

Autumn 2023

WASHOE ENVIRONMENTAL PROTECTION DEPARTMENT

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WEPD Staff:

Rhiana Jones - Environmental Director
James Gatzke - Environmental Manager
Cale Pete - Environmental Manager
Tonya Quiner - Office Manager
John Warpeha - Environmental Scientist—Brownfields & Noxious Weeds Specialist
Kristina Burnette—Environmental Scientist—Aquatic Invasive Species & Water Quality Specialist
Kevin Rogers—Fire Restoration & Resiliency Specialist
Allison Kerley - Climate Resiliency & GIS Specialist
Robert Wyatt - Environmental Technician
Jason Kizer - Environmental Technician
Craig Christensen -Environmental Technician
Yancy Burt—Conservation Crew
Dan Quiner—Conservation Crew
Bobbi Mortimer—Conservation Crew

Yancy Burt is a new Environmental Conservation Crew staff member for WEPD. Mr. Burt previously worked with the WEPD conservation crew and has worked as an Environmental Specialist 1.

"I've always been passionate about working with the environment. The recycling program was the most interesting to me. I previously worked with the auto and curbside recycling programs.

Since being back in the department, I've helped place wattles in the fire damaged areas around Leviathan Mine.

As one of the newest Environmental Crew members I hope to contribute to completing projects. I look forward for opportunities to educate others, to help preserve our lands for the younger generations to enjoy, just as I have for many years ".

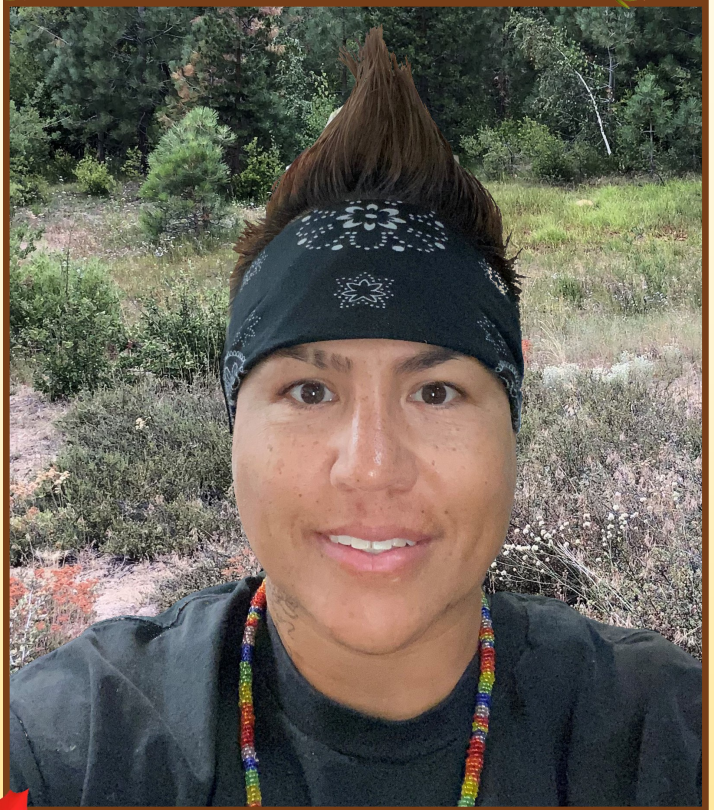
NEW EMPLOYEES cont.

Bobbi Mortimer—is a Washoe Tribal Member and she grew up in the Huṇ-á-lel-ti Community. She now lives in the Dresslerville Community.

I was hired onto the WEPD Environmental Conservation Crew on August 28, 2023. My occupation before was commercial driving which I really enjoyed and still hold my class A license, but I can definitely say I really enjoy my job.

We mainly work outside which is awesome. We have been collecting pine nuts in hopes to plant some trees for our future generations. I feel like there are great opportunities here to learn more about my culture and to learn new skills and gain knowledge.

We do things here that will benefit us and our future generations, so it's one of the coolest jobs I've had.



Dan Quiner—has been hired as a seasonal WEPD Environmental Conservation Crew Employee. Dan is a College Junior studying Biology with a focus on Wildlife and Range Management.

I enjoy physical work, and enjoy working in the outdoors even more. It is great to work with people who are dedicated to protecting the environment as much as myself. I admire how the Washoe people view land stewardship with passion and reverence.

Working at WEPD gives me the opportunity to meet and learn from so many environmental experts and scientists. It also allows me to study nature up close, while working hard to help restore areas that have been damaged, and to take care of the traditional Washoe Lands.

Many of the projects that WEPD is working on are directly related to my field of study and I plan to learn as much as possible while working as an Environmental Conservation Crew Employee.

Streambank Stabilization on the 2020 Numbers Fire Scar

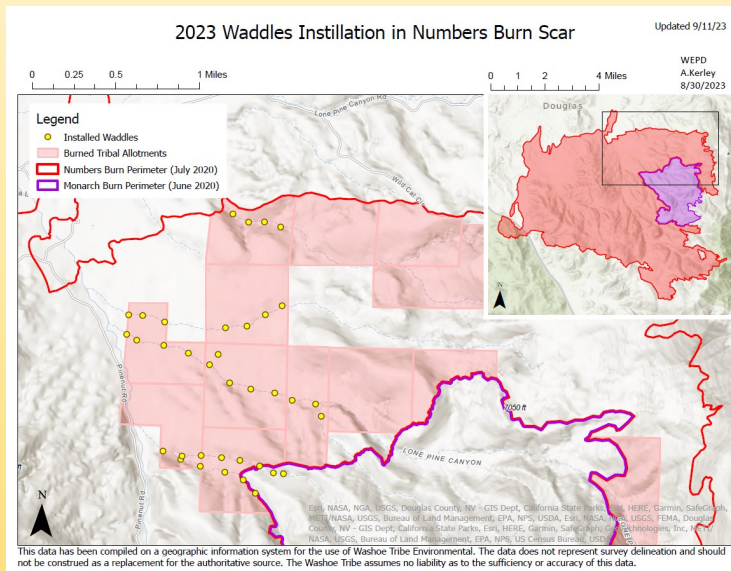
By Kevin Rogers, Fire Restoration & Resiliency Specialist

This Summer, WEPD staff have been hard at work installing straw wattles along streambank corridors to help combat erosion in areas devastated by the 2020 Numbers Fire. Certain areas of the Numbers Fire burned with such intensity to kill all vegetation and bake the soil to a state where it has turned to ash, more closely resembles baby powder than dirt.



As a result, the streambanks have lost a significant amount of their stability, causing more extreme erosion, wash-outs, and contamination downstream.

These straw wattles when installed to moderate the flow of water and debris, helping prevent erosion of the stream banks and these contaminants from entering the water supply.



Since the beginning of the summer in May, WEPD staff have successfully installed **170** wattles spread across 40 sites in the Pinenut Mountain foothills in the areas of Lone Pine Canyon, Dutch Canyon, and south of the Bill Johnson Ranch. Further streambank stabilization work is now ongoing within the 2021 Tamarack Fire scar.



Open Water Dive Training — Clean Up The Lake

By Craig Christensen-Environmental Technician

Scuba diving is a powerful tool used to bring awareness and conservation. WEPD staff member Craig Christensen, and Tribal members Herman and Helen Fillmore, had the opportunity to obtain their open water diving certification with the newly established, non profit environmental dive center, Clean Up The Lake.

The purpose behind this training is to begin to establish a Washoe presence in eco-diving and to assist with the efforts of preserving Da'ow (Lake Tahoe) and the breath taking beauty underneath the water.



Photos by John Peltier

As with all natural ecosystems Tahoe's fragile natural environment is threatened from various human impacts. Environmental diving is a specialized form of diving used to monitor and document Aquatic environments. Tahoe's health is critically threatened by various Aquatic invasive species and man made litter which wreak havoc on local ecosystems; we are tasked with identifying and using monitoring techniques and tactics to restore a balanced ecosystem.



Lake Tahoe is one of the most sacred sites of the Washoe people and these efforts mark the beginning of Tribal conservation efforts beneath the waters surface in the form of conservation diving. With the help of our partners, members of our team and the work of so many others , we aim to educate people and inspire change and work to increase the Tribes status as stewards of the land and our sacred waters.

Environmental scuba diving opens up our under water ecosystems in powerful ways and offers people a way to connect with through exploration, data collection, and advocacy. Diving has become a way in which humans can play a vital role in safeguarding our planets most precious resource. These under water efforts are essential for ensuring that future generations have the privilege of experiencing clean water and healthy ecosystems for all life that depends of these precious resources.



Lahontan Cutthroat Trout Monitoring

By Kris Burnette, WEPD Environmental Scientist

On August 23, a WEPD Environmental Scientist, Kris Burnette, went out on an overnight boat trip to assist United States Fish and Wildlife Service's (USFWS) Senior Fishery Biologist with tracking Lahontan cutthroat trout (LCT), *Oncorhynchus clarki henshawi*.

The USFWS released five LCTs at Lake Forest Beach in Lake Tahoe with an acoustic tracking device to monitor the location of the species. The USFWS wanted to see if the fish that were released with tracking devices would stay in the general area or move on from the location in which they were released.

The tags that were attached to the LCT would send out signals every 30 seconds during the first few weeks and then the signal would be extended until the lifespan of the tag was no longer sending a signal. The estimated life span of the battery for the tags is 155 days. When a signal is picked up, it will be transferred to a device that tells the tag number of the fish and it is recorded in a notebook with the compass orientation, date, location, and time.

In the photograph, our WEPD Environmental Scientist, is holding a stick with a transducer attached



to the bottom. The transducer is turned in different directions to pick up the signals from the fish. According to a USFWS Senior Fishery Biologist, who was present during this trip, it is possible to tell if an LCT was consumed by a predator.

During this trip, four out of five LCTs were tracked in the same location where they were released. The USFWS did 24 hour shifts for 6 days for this survey.



Pinyon Pine Harvesting

Ally Kerley, Climate Resiliency and GIS Specialist

This fall, WEPD will be harvesting Pinyon Pine cones to cultivate in the Restoration Garden. The seeds will be germinated over winter, and will be planted in the Restoration Garden in the Spring. Next fall, the seedlings will be planted in recent wildfire burn scars, to assist with the reforestation of the Pine Nut Hills.

WEPD built/crafted several ʔitbeyú-gum from young Lodgepole pines cut from the Tribe's Babbit Peak Parcel. These ʔitbeyú-gum will be used by WEPD during this year's pinyon harvest.



Pinyon Pine seeds collected 2022.

Last year, WEPD planted 20,000 pinyon pine seeds collected from 12 different locations across Nevada to begin the propagation of pinyon pine in the Resilience Garden. This year, WEPD will be propagating seeds collected closer to the Washoe Tribe's traditional home territory.



A young cone in it's first year of development. This cone will be ready to harvest next year. (Depicted above is a young cone of the double-needle Pinyon Pine tree, a close relative of the local single-needle Pinyon Pine.)

Initial cone scouting suggests this year's pinyon pine crop will be small. Pinyon cones grow on a two year cycle; cones harvested this year were initiated last summer. If a tree is regularly producing cones, at any given time there will likely be two separate year's cones on the trees: the current year's harvest, and the much smaller cones that will be fully developed and ready to harvest the following year.

Aquatic Invasive Species Bi –Partisan Infrastructure Law Cooperative Agreement with the U.S. Fish and Wildlife Service: Program Agreement update.

By John Warpeha, Environmental Scientist—Brownfields & Noxious Weeds Specialist

Washoe Environmental Protection Department staff members have completed a number of Aquatic Invasive Species (AIS) Program tasks and activities during the summer and early fall period.

Our WEPD Staff have engaged in valuable training e.g. a webinar, photo documentation and field work that have assisted our ability to manage a Tribal AIS Program.

- WEPD staff members are monitoring discussions by the LTBMU related to the redesign of the SR-89 Bridge in Meeks Bay California.
- Staff listened to a Polyfluoroalkyl (PFAS) webinar, which are chemicals that are highly pervasive in surface-groundwater and fish species throughout the United States. This webinar was sponsored by the Native American Environmental Protection Coalition.
- Staff reviewed LTBMU fish assessment protocols that assisted staff with field work.
- Staff member Kris Burnette participated in the Angora Creek Electrofishing Project with LTBMU field staff the week of August 15th 2023. Ms. Burnette also participated in a LCT Telemetry Study with Roy Ulibarri of the U.S. Fish and Wildlife Service in the week of August 23, 2023. In addition, Ms. Burnette completed a safety protocol manual for the new electrofishing unit.
- Staff attended the September 6th 2023 TRPA sponsored field trip to the Tahoe Keys to review invasive aquatic vegetation site projects. Please see attached photo.



WEPD Environmental Manager James Gatzke views a demonstration of collecting AIS with a device in a marina of the Tahoe Keys. This field trip was sponsored by the Lake Tahoe AIS Coordinating Committee and the TRPA. Tahoe Keys Marina. WEPD photo - September 6, 2023.

- Staff have updated the Environmental Improvement Project Tracker web site sponsored by the Tahoe Regional Planning Agency. This update is very important for agency review and obtaining funding in the future for the Tribal AIS Program.
- WEPD Environmental Technician Craig Christensen completed his scuba diving training certification. WEPD scuba diving certified staff can assist with removing AIS at sites in cooperation with agency sponsored projects like the Tahoe Resource Conservation District.
- WEPD staff will continue to look for opportunities to participate with Lake Tahoe Basin agency partners like the League to Save Lake Tahoe to develop capacity to manage a Tribal AIS Program.

WEPD staff appreciates your review of this article!
Cordially, John Warpeha, WEPD. 775-265-8680.



Collaborative Efforts in the Tahoe Basin

Rhiana Jones, Environmental Director



From R to L: Herman Fillmore: Cultural Language and Resources Director, Rebekah Sease: LTBMU Heritage Program Manager. Chairman Serrell Smokey, Erick Walker: LTBMU Forest Supervisor, Mike Gabor: LTBMU Forest Engineer, Joseph Nady: Washoe Tribe General Counsel, Rhiana Jones: Environmental Director, Charles Clark: LTBMU Legislative and External Affairs Officer

The Washoe Environmental Protection Department has been working on strengthening our relationships with environmental partners in the Tahoe Basin and have made great strides in our collaborations with USFS Lake Tahoe Basin Management Unit, League to Save Lake Tahoe, The California Tahoe Conservancy, North Lake Tahoe Fire Protection District, and more!

The Washoe Tribe has been looking to regain access to their homelands for many years and WEPD has been working with our environmental partners on how the Washoe Tribe can continue our legacy of Indigenous Stewardship in the basin, have more recreation and land management opportunities, as well as providing education and outreach to our community and the public about Washoe Tribal environmental goals.

Pictured above, a recent visit to the Tribes Skunk Harbor parcel to discuss how the Tribe can have more recreational access, prevent aquatic invasive species from entering the harbor, reduce microplastics and waste in the area, prevention of user made trails, protection of endangered plants on the parcel, and co-management of the parcel for fuels reduction and road access.

WEPD has collaborated with LTBMU on electro-shock fishing to monitor fish populations, with US Fish and Wildlife on Lahontan Cutthroat Trout monitoring, we have had two prescribed burn opportunities with LTBMU for WEPD fire staff, and are collaborating with North Lake Tahoe Fire Protection District to do fuels reduction and prescribed burning on the Tribes Incline Village parcel, and will be burning with CA State Parks this week !

Now Is an Important Time for Addressing Contamination from Leviathan Mine

By James Gatzke, Environmental Manager

Two responsible parties at the Leviathan Mine Superfund Site, Atlantic Richfield Company and the State of California, are collaboratively addressing contamination from Leviathan Mine under the oversight of the Environmental Protection Agency (EPA). In 2023, Atlantic Richfield Company released three key reports for review – the Remedial Investigation, the Baseline Human Health Risk Assessment, and the Baseline Ecological Risk Assessment. The three reports are lengthy (thousands of pages) evaluating years of data collection from the mine site down Leviathan and Bryant Creeks to Ruhenstroth Dam on the East Carson River which is less than ¼ mile from the Pagoda Building on Washoe Tribe Trust Lands. Bryant Creek flows adjacent to and then across several Washoe Tribe allotments impacting numerous allotment owners. The three reports also include data collected in and around streams not contaminated by Leviathan Mine (Mountaineer Creek and Cottonwood Creek) to measure the naturally occurring amounts of different minerals in the vicinity.

The Remedial Investigation reports the results of sampling for potential mine contaminants in mine waste piles, floodplain and upland soils, stream sediments and sand bars, surface waters, underground waters, and plants and animals. The results of the Remedial Investigation will guide future remediation actions by the responsible parties to address contamination from Leviathan Mine. As an example, early results clearly demonstrated the need for year round capture and treatment of acid mine drainage, so that aquatic insects will recover in contaminated streams. Currently, capture and treatment of acid mine drainage is seasonal due to inadequate infrastructure to capture and treat in the winter.

The Baseline Human Health Risk Assessment (BHHRA) evaluates the potential risks to humans by being exposed to contaminants from Leviathan Mine. About twenty years ago, Washoe Environmental Protection Department (WEPD) staff and technical contractors documented Washoe lifeways and potential impacts to the Washoe by hunting and fishing, collecting food and medicinal plants, collecting basketry materials, bathing, etc. in and near contaminated creeks. Thanks to this earlier work the most stringent evaluations in the BHHRA are based on Washoe lifeways. Recently, environmental staff from other tribes across the nation (Alaska to New York) visited Leviathan Mine and commented that the tribal lifeways have been overlooked at other Superfund Sites. Current WEPD staff and technical contractors will evaluate the BHHRA to make sure that the report correctly evaluates impacts to Washoe lifeways.

The Baseline Ecological Risk Assessment evaluates the potential risks to animals and plants by being exposed to contaminants from Leviathan Mine. For example, if wildlife drink contaminated water at Leviathan Mine as shown on the right, what is the impact to the wildlife and other plants and animals dependent on the wildlife? Current WEPD staff and technical contractors are conducting in-depth reviews of the BERA, BHHRA, and Remedial Investigation and will provide comments to EPA to protect the health and safety of the Washoe and the environment. Please reach out to WEPD (775-265-8680) Environmental Managers, Cale Pete (cale.pete@washoetribe.us) or James Gatzke (james.gatzke@washoetribe.us), to request more information or an outreach event for your community or organization.

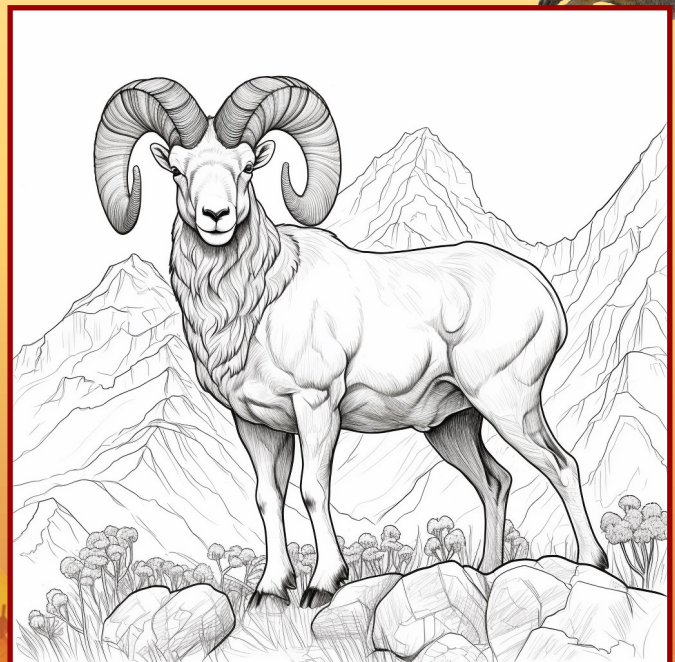


WASHOE AUTUMN WORD SEARCH



1. Pine nuts
2. Acorns
3. Whitefish
4. Spawning
5. Quail
6. Seed collecting
7. Hunting
8. Pine cone
9. Ceremony
10. Gathering
11. Dance
12. Squirrels
13. Marmots
14. Sagehen
15. Harvest
16. Antelope
17. Big Horn Sheep
18. Rabbit Drive
19. Pelts
20. Mule Deer
21. Honey

L	E	T	S	A	G	E	P	O	L	E	T	N	A
A	C	P	E	C	N	A	H	A	U	I	U	E	M
W	E	I	E	O	I	L	A	A	R	N	H	H	R
H	R	N	D	R	N	I	I	H	R	N	O	E	A
I	E	E	C	N	W	A	O	D	G	V	N	G	B
T	M	N	O	S	A	U	W	N	S	V	E	A	B
E	O	U	L	R	P	Q	I	I	T	G	Y	S	I
F	N	T	L	E	S	R	T	T	L	M	S	R	T
I	Y	S	E	E	E	N	O	C	E	N	I	P	D
S	M	G	C	H	D	C	L	V	P	N	C	E	R
H	S	T	T	S	L	E	R	R	I	U	Q	S	I
S	E	A	I	E	R	E	E	E	C	N	A	D	V
O	G	D	N	S	T	O	M	R	A	M	G	W	E
I	T	N	G	H	U	N	T	I	N	G	N	I	N



OPEN

For your recycling convenience recycle drop-off is available during non-business hours.
No need to wait for us.

WEPD's Modified Transfer Station is OPEN

1000 Memdewee (Deer) Run, Gardnerville, NV

(Across from the Pagoda Building)

What is allowed to be dropped-off at the Transfer Station?

Paper
Aluminum
Glass
Cardboard

Tin cans
Plastic bottles
Magazines
& **NO PIZZA BOXES!!!**

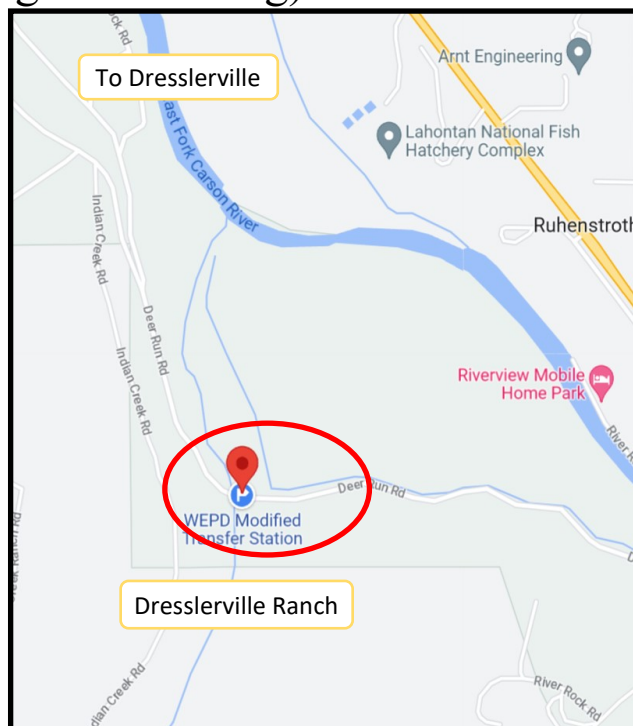


Household Hazardous Waste (HHW):

Gasoline	Used Oil
Vehicle Parts	Tires
Aerosol Cans	Batteries (Car/Home)
Propane Tanks	Electronics
Fluorescent Lights	Heater/Coolers
Microwaves	
Antifreeze & other Automotive Fluids	

What should be put in the Metals Recycle Bins:

Washers/Dryers	Refrigerators
Grills	Bikes
Compressors	Exercise Equip.
Other Metal Items	



The entrance gate is unlocked

1. Place recyclables in the blue recycle trailer bins
2. Appliances and Tires in the drop-off areas
3. HHW in designated areas—no leaking containers
4. **Please be sure to close the gate when you leave.**

WEPD's Recycling Manager
Bob Wyatt



With any of your recycle questions
Phone #(775)265-8680 x11003

RECYCLE ONLY

NO TRASH OF ANY KIND ♦ **NO CONSTRUCTION MATERIALS** ♦ **NO MEDICAL WASTE**
NO FURNITURE OR MATTRESSES ♦ **NO PLASTIC GROCERY BAGS** ♦ **NO STYROFOAM**
NO PIZZA BOXES!!!



Washoe Environmental Protection Department

Thank you, to all of our Curbside Recycling Program participants!
As our current recycle program funding ends we are transitioning to the

WEPD Modified Transfer Station

Our funds for the curbside recycling program end December 31, 2023.

WEPD has applied for new grant and hope to be able to continue to provide this service.

See page 11 for map and non-business drop-off information

Normal Operating Hours are

Monday thru Friday

9 am-4 pm

Call the WEPD Recycling Manager if you have any questions

Phone # (775) 265-8680



FREE mattress recycling at Woodfords Fire House!



What: **FREE Mattress Recycling for Alpine County Residents**
MATTRESSES, BOX SPRINGS AND FUTON MATTRESSES
THAT SEPERATE FROM THE BASE ONLY. 10 UNITS MAX.

When: **Thursdays**
9:30 a.m. - 11:30 p.m.

Where: 96A Washoe Blvd.
Markleeville, CA 96120

Info: Call 775-265-8600



ByeByeMattress.com

