



PYRAMID LAKE PAIUTE TRIBE NATURAL RESOURCES NEWSLETTER

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From the Natural Resources Director

- Donna Noel, Natural Resources Director



Greetings from the Natural Resources Department!

We have had a very busy and productive year in the Natural Resources Department. The Earth Day, Free Dump Days, recycling activities, and Youth Camp events were a big success, with people participating from the Tribal government, community, and youth from Natchez Elementary, and Pyramid Lake High School. It was nice to see so many people getting involved to learn about protecting our natural resources, and to help clean up the reservation. We are planning other events throughout the year to carry on the Earth Day spirit, so please join us in our effort to keep the reservation clean. 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 come by 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, evaluating Brownfields sites, assessing wetlands, scheduling water deliveries, overseeing the irrigation systems, exploring renewable energy projects, supporting summer college interns, monitoring illegal dumping, 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 environment.

We are excited this year to start and develop the Aquatic Invasive Species Program in coordination with the Fisheries Program. We have developed standard operating procedures for monitoring the river and lake, assess the invasive species present, develop management plans, developed Ordinances, and the boat inspection/decontamination station should be operational this fall. We are working with Fisheries on this program and are looking to make it self-sustaining after a few years.

The other programs the department intends to address in the next few years are Total Maximum Daily Loads for nutrients and water quality modeling in the lake, as well as fish barrier removal in the river. Grants were secured for the Fish Passage project that will have the Fish and Wildlife Service working with the Tribe to complete a fish ramp to allow passage over Numana Dam. Through our General Assistance Program grant we have developed a model to predict Nitrate, and TDS loading in Pyramid Lake from upstream sources. These grants and the development of new programs allow our department to grow without encumbering the current work being done.

One project completed this year was the lining of the Nixon Irrigation ditch. The funding for this project was a long time coming and it took four grants and five years to get the project going. The project was contracted to A&K Construction, who did a good job in completing the

From the Natural Resources Director (Cont. from Page 1)



job in a timely manner. There are still a few issues to overcome with the project, as we still need to pipe the diversion and replace the diversion gate. The lining of the Nixon Ditch is a great accomplishment, as it will conserve water for instream flows and allows the ditch to operate much more efficiently. The estimated water savings to Pyramid Lake from the lining alone ranges from 1,551 to 2,888 acre-feet of water per year with additional water quality benefits. The completion of this project benefits water quality in Pyramid Lake by reducing the diversion from the Truckee River, increases the quantity of water to Pyramid Lake, and increases instream flows for the fish.

The Tule, Truckee, Tokahum, and Perry Fires on the reservation over the past few years has kept the department extremely busy. Most of the restoration and protection work was completed, but we are still working on the herbicide treatment to reduce the cheat grass so we can reseed. The Tule Fire herbicide treatment was completed this year, with seeding beginning in the spring. Herbicide treatments followed by seeding will continue on the Truckee, Tokahum, and Perry areas through 2021. 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.

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, and with every decision made.

Donna Marie Noel
Natural Resources Director

Our New Recruit: From Pack Intern to Environmental Intern

- Robyn Miller, Environmental Intern



Hello! My name is Robyn Miller and I am an Environmental Intern here in the Natural Resources Department.

I was born and raised in Reno and always loved being outside. Growing up, I travelled to Pyramid Lake to camp and swim, and always had an interest in this beautiful lake and the surrounding area. I spent my time hiking and doing anything I could outside, which led me to study the environment when I went to college. I graduated from the University of Nevada, Reno in May 2019 receiving a Bachelor’s Degree in Environmental Science with an emphasis on water and natural resources management. It is important to take care of the resources we have and manage them so they are available and plentiful in decades to come.

I began with the Pyramid Lake Paiute Tribe’s (PLPT) Natural Resources Department in January of this year. My position, originally, was through the Pack Internship Program, which is associated with the University of Nevada, Reno. This Internship Program provides funding for internships at various organizations within the region, which provides undergraduates at the University the opportunity to gain invaluable experience in their fields of study. The Water Quality Program agreed to host one internship position, the position asked for an intern to perform a variety of duties that assisted the department staff in monitoring and planning public outreach events, such as, the Environmental Summer Youth Camp and Earth Day.



Robyn using Anemometer during Amphibian Assessments

During my time as the pack intern I was able to assist with the planning of multiple events, water quality monitoring, non-point source, and other smaller tasks within the department. Some of the events included Earth Day, a Pyramid Lake Day with One Truckee River, and our annual Summer Youth Camp. When planning these events I assisted in making the outlines for the day, contacted any presenters, and helped to carry out the event itself. Along with planning different public outreach events, I was also able to work with the Wetlands and Water Quality Programs. I assisted with monthly sampling events in the field and in the lab, and helped with amphibian surveys. The Pack Internship requires 120 hours of work done for one semester, once that was completed I was given the opportunity to stay with the PLPT Natural Resources Department as an Environmental Intern. As the Environmental Intern, I have continued to assist the Water Quality and Wetlands Programs with a variety of duties. As a recent graduate I am excited for this opportunity to learn, gain experience, and work in my desired field.

Brownfields Tribal Response Program Updates

- Ruben Ramos-Avina, Tribal Response Program Coordinator



As part of a Targeted Brownfield Assessment (TBA), Tribal Response Program staff recently collected samples at the White Building, Rock Building, and Oil Pit. The samples are currently undergoing laboratory analysis to determine if contaminants-of-concern at the three brownfield sites exceed regulatory health-based standards. To render them safe for redevelopment or reuse, brownfield sites with contaminants-of-concern exceeding regulatory health-based standards typically warrant response actions (also known as cleanup).



Collecting paint chip samples at the White Building

Due to their age of construction (pre-1978) the White Building and Rock Building were suspected to contain lead-based paint (LBP), and asbestos in certain building materials. Consequently, paint chips and building material samples were collected at both sites. At the White Building, in particular, the presence of paint dust in the soil near the structure prompted the collection of soil samples for lead analysis. Similarly, soil samples were collected and soil gas was extracted at the Rock Building to determine the existence of petroleum impacts from a former above-ground storage tank (AST) and oil furnace. At the Oil Pit, soil was sampled in several areas at a maximum depth of 15 feet to determine analyte concentrations, and to delineate the contamination from past vehicle maintenance activities.

Depending on future site uses and the concentrations of contaminants-of-concern, certain response actions will be proposed. For example, extensive cleanup would be required if a site that is to be redeveloped into a public park contains soil lead levels exceeding regulatory health-based standards, since children are at greatest risk for developing health problems as a result of lead poisoning.

For more information on our projects, please contact the Tribal Response Program Coordinator by email at, ravina@plpt.nsn.us, or phone at 775-574-0101, extension 10. Please also visit the Tribal Response Program Website at, plptbrownfields.org, to see the PLPT Brownfield Inventory and Public Record of Brownfield Sites, read assessment reports (coming soon) and other brownfield site documents, and download a copy of Form 105 to report a potential brownfield site.



Map depicting locations of the three brownfield sites



Collecting soil samples at the Oil Pit



Extracting soil gas from the Rock Building's basement

Note: EPA defines a brownfield site as "Real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."



FIGURE 2
SITE LAYOUT MAP
Rock & White Buildings & Oil Pit
Targeted Brownfields Assessment
Pyramid Lake Paiute Tribe
Nixon, Washoe County, NV

Wildfire Smoke

- Tanda Roberts, Air Quality Specialist



The Black Mountain 2 Fire, as seen on the BLM Fire Camera

What is Wildfire Smoke?

Wildfire smoke is a combination of fine particles, water vapor, and gases. Fine particles are respiratory irritants and exposures to high concentrations can cause persistent cough, phlegm, wheezing and difficulty breathing, irritated eyes and chest discomfort. Exposure to these particles can aggravate asthma, emphysema, and pose a greater health risk for those who have heart disease. Exposures can also affect healthy people, causing reduction in lung function and pulmonary inflammation.

Reduce exposure to wildfire smoke

Reduce your exposure to wildfire smoke by limiting outdoor activities, especially during the hottest time of the day. Avoid strenuous activity or exercise outdoors. If you must be outside, take things slow, and try to keep your heart rate down. Increased breathing can lead to more pollution entering the lungs. By reducing your activity, you lower the dose of inhaled air pollutants. Drink plenty of fluids to keep the respiratory membranes moist and to help reduce symptoms of scratchy throat and coughing. Also, wearing a special mask called a Particulate Respirator (N95 disposable particulate respirator) can help protect your lungs.

Stay indoors

It is recommended to stay indoors to avoid exposure to wildfire smoke. The effectiveness of this strategy depends on how well a building limits the amount of smoke from entering the home, and how a building minimizes indoor pollution sources.

Keeping windows and doors closed will reduce exposure to ambient air by 33%. Air conditioning systems that have a “re-circulate air” feature should be utilized during a wildfire event to prevent smoke from coming inside. Added protection can be achieved by operating central air condition systems, and upgrading the filtration.

People residing in buildings without air conditioning are at greater risk of heat stress during high temperatures. Those who depend on open windows and doors for ventilation, older individuals, and those with health issues, run the risk of heat exhaustion or heat stroke. If it gets too hot, it is advised to stay with a friend or family member living in a cleaner air shelter in the community or leave the area.

Reduce other sources of indoor air pollution.

To help reduce particle levels inside the home, avoid from smoking cigarettes inside. Other ways to reduce particle levels inside the home while ventilation is not an option is to temporarily avoid spraying aerosol products, burning candles and incense, vacuuming indoors, using gas and propane stoves, and frying or broiling meat (this is a good time for bringing home pizza or eating out).

For more information, contact the Pyramid Lake Tribal Air Quality Department at 775-574-0101 ext.18.

Updates from the Environmental Manager

- Mervin Wright Jr., Environmental Manager



The Pyramid Lake Paiute Tribe has been organized since 1936 when it adopted its Constitution and By-Laws. The language in it states, wherever there are no tribal laws, federal law will prevail. Prior to contact with western civilization, inherent indigenous understanding allowed for the enforcement of traditional law; the unwritten tenets of knowing the difference between right and wrong. Natural law held that our survival depended on the environment and the life cycles within our ecosystem; that is what we knew.

Today, our understanding of natural and traditional laws is not entirely realized. Containing our garbage and controlling its disposal seems to be one component of our responsibility that is lacking concrete foundation. The illegal open dumps occur not only in remote locations on the Pyramid Lake Paiute Reservation, but when garbage is disposed on the ground outside of the transfer stations, it does not comply with tribal laws or tribal regulations.

Please use the transfer station bins for all household garbage, furniture, and other large household waste. Yard waste, automotive waste, hazardous materials, white appliances must be arranged with Tribal Public Utilities District (PUD). Tribal PUD can be reached at (775) 574-0268, or the Tribal Environmental Office at (775) 574-0101.

Here are photos of an illegal open dump discovered on Dodge Flat.



The Tribal Irrigation O&M Program is conducting its responsibility with scheduling and delivering irrigation waters to tribal irrigators. The new concrete lining of the Indian Ditch in Nixon was afforded through several federal grants. The operation and function is a tremendous improvement for delivery time and efficiency for irrigation water management.

New concrete lining for irrigation ditch



The Tribal Noxious Weeds Program continues to treat for areas that contain evidence of noxious weeds. The focus of the program is for controlling the infestation of areas and to prevent the potential for seed distribution. The program is also limited with financial resources and the extent of the problem with noxious weeds is always a huge endeavor to accomplish our program grant objectives.

Streambank erosion continues to be a problem in the lower Truckee River. The permitting requirements force the development of engineering designs to address each streambank scheduled for repair and restoration. The impacts include water quality degradation, loss of aquatic habitats, decreased proper function condition of the river, loss of croplands, and spawning bed suffocation. The Tribe received notice of a FEMA Pre-Disaster Mitigation grant that aims to support completing preliminary engineering reports to ultimately achieve the protection of our streambanks and the restoration of our cold-water fishery.

Streambank Erosion on lower Truckee River



If you have any questions, please contact me at (775) 574-0101 x17. Thank you. Mervin Wright Jr., Environmental Manager.

The Natural Resources Departments Recycling Program

- Amanda Davis, Environmental Assistant/Recycling Program



New Recycling Truck -

The Pyramid Lake Recycling Program received grant funding from the Nevada Department of Conservation and Natural Resource's Division of Environmental Protection's Recycling Program.

Our program received \$22,521.50 to purchase a new recycling truck, which will help support our new recycling program throughout the reservation. The vehicle will be used for the collection and transportation of recyclables to recycling facilities in Reno.

Recycling Locations -

Bins were removed from the Wadsworth Community Center and the Nixon Gym due to an excess amount of contaminated recycling and garbage placed in the bins.

We still have bins at the Sutcliffe Marina, I-80 Smoke Shop and in front of the Natural Resources Building in Nixon for Recyclers to utilize.

A new Bin will be placed at the Brown Building in Wadsworth. Another bin will be placed back behind the Nixon Store after the Burning Man season has passed.

Acceptable

Unacceptable



Plastic screwtop bottles and jugs



Mixed paper



Styrofoam



Paper napkins, towels, and plates



Paperboard



Aluminum and steel cans



Cardboard



Glass bottles and jars



Plastic solo cups