fish friendly ramp to allow the fish to swim over the dam to reach the spawning grounds and a fish screen at Nixon ditch to prevent the entrainment of fish in the irrigation canal. Another fish passage grant was secured to rehabilitate and improve the diversion to Herman Ditch to allow for better fish passage in that reach of the river. These grants and the development of this new program, has allow our department to grow without encumbering the current work being completed.

Water Management

Water management of the reservoirs and Truckee River flows were challenging this year. Since the winter produced little snow and the rest of the year was dry we relied on the storage in the reservoirs to have water for a spawning run in the river. The flows were below ideal conditions but some fish managed to spawn in the river over the short time period. Fish and Wildlife Service were limited in their monitoring primarily due to the low flows because the water was cut back to a dryer flow regime after the river warmed and the fry returned to the lake. The water remaining in storage is low so we are hoping for a wet winter for 2022-2023.

Groundwater

The groundwater issues persisted in the Wadsworth area as the Tribe reviewed the mining methods being used by CEMEX. Adjustments were made to their mining methods to help prevent impacts to the Tribes resources. We are still working with the EPA and CEMEX to resolve pit wall stability issues and permitting.

The groundwater and geothermal water on the east side of the reservation may be threatened by a new geothermal plant in the San Emidio valley. Ormat has prepared and BLM approved an Environmental Assessment that included the development of a monitoring program. The third-party consultant has begun sampling springs and wells to determine the background or base values for the study. The Pyramid Lake Water Quality program is working with the consultants to interpret and collect the samples. The goal of the monitoring program is to measure any impact to the Tribe's groundwater and geothermal resources. A new Ormat geothermal facility is slated to start the Environmental Assessment in Little Valley near Black Warrior Peak and in the same basin as the Nixon municipal wells. Betty Aleck and I are serving as cooperating agency representatives to be sure the Tribes concerns are addressed from the beginning of the project.

Fire Restoration

The Department is still working on the restoration of the Tule, Truckee, Tokahum, and Perry Fires. Most of the restoration and protection work was completed, but we are still working on the herbicide treatment to reduce the cheat grass and seeding the final areas. The Tule Fire seeding was completed this year, with a few tasks left to go.

From the Natural Resources Director (Continued from Page 2)

Herbicide treatments are completed on the Truckee and Perry fires and seeding is underway this fall. Herbicide treatments on the Tokahum fire will be completed this fall and seeding will finish next year. We are focused on the restoration of these lands and protecting the water quality in the streams and lake. There is still much work to do and we will be completing the tasks as time, resources, and weather allows.

Integrated Solid waste Management Plan (ISMP)

The ISWMP document was revised this year and will be completed this fall. This plan was developed by the Natural Resources Department as a strategic planning tool to guide the work needed to improve the management of solid waste with an emphasis on the 3Rs, Recycle, Reuse, and Reduce. This document is a living document that will be revisited as circumstances change. The document will be posted for input from Tribal Members to help guide the implementation of the plan. I hope everyone had an opportunity to look at and comment on the document. If not, please contact me and I can get you a copy to review.

The Natural Resources Departments mission is *“to ensure clean air, water and lands to maintain healthy fish, wildlife, and plant populations for future generations to preserve the Pyramid Lake Paiute Tribe’s culture and way of life”* and we take this mission seriously by thinking about it every work day with every decision made.

Respectfully,

Donna Marie Noel,

Natural Resources Director

Water Quality Program Updates

-Aaron Bill, Water Quality Program Manager

Water Quality Program Update (106/319)

Beginning May 19, 2022, I will step into the Water Quality Manager’s (WQM) role, overlooking the Tribe’s Clean Water Act (CWA) §106 program, the CWA §319 Nonpoint Source (NPS) program, and the CWA §104 Wetlands program. Kameron Morgan, the previous WQM, resigned his position to take a role in the State of Nevada’s Department of Transportation (NDOT) as a scientist within their Storm water division. We wish Kameron all the best going forward into his career, and appreciate the 9 years of service he devoted to adding onto and shaping the Water Quality Program.

2021-2022 Triennial Review

The time has come for the Water Quality Program to re-evaluate Tribal water quality standards. Uses of a waterbody are important to uphold, especially the waterbodies on the reservation, Pyramid Lake and the Truckee River, which we depend upon for many reasons: cultural, subsistence, economic and fishing & summer recreation, to name a few. Water quality criteria describe the conditions that uphold those uses, and we determine how well the water quality supports each use based upon monitoring/sampling activities, and enact anti-degradation measures to protect those uses whose criteria already supports those uses. If the water quality doesn’t support the use, we mitigate the pollutive causes of the impairment through changes in management practices both on reservation & with upstream operators.

States and Tribes with water quality standards are required to revise their standards every 3 years or so, and must hold public meetings when implementing new or modifying existing standards. It is also during this time that...

Water Quality Program Updates (Continued from Page 3)

...States and Tribes can incorporate new water quality criteria recommended by the US Environmental Protection Agency (EPA). The Tribal Water Quality Program, in conjunction with SWCA Consultants, is hosting an introductory, online public workshop on May 24, 2022 which will present information on the Triennial Review process, of the steps needed for modifying the water quality criteria within the PLPT Water Quality Control Plan (WQCP), and of upcoming public workshop events once proposed changes are announced.

Then, on June 16, 2022, revisions to the WQCP shall be posted for public comment on the PLPT WQP website. Visitors will be able to follow a link to leave a comment on any proposed changes to the WQCP. Sorry, we can only accept comments on the proposed changes themselves, not on the overall document. On June 28, 2022, a public workshop will be offered online via Zoom where proposed changes to the WQCP will be discussed.

The WQP will then host an online public hearing via Zoom for the proposed revisions to tribal water quality standards on August 2, 2022 where the WQP and its consultancy firm SWCA will explain the rationale for their proposed changes, and answer attendee questions.

Following the posting of proposed changes to the WQCP, public comments will be accepted on proposed changes until the closing of the public comment period, on August 3, 2022. Please visit the PLPT Water Quality Program website at plptwq.org/triennialreview for further details and up-to-date information & announcements regarding the Triennial Review process.

Aaron Bill,
Water Quality Program Manager

Harmful Algae Blooms (HABs): What to Watch For

-Pat John, Water Quality Technician

I attended a webinar training about kickstarting a Tribal monitoring program for Harmful Algal Blooms, cyanotoxins, and fish kills. This training was held by The Big Valley Rancheria from Lakeport, CA and hosted by their Environmental Director Sarah Ryan and Dr. Jeanine Pfeiffer, an ethno-ecologist from UC Davis who assisted with the workshop scheduling and organization. I couldn't attend in person but I was able to attend and participate through zoom and my coworker Aaron Bill was there to help me get through certain activities.

We started the first day with introductions and a basic intro to what Harmful Algal Blooms are and how to identify them in our lake. We also brainstormed for developing a funding proposal for the monitoring activities. On the second day, we covered a lot of material including going over the Clean Water Act and Tribal beneficial uses as well as going over what we did as a Tribe to identify our Tribal beneficial uses. On the second day, we continued the material with why we monitor for cyanotoxins, cyanobacteria identification, and cyanotoxins and drinking water. For the third day, we looked at how we should structure our monitoring program and choose the field equipment, labs, and mitigation of nonpoint source control to reduce HABs/cyanotoxins. We went over how to conduct the monitoring and proper water sample collection and processing. On the last day, we went over analyses and presentation of results from the lab and reporting out to State Agencies.

This training was very useful because we had already begun our HABs monitoring for the lake and learning more information can only benefit me to grow my knowledge...



Microscopic image of cyanobacteria

Harmful Algae Blooms (HABs) (Continued from Page 4)

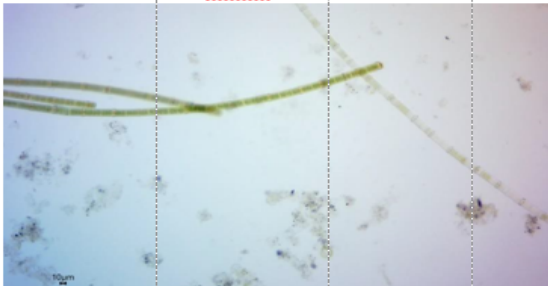
...about HABs. 2020 was when we had one of the worst blooms on the lake and when we sent off some of our samples to the Bend Genetics out in Sacramento, they told us that one of our samples was one the most highly tested for Nodularia, which is the species of a particular cyanotoxin that occurs in our lake that causes our lake to bloom. I remember we collected this specific sample just below Tom Anderson in the lake but the whole lake had hot spots throughout the lake.

Bend Genetics, LLC 87 Scripps Drive, Ste. 301 Sacramento, CA 95825 Tel: (916) 550-1048			Project: Pyramid Lake Paiute Tribe			
			Analysis for Toxicogenic Cyanobacteria			
			Project #:	Reported: 7/22/2020 9:50		
SAMPLE RESULTS						
Sample ID	Method	Target	Result	Quantitation Limit	Units	Notes
SBLK	QPCR	Anatoxin-a	ND	100	copies/mL	U
SBLK	QPCR	Cylindrospermopsin	ND	100	copies/mL	U
SBLK	QPCR	Microcystin	ND	100	copies/mL	U
SBLK	QPCR	Nodularin	2,541.785	100	copies/mL	
SBLK	QPCR	Saxitoxin	ND	100	copies/mL	U
SBLK	ELISA	Microcystin/Nod.	400.5	15.0	µg/L	Batch 1
BLK2	QPCR	Anatoxin-a	ND	100	copies/mL	U
BLK2	QPCR	Cylindrospermopsin	ND	100	copies/mL	U
BLK2	QPCR	Microcystin	ND	100	copies/mL	U
BLK2	QPCR	Nodularin	527.058	100	copies/mL	
BLK2	QPCR	Saxitoxin	ND	100	copies/mL	U
BLK2	ELISA	Microcystin/Nod.	26.63		µg/L	Batch 1
MAR1	QPCR	Anatoxin-a	ND	100	copies/mL	U
MAR1	QPCR	Cylindrospermopsin	ND	100	copies/mL	U
MAR1	QPCR	Microcystin	ND	100	copies/mL	U
MAR1	QPCR	Nodularin	3,359.072	100	copies/mL	
MAR1	QPCR	Saxitoxin	ND	100	copies/mL	U
MAR1	ELISA	Microcystin/Nod.	>2,500	75.0	µg/L	C2,J Batch 2
SEP	QPCR	Anatoxin-a	ND	100	copies/mL	U
SEP	QPCR	Cylindrospermopsin	ND	100	copies/mL	U
SEP	QPCR	Microcystin	ND	100	copies/mL	U
SEP	QPCR	Nodularin	6,913.752	100	copies/mL	
SEP	QPCR	Saxitoxin	ND	100	copies/mL	U
SEP	ELISA	Microcystin/Nod.	>10,000	300.0	µg/L	C2,J Batch 2
PEL1	QPCR	Anatoxin-a	ND	100	copies/mL	U
PEL1	QPCR	Cylindrospermopsin	ND	100	copies/mL	U
PEL1	QPCR	Microcystin	ND	100	copies/mL	U

The lab results were well above our threshold to shut down a beach and warn our community about the active bloom through the Tribal Facebook page. I attached part of the lab report from Bend Genetics and highlighted the species Nodularin found at all of our sites. I also attached microscopic images of the sample.

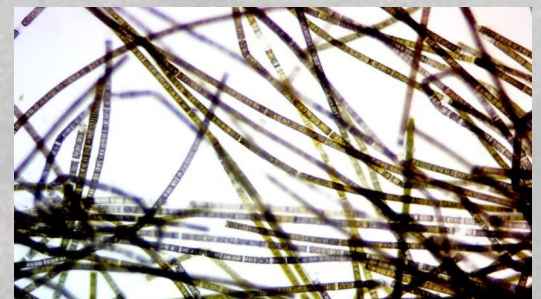
What you need to look for if you suspect an algae bloom event: you will first notice the algae on the surface of the water, and from a far it looks like a light green mats or areas that look out of place. Up close inspection the water looks like light green pea soup and looks like small strains of dog hair. Sometimes it has a bad foul smell around the site. Do not enter the water because the toxin may cause skin rash/ irritation, if swallowed or ingested may cause headaches, nausea, and liver damage. HAB's can be extremely dangerous for animals, especially people's pets. When a dog drinks from a body of water that has HAB's, it takes only a small amount to be fatal for the dog.

Sample ID	Dominant	Sub-dominant	Also present	Notes
SBLK	Nodularia			This sample contained a moderately high amount of <i>Nodularia</i> sp.; no other cyanobacteria were observed. The photomicrograph was taken under 40X magnification.



If you see conditions like this on Pyramid Lake this summer recreation season, please contact the Water Quality Program at 775-574-0101 extension 13, thank you!

Pat John
Water Quality Technician



Microscopic image of cyanobacteria

Brownfields Tribal Response Updates

Cindy Robles, Brownfields Tribal Response Coordinator

Hello everyone,

My name is Cindy Robles and I am the Environmental Specialist under the Tribal Response Program.

The Tribal Response Program (also known as the Brownfields Program) is an enforcement program whose primary purpose is to provide the Pyramid Lake Paiute Tribe with enforcement authorities to ensure that hazardous sites are assessed and cleaned-up in accordance with all applicable laws and regulations (see CERCLA Section 128 (a)(2)(B)). Current funding for the program is provided by the U.S. Environmental Protection Agency (EPA). At the discretion of the EPA, the Pyramid Lake Paiute Tribe can also spend a limited amount of funding to conduct assessments and cleanups at brownfield sites. To view updates and see a list of current brownfield sites and completed assessments, please visit the Brownfields Program Website at www.plptbrownfields.org. Likewise, you may coordinate with Cindy Robles by email at crobles@plpt.nsn.us if you would like to get a hard copy of any report or suggest a site to be assessed.

Updates from these past couple months, the program has done sampling collections for cleanup and reuse (or redevelop) the White Building, Rock Building, and the Depaoli South #2, as well as the Smith Site located in Wadsworth. Indeed, the program is currently working on updating the current Solid Waste Ordinance and add a Comprehensive Environmental Response Ordinance and Management Guide in order to help protect human health and the environment of the Pyramid Lake Paiute Tribe.

Community members are encouraged to comment on the ordinance and management guide that will be up for a 30-day comment period soon. These documents have been created to address releases of hazardous substances into the Reservation's environment. Specifically, the ordinance and management guides are being written to: 1) set guidelines for cleaning-up contaminated sites to the satisfaction of the Tribe, 2) help the Tribe determine who is responsible for cleaning-up contaminated sites, 3) help the Tribe recover cleanup costs and natural resource damage costs as a result of the release of a hazardous substance into the Reservation's environment. Overall, the purpose of the ordinance and management guides are to help protect human health and the environment.

Pyramid Lake Tribal Air Monitoring Program Updates

Tanda Roberts, Air Quality Specialist

The Pyramid Lake Paiute Tribe's (PLPT) Tribal Air Monitoring program continues to maintain the air quality station at the Wadsworth and Nixon sites. Both stations are equipped with a particulate matter (PM10) monitor and weather sensors such as temperature, relative humidity, wind speed and wind direction. Data from the Wadsworth station is collected and stored on the online data management system, the Quality Review and Exchange Systems for Tribes (QREST) network. The public can access this information at <https://www.qrest.net/>. Although the Nixon AQ station is up and running, the Tribal Air Monitoring program is still trying to connect it to the QREST network.

Alongside ambient air monitoring, the Tribal Air program is building program capacity to be able to conduct home/building indoor air quality (IAQ) assessments. IAQ assessments are designed to evaluate the quality of air inside of your home/building. IAQ assessments help to identify air pollution sources and give the opportunity to improve indoor air quality for overall health and comfort.

Since the PLPT was determined a beneficiary Tribe of the Volkswagen (VW) Environmental Mitigation Trust, the Tribal Air Monitoring program worked to secure funding for a project to help reduce air pollution...

Tribal Air Monitoring Program Updates (continued from page 6)

...emissions by replacing the PLPT Recycling program's older diesel truck with a newer one with less emissions. The trust is intended to help mitigate the excess of nitrogen oxide (NOx) emissions caused by the use of illegal emissions testing defeat devices in certain VW diesel vehicles.

Questions or concerns regarding air quality can be directed to the Tribal Air Monitoring program at 775-574-0101 ext. 18.

Tanda Roberts

Air Quality Specialist

troberts@plpt.nsn.us

Aquatic Invasive Species Program Updates

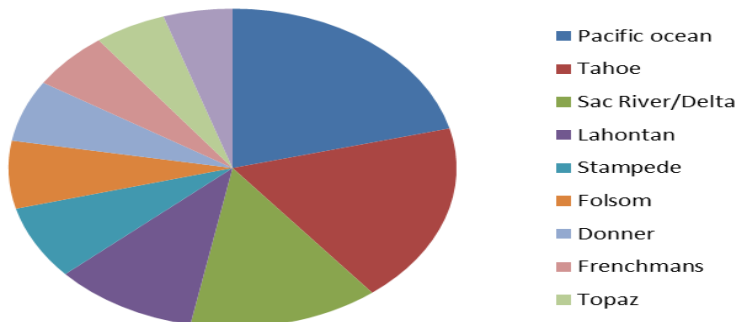
The **Aquatic Invasive Species Program (AIS)** is happy to announce the Watercraft Inspection and Decontamination (WID) Station opened for business on October 1, 2021! While the station is open it is mandatory for all boaters to stop and receive an inspection. If standing water, or other conditions are found that could potentially harbor AIS, the boat will need to be decontaminated before allowed to launch. The WID station is capable of delivering 140 degree water to boat engines, hulls, trailers, etc. and 120 degrees to interior compartments and systems. These temps are hot enough to cook any invasive that may be onboard without harming the boat! To date the program has preformed 201 inspections on incoming vessels. Of those vessels 68 were found to not be **Clean Drain and Dry**, and required decontamination.

Below is a chart with the top 10 most frequently visited water bodies that boaters launched at prior to Pyramid Lake. Some of these water bodies have invasive species such as the Dark False mussel, Eurasian Watermilfoil, and New Zealand mudsnails.



Watercraft Inspection at Pyramid Lake

Top 10 Previously Visited Waterbodies since 10.1.21



Aquatic Invasive Species Program Updates (Continued from Page 7)

Boats that are not **Clean Drain and Dry** have the potential to be carrying invasive species from one water body to another. Practicing proper **Clean Drain and Dry** methods every time you leave the water is the best way to prevent the spread of aquatic invasive species!

-Cleaning removes visible plants, mud, and large-bodied organisms that are attached to, or in, watercraft, trailers, or recreational equipment.

-Draining removes water which hides small and nearly invisible invasive organisms such as zebra mussel larvae (veligers).

-Drying is necessary to ensure that living biological material is not being moved, as many organisms can survive in small amounts of standing water. Together, these three steps are effective at preventing the spread of aquatic invasive species.



Artificial Substrate Samplers

The AIS program also continues to monitor the lower Truckee River and Pyramid Lake. Through the use of artificial substrate samplers, and conducting surveys we are able to ensure early detection for any new infestations that may occur. If you happen across one of our artificial substrate samplers on the lake or river please **DO NOT** remove it! We check our samplers monthly for invasive species colonization/infestation. They may look strange or like trash but our samplers are a vital part of protecting the water for future generations!

Wetlands Program Update

-Kaylie Wilmot, Wetlands Specialist

The Wetlands Program has continued its work under the EPA Wetland Program Development Grant (WPDG), and the EPA Non-Point Source Competitive Grant. The primary purpose of the wetland program is to identify wetland habitats across the reservation and track changes in their functions and biological health. Along with the use of a rapid assessment method that provides a numerical score, the program also collects and analyzes water quality samples and macroinvertebrate data from representative wetland sites.

Each new WPDG the Program applies for requires a new project proposal, in addition to the annual work the program conducts. The current WPDG's proposed project is to collect macroinvertebrate data in order to create an index of biological integrity that can be used across Nevada's wetlands. This index will be created as a partnership between the University of California at Monterey Bay and PLPT Natural Resources Department. The macroinvertebrate data will be compared with the water quality parameters to correlate species of macroinvertebrates to the health of the wetland system. Nevada does not currently have a developed Index of Biological Integrity for wetlands, so our department is proud to be filling this gap in the monitoring of our state's wetlands.

Additionally, the wetland program will be continuing with our herbarium and seed bank collections, as well as conducting multiple outreach events. On June 10th, 2022 volunteers from Patagonia will come out to Numana wetland to assist with the sheet mulching being done there to prevent the spread of an invasive plant commonly named whitetop, or perennial pepperweed. The leopard frog population along the lower Truckee River was still actively growing as of the summer of 2021. Continuation of frog call surveys will happen in the summer of 2022 with the use of new acoustic recorders in the hopes that we can more accurately capture the locations of the northern leopard frog populations.

To keep up with the wetland program's current projects and view photos of our assessment sites you can visit our website at <http://www.plptwq.org/wetlands>. The wetland specialist can be reached for questions or comments at kwilmot@plpt.nsn.us or by calling (775)-574-0101 ext.10.

Natural Resources Assistant Update: Earth Day

-Dehan Dominguez, Environmental Assistant

In honor of Earth Day the Pyramid Lake Natural Resources Department did a demonstration on composting with worms at the Nixon Community Garden & Orchard.

The project consisted of the teachings of "Reduce, Reuse, Recycle & Repeat" with everyday items from our own home/back yards like bark, leaves, dirt, cardboard and kitchen scraps. This will extremely help reduces the amount of waste that go into the local transfer stations.

This outreach started out with developing signs for public outreach & posting them in all three communities of the Pyramid Lake Reservation; Sutcliffe, Nixon and Wadsworth. My co-worker Suzie Albright and I attended a composting class hosted by; Keep Truckee Meadows Beautiful with different sponsorships like Washoe County Health District, Enhancing Quality of Life & Down to Earth Composting.

I was really trying to have one of their speakers come out to the PLPT & to speak at our event about how important it is to compost. I made a couple of contacts but by the time we actually had a conversation about what...

Natural Resources Assistant Update: Earth Day (continued from page 9)

...our different programs were doing, their calendars were already filled with other obligations for Earth Day, 2022. Next year I will start earlier to get a guest speakers, as well as more contacts to help make the Recycling Program better each year.

The Earth Day event we had about 12 adults & a woman from Wadsworth who was an employee of the local food bank and will be making and utilizing bins for composting in their upcoming hoop houses. Natchez Elementary School brought 17 fourth grader to participate with the making of five homemade composting bins. The youth saw how many little holes were put in the first bin on the bottom and sides so that the worms had oxygen in their new homes. We started with tree bark on the bottom, we made sure that we really pulled apart the bark so it was more like in a long string form. Then we added leaves that I had collected from the Truckee River. Each group was giving a water bottle to keep everything moist, they added cardboard to help with that process. A couple hand fills of soil on top, mixed it all up. Then the youth got to see Red Wiggler Worms as we put them in each bin. Some of the youth were a little reserved but it didn't take them long to be checking out the worms in their hands. Most of the youth wanted to take these bins home to show their parents. We sent each child a how to make your our composting bins at home from Cooperative Extension, University of Nevada, Reno.

As the groups completed the composting bins they were sent to another station were they could plant sunflowers and take them home. We also gave them water bottle with "Reduce, Reuse, Recycle & Repeat" logo on them.

The Pyramid Lake Natural Resources Department would like thank you all for participated in this year's Earth Day Event. As we are all Caretakers and Stewards of this Land our Mother Earth.

Dehan Dominguez

Natural Resources Assistant

Pyramid Lake Paiute Tribe



Environmental Specialist Update

-Brianna Merrill, Environmental Specialist

I, Brianna Merrill, am overjoyed to join the Natural Resources Department as the new Environmental Specialist. I will be dividing my time between water quality and rangeland projects. With the excellent guidance of our more senior department members, I have been learning what we do to monitor the water quality of our water resources from Pyramid Lake to the Truckee and the different springs we have all throughout these beautiful lands. Water is life so making sure we have an adequate supply of good, clean water is good work to be doing. I'm also learning everything I can about our tribal rangelands to help find balance between cattle and wildlife grazing and having a thriving ecosystem to be strong against the drought and fires we've been facing. Everyone has been great to work with and our tribal members have been great. I'm very happy to serve you all in this role.

I was born in Tucson, AZ, grew up outside of Albuquerque, NM, and have tried living in Richmond, Virginia and St. George, Utah. I received a degree in Earth & Environmental Studies with minors in Parks and Protected Area Management and Studio Art from Barrett, The Honors College at Arizona State University. I have a couple years of construction experience and was able to serve as a Restoration Team Member in AmeriCorps for Walker Basin Conservancy. I am married into this tribe and I am native myself. My family was not able to keep whatever our language, stories, and traditions for the younger generation. I wish I could learn my own culture and language, but I enjoy learning about the history and arts of all tribes on these continents now since it wasn't taught in school. Other than that, I do love painting when I have the time. I absolutely love living out here since I'm a mountain and desert person. My husband and I love camping and hiking with our dogs. I'm definitely a horse girl so I can't wait for us to be done rebuilding our ranch to have some horses, ranch animals and a native food garden as well as an "earthship" for our home in the near future. So far my favorite things here is the museum and the interesting rocks and unique geology. I look forward to seeing you all around!

Brianna Merrill

Environmental Specialist

Environmental Technician Update

-Emily Lamb, Environmental Technician

My name is Emily Lamb and I had the privilege of spending this summer working for the tribe as an Environmental Technician. I am currently a student at the University of Nevada, Reno and will be going back in the fall for my final year of study towards a bachelor's degree in Wildlife Ecology and Conservation. Over the summer I was able to put into practice much of the knowledge I gained in the classroom but was also granted the opportunity to learn so much more from my coworkers in the Natural Resources department. From pulling weeds to collecting water samples to counting bats, my summer was spent helping with a variety of projects all with the goal of monitoring and preserving the natural resources found in and around the lake. My work took me all around the reservation and I gained such an appreciation for the natural beauty of this area; it really helped remind me why the Natural Resources department is doing the work it is.

Over the summer my time was spent primarily aiding the water quality and rangeland departments. My work with water quality included monthly sampling of the lower Truckee River followed by laboratory testing of the samples, as well as weekly HABs monitoring, and our recently completed river bio-assessments. Rangeland tasks included setting up/taking down of sonar bat detectors used to help determine bat species present on the reservation, scouting of big horn sheep released as part of the reintroduction project, and sorting through game camera pictures. I also had opportunities to assist the aquatic invasive species and wetlands departments, shadow grad students doing research on the reservation, and help out with projects such as this newsletter. I truly enjoyed my time working for the tribe and am very grateful for the experiences and knowledge I was able to gain.

Emily Lamb

Environmental Technician

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Pyramid Lake Natural Resources Department
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Mission Statement

The mission of the Environmental Department is to preserve the health and culture of the Pyramid Lake Paiute Tribe through the protection and restoration of the natural environment including air, water, and lands upon which the Tribal Members have depended on for thousands of years.

Vision Statement

Ensure clean air, water, and lands to maintain healthy fish, wildlife, and plant populations for future generations to preserve the Pyramid Lake Paiute Tribe's culture and way of life.