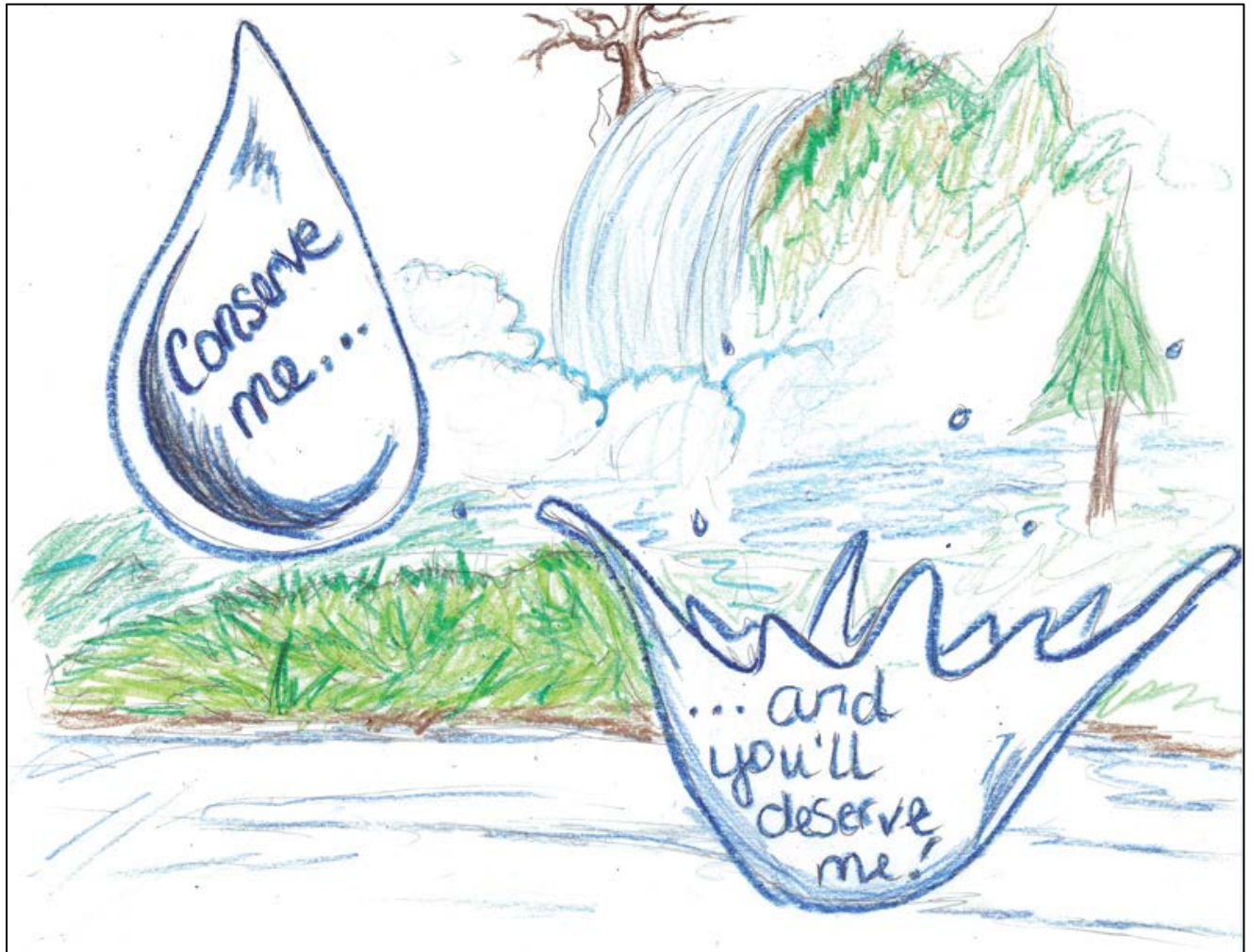


TMWA Board Meeting

Wednesday, July 16, 2014

Press Clippings

June 10, 2014 – July 8, 2014



*Desiree Villareal (Lincoln Park Elementary School)
2010 Poster Art Contest - Second Place, Grades 4-6*



June 6, 2014
Contact: Marlene Olsen
marlene@goodstandingoutreach.com
(775) 829-2810

Media Alert

Truckee Meadows Water Authority Hosts Sprinkler Workshop

WHAT: Sprinkler Maintenance Made Easy Workshop
Join TMWA's conservation staff for an hour-long workshop on the fundamentals of maintaining your sprinkler system.

WHAT: Tuesday, June 10th at 5:30 p.m.

WHERE: Truckee Meadows Water Authority's office at 1355 Capital Blvd.
in Reno

HOW MUCH? It's free for TMWA customers!

SIGN UP: RSVP's are required. RSVP to conservation @tmwa.com or call 834-8005

NEXT: Having problems with your drip system? Attend the Drip System Maintenance Made Easy Workshop on Tuesday, June 17th at 5:30. Reservations required.

INFO: For more information about water-efficient landscaping and conservation, and TMWA's workshop series, please visit www.tmwa.com and www.tmwalandscapguide.com.

Truckee Meadows Water Authority (TMWA) is a not-for-profit water utility, overseen by elected officials from Reno, Sparks and Washoe County. TMWA employs a highly skilled team who ensure the treatment, delivery and availability of high-quality drinking water around the clock for more than 330,000 residents of the Truckee Meadows.

###

Truckee River play can turn ugly for the careless

Benjamin Spillman, REN 3:40 p.m. PDT June 13, 2014



(Photo: Hilary Swift/ RGJ)

STORY HIGHLIGHTS

- Firefighters suggest people wear a personal flotation device and sturdy shoes — not flip-flops
- Avoid alcohol before getting in the water
- Let others know where the trip is going and when it's expected to be over just in case

to take to avoid being one of them.

And it starts long before stepping into the water.

"You need to know the stretch of river you intend to run or know somebody who knows the stretch of river," Lieberman said.

In addition to scouting the river for hazards or dangerous spots there also are important things everyone should wear and take on a river trip, even if it's just a simple day float in town.

The list starts with a personal flotation device and sturdy shoes. In the event of a spill, the flotation device will help keep a person upright in the water and sturdy shoes will protect feet from underwater hazards. They'll also make it easier to walk out of the water to dry land.

"Flip-flops are perfect for the beach, they are not appropriate footwear for scrambling over rocks," Lieberman said.

Other essentials include a hat and sunscreen for protection from the sun, drinking water, a small first aid kit, a kit for patching a tube or raft and a cell phone that can be stashed in a dry bag in the event an emergency call is necessary.

Whatever items people bring along should be tied snugly to the raft or tube without leaving excess rope to get caught on hazards. Lieberman also said people should avoid tying multiple tubes together.

"People can go on opposite sides of obstacles and get hung up," he said.

People who do wind up in the water should make an effort to point their feet



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Like so many other things, floating the Truckee River is always fun until someone gets hurt.

With summer temperatures arriving early so comes the temptation to hit the river with nothing but a swimsuit and something that floats.

But even though snowmelt from the Sierra Nevada has been significantly lower than normal in recent years the river can still be a dangerous place for the unprepared.

Reno Fire Department firefighter Eric Lieberman, leader of the Water Entry Team, said in a typical calendar year there are about 40 to 45 water rescues and that the number can double in high flow years.

He wants people to know there are lots of measures to take to avoid being one of them.

downstream with toes up at the surface of the water and their back as straight as possible to avoid hitting underwater hazards.

“Our river is not pristine ... there can be glass, as well as metal, concrete,” he said.

Other tips included avoiding alcohol before getting in the water and letting others know where the trip is going and when everyone is expected to be safely out of the water

One Fish, Two Fish, now You Fish!

Story Comments Image (2)

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Previous Next

Posted: Sunday, June 15, 2014 3:00 am

0 comments



Posted on Jun 15, 2014
by Chante Owens

Hundreds of local kids and their families sprawled across the south side of the Sparks Marina on Saturday for the 14th annual Kids

Free Fishing Day. Kids of all ages joined the fun and cast their lines along the southern banks of the marina, hoping to feel a tug on the other end. Many participants catch their very first fish during this event. With the help of Sparks Rotary, Nevada Bighorns Unlimited, and various sponsors, Kids Free Fishing Day was a huge success.

This was the first year that Sparks Rotary member and event co-chair, Ryan Gilbrech, led the organization of the event. "What I like most about this event is getting to see the look on kids' faces when they catch their first fish," Gilbrech said.

Gilbrech's statement was exactly true for 9-year-old, Ethan Smith, who caught his very first fish on Saturday.

"I like being able to catch fish and get free ice cream," said Smith.

Ethan's dad, Chris Smith, explained that they rarely ever fish aside from this event, and that Saturday marked the second time they've attended Kids Free Fishing Day.

The sidewalk was lined with booths manned by organizations and sponsors of the event, including Truckee Meadows Water Authority, Nevada Department of Wildlife, Cabela's, and Safari Club International. All of the kids were welcome to play in one of the bounce houses, get face painted for free, and pick up free ice cream from one of several ice cream carts. Rotary volunteers were also grilling up hot dogs for anyone who was hungry.

"I got my face painted like a princess," said 8-year-old, Laura Tate, who was getting help from her dad with casting her fishing line.

"It's Laura's first time fishing," said Tate's dad, Bill Tate. "Fishing is something I enjoy, and I want to show her that anyone can do it. This awesome event is helping me teach my daughter."

Bait and Switch

Tribune photo by John Byrne - Retired Sparks police officer Paul Ochs volunteered Saturday at the Sparks Marina for Kids free Fishing Day, helping local youths bait their hooks.



See how a can becomes a bike
at IWantToBeRecycled.org



Give your garbage another life. Recycle.

The estimated total number of people who went to the event was between 1,200-1,400. The event experienced a higher turnout during previous years, but this year's lower attendance numbers brought with it some advantages.

"Our turnout this year was pretty fair, less than last year, but it ends up giving kids more room to fish which makes things easier," Gilbrech said.

Kids Free Fishing Day didn't all happen on Saturday; Friday was Kids with Special Needs Free Fishing Day, which was another amazing success, despite some lower attendance figures due to school ending on the same day.

"Kids Free Fishing Day gives kids the opportunity to have a unique outdoor experience where they might not usually get one. It's encouraging kids to take up outdoor activities," Gilbrech said.

The 14th annual Kids Free Fishing Day wrapped up around 11 a.m. on Saturday, leaving close to 600 kids with smiles long-lasting memories and the excitement of catching their own fish.



June 16, 2014
Contact: Marlene Olsen
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(775) 772-0020
FOR IMMEDIATE RELEASE

Truckee Meadows Water Authority Announces Water Quality Report Available Online

(RENO, Nev.) – Every year [Truckee Meadows Water Authority](#) (TMWA) releases a [Water Quality Report](#), as required by the Environmental Protection Agency (EPA). The report features important data and information regarding the quality, [source and treatment of your drinking water](#). This year represents a continuation of TMWA’s perfect record of providing your drinking water without a single safety violation.

“At TMWA we are very proud of the quality of the water that we deliver to our 330,000 customers on a daily basis and our Water Quality Report is a welcome opportunity to show our customers the stringent safety standards that we adhere to in ensuring their water quality,” said Paul Miller, manager water operations and water quality.

The water quality report is available entirely online at www.tmwa.com/WQR_2014. In addition, a Spanish version will be available for viewing. However, for those who want to receive a hardcopy, in either English or Spanish, please call or email Will Raymond, TMWA’s water operations supervisor, at 834-8138 or wraymond@tmwa.com.

Truckee Meadows Water Authority (TMWA) is a not-for-profit water utility, overseen by elected officials from Reno, Sparks and Washoe County. TMWA employs a highly skilled team who ensure the treatment, delivery and availability of high-quality drinking water around the clock for more than 330,000 residents of the Truckee Meadows. For more information, go to www.tmwa.com

###

Cutting Back on Grass Saves on Money and Water

Posted: Jun 17, 2014 3:15 PM PDT

Updated: Jun 17, 2014 3:42 PM PDT

When you live in the high desert you learn to work with Mother Nature. At least that seems to be the case with homeowners in Northern Nevada. According to local landscapers, they are seeing a trend toward less grass and more of anything else.

"We decided to let go of grass and go with a more eco-friendly yard when we moved in here about a month ago," said Joe Walker of Somerset in Northwest Reno.

He decided on a large paver patio and drought-tolerant shrubs and bushes for color and lushness. He came up with that plan with Will Johnson who owns 2 Crazy Gardeners.

Johnson says he's seeing a lot of requests for that kind of balance in landscaping. "We're seeing people asking for a lot of xeriscaping, drought-tolerant plants, vines for a lush look and some color. And some softness so it doesn't just look like a desert landscape. And just a little color or grass can give you that and still save you on watering and on money."

Not only that, but installing a drip system instead of a sprinkler system saves on watering and maintenance and on labor installation.

And speaking of sprinklers don't forget to kick up the watering for hot weather. "You need to water a couple of times a day and get the ground wet enough that it's soft and you can stab a six-inch screw driver into it, but you don't want the water to run off. You have to find the balance," says Andy Gebhardt with Truckee Meadows Water Authority.

The watering schedule in this area is a three-day schedule all year-round. Tuesdays, Thursdays and Saturdays for even-numbered addresses and Wednesdays, Fridays and Sundays for odd-numbered addresses. There's no watering on Mondays.

Written by Erin Breen



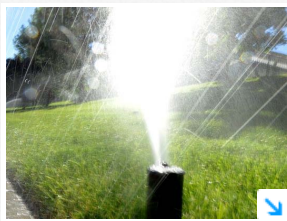
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Reno customers to be asked to cut water use 10 percent



A few simple steps can achieve the 10 percent reduction in water use sought by the Truckee Meadows Water Authority. Jeff DeLong/RGJ

Jeff DeLong, RGJ 4:05 p.m. PDT June 20, 2014



(Photo: Tim Dunn/RGJ)

STORY HIGHLIGHTS

- Coming Sunday: The Reno Gazette-Journal begins a five-part series on drought in Nevada

f 53

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Reno-Sparks residents will soon be asked to cut water use by 10 percent as the region struggles through extended drought, with diminished flows of the Truckee River forcing the area's primary water provider to tap backup supplies.

It's the first time in 20 years the Reno area has needed to use its drought reserves and the first time ever the Truckee Meadows Water Authority, formed in 2001, has needed to do so.

"We're asking our customers to help us out," Bill Hauck, water supply coordinator for the water authority, said of a request planned for late July or early August.

"I think we're very fortunate to have made it this far into such a significant drought," Hauck said. "This is an exceptionally dry year. If this is not the worst year on record,

it's going to be one of the worst in the last 100 years."



The request to reduce water use across the Truckee Meadows will be triggered as flows of the Truckee River drop due to a lowering Lake Tahoe and Boca Reservoir.

To keep up with summer demand with the drought in its third year, the utility will soon begin tapping backup supplies stored at Boca and Stampede reservoirs and later in the summer, Donner Lake, Hauck said. It's the first time drought reserves have been needed since the area's prior water supplier, Sierra Pacific, used them during an extended drought that ended in 1994.

The 10 percent reduction can be achieved by cutting back on outdoor watering, utility officials said. The utility is expanding the hours during which watering is prohibited — from 11 a.m. to 7 p.m. instead of noon to 6 p.m. No reduction in indoor water use is believed necessary.

"Irrigation is where people can cut back," Hauck said. "Our customers are pretty efficient when it comes to indoor water use. There's not too much people can do they are not already doing.

"We feel the low-hanging fruit is outdoor water use."

A 10 percent reduction can be achieved relatively easily, utility officials said. If people currently water their lawns on 10-minute cycles, for example, adjusting timers to 9-minute cycles will help achieve the goal.

If the target is met, some 2,000 acre-feet of water will be saved, Hauck said. That savings would be sufficient to allow the utility not to touch its largest drought-reserve reservoir, Independence Lake, at all this summer or fall. That water could then be held for use in 2015 in the event the drought extends a fourth year.

Kim Mazeres, director of customer relations for the water authority, said she is confident the water-savings goal can be achieved. Responding to messages to urge water conservation, residents of the Truckee Meadows already use 15 percent less water than they did a decade ago, Mazeres said. When Sierra Pacific asked customers to conserve during the lengthy drought of 1987 to 1994, water use dropped by 20 percent.

"I'm pretty proud of this community for doing that," Mazeres said. "Folks tend to conserve when you ask them. They step to the plate and help the entire community."

Soon, the water authority will begin an educational and community outreach

campaign on radio, print, television and the Internet urging conservation steps. It has also added additional seasonal workers to advise customers and patrol for water wasters, who could face potential fines for repeated violations.

The utility held off on asking customers to cut water use at a time earlier this year due to court decrees dating back to the 1930s that dictate how the Truckee River is operated, officials said. Under those decrees, water must be released from Tahoe and Boca to maintain specific flows of the Truckee River as long as possible. The two primary reservoirs used to store drought reserves, Donner and Independence, are full and no more water could be added there until those backup supplies begin to be used.

The water authority — jointly operated by the cities of Reno and Sparks and Washoe County — approved a plan in 2003 that officials said would allow the region to weather a drought eight years in duration. That's equal to the drought of 1987-1994, a span of five dry years that was broken up by a couple of wet ones, with an extra year thrown in.

The utility serves roughly 93,000 homes and businesses across the greater Reno-Sparks area.

WATERING SCHEDULE

Monday: No watering allowed.

Tuesday, Thursday and Saturday: Watering for even addresses.

Wednesday, Friday and Sunday: Watering for odd addresses.

NO WATERING HOURS

Current: No watering noon to 6 p.m.

Coming: No watering 11 a.m. to 7 p.m

TMWA Asking for 10% Less Water Use at End of July

Updated: Fri 1:47 PM, Jun 20, 2014

By: Staff/News Release [Email](#)

- [Home](#)
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RENO, NV - Truckee Meadows Water Authority is asking all its customers, beginning at the end of July, to reduce outdoor water use by 10% and not water from 11AM-7PM each day. This follows a very dry winter with low Sierra snowpack.



TMWA says it will always ask for extra conservation when mandated Truckee River flows cannot be sustained and drought reserves are needed.

In a news release, TMWA says it has planned for these types of dry cycles and will be able to use its upstream drought reserves to augment reduced river flows, as well as use groundwater reserves, to meet [customer](#) [↗](#) demands.

Late July is the time when customers can make a difference by conserving water, which will reduce the amount of drought reserves TMWA needs to release.

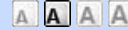
For more information, please check the attached FAQ list and the TMWA website.

- Related Links
 - [Truckee Meadows Water Authority](#)
- Related Documents
 - [FAQs-TMWA-Conservation-FINAL](#)

Water use scheduled to be cut by 10% in July

Video Images

Reported by: Terri Hendry



Email: thendry@mynews4.com

Print Story

Published: 6/20 5:54 pm

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Updated: 6/20 7:02 pm

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RENO, Nev. (MyNews4.com & KRNV) -- For the first time in 20 years, the Truckee Meadows Water Authority plans to dip into its water reserves. It is expected to happen at the end of July, and when it does, residents will be asked to reduce their water use by 10-percent.

TMWA Customer Service Manager Andy Gebhardt explained that both Lake Tahoe and Boca Reservoir keep the Truckee River flowing at mandated levels. When Tahoe

and Boca drop below their rims, the Truckee River water flows will dramatically change. "As soon as that river drops and it will happen overnight, then we will have to dip into our 'savings account,' or our water reserves."

Gebhardt said the best way to reduce your use is by focusing on outdoor watering. "The average water customer's water use is approximately four times higher in the summer, so keeping our focus on outdoor use is where we get the biggest impact in water savings."

The no-watering times will be expanded to 11 a.m. to 7 p.m., which is the hottest, windiest time of the day.

Gebhardt also had another suggestions. "We're not asking you to do anything crazy to get to a 10-percent savings. Something like re-setting your sprinkler system will work. If it runs on a 10-minute cycle, just set to nine minutes and you just did your 10-percent savings."

[Water Conservation by the end of July](#)

TMWA Asks Customers to Reduce Outdoor Water Use

Posted: Jun 20, 2014 1:40 PM PDT

Updated: Jun 20, 2014 6:07 PM PDT

By Paul Nelson - [email](#)

Truckee Meadows Water Authority is asking its customers to cut back on outdoor water use starting late next month, and not water between the hours of 11 a.m. - 7 p.m.

The agency is asking customers to cut outdoor use by 10% at the end of July, although an exact date hasn't yet been announced.

"We're targeting outdoor usage because that's when most of the usage is," John Erwin, TMWA Director of Natural Resources said. "Folks are very good inside. Inside water use doesn't change, month-to-month, day-to-day."

Because of our recent dry winter, TMWA says it will use upstream reserves to supplement low river flows and groundwater reserves to meet demands. It says late July is the time when customers can make a difference by conserving water, which will reduce the amount of drought reserves TMWA needs to release. It says TMWA's drought supply reservoirs - Donner and Independence Lakes - are currently full.

"The system's designed to do this," Erwin said. "We have these reserves upstream. We also have additional ground water that we'll be exercising pulling out as well."

The entire state of Nevada is in a drought, with exceptional drought stretching from Lander County to the California border. "The reservoirs continue to decrease," Jeff Anderson, Water Supply Specialist for National Resources Conservation Service said. "The in-flows to the streams during the summer continue to get lower and lower, and soils dry out."

The exceptional drought is an accumulation of three years without adequate precipitation. That leads to increased fire danger and hampers agriculture.

"Rangelands are drying out," Anderson said. "There's not as good of crop for feed for the cows and for farmers, as well. Their water supplies get shorter and shorter."

Despite the drought, officials say area wells are consistently full. But those will likely begin to drop, as we head into the hotter summer months.

For more information, go to www.tmwa.com.



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Deepening drought threatens Nevada's very way of life

Jeff DeLong, RGJ 1 a.m. PDT June 22, 2014



(Photo: Marilyn Newton/RGJ)

STORY HIGHLIGHTS

- Coming Monday: Wildfire is always a risk here but drought-dried forests are now particularly vulnerable.
- Coming Tuesday: Wild horses, deer, bears and even squirrels and snakes struggle to survive.
- Coming Wednesday: Farmers and ranchers are in trouble everywhere but especially around Lovelock.

f 27 | TWEET | in 2 | COMMENT 2 | EMAIL | MORE

In Nevada, drought tightens its grip daily.

Three years of dismal winters and hot summers are taking their toll across a normally arid but now exceedingly dry landscape, with western Nevada rated by experts as being in extreme or exceptional drought.

Water supplies are diminishing. For the first time in 20 years, Truckee River flows are expected by early August to drop to such levels that the major water provider serving the Truckee Meadows will need to tap reserve supplies. Lake Tahoe should drop below its natural rim sometime in September, the first time in a decade that's happened so early in the year.

Farmers and ranchers struggle to maintain a livelihood. Wild animals wander in a stressful search for food and water. Boat ramps go dry and the danger of destructive wildfires — which now exists year-round — increases with each passing day of summer.

Droughts have happened before, of course, and many are comparing the current situation to the lengthy one experienced across the region from 1987 to 1994. Others say this particular drought stands out as especially severe.

"It's horrible," said Bennie Hodges of the Pershing County Water Conservation District. Farmers in the Lovelock area are receiving zero irrigation water from a dry Humboldt River this year.

"I can't see on records where we've had a year this bad," Hodges said. "Some of the old timers are talking to other old timers and say they've had years this bad but I can't find one."

Drought has forced Gardnerville rancher David Hussman to cut the size of his cattle herd by 10 percent, a move he was loath to make considering today's soaring beef prices. He just didn't have a choice. Hussman is making his first alfalfa cut of the year and doubts there will be another. Buying the stuff to feed his cattle is too expensive.

To him, this drought seems similar to the one that withered the region in 1976-77 but still seems distinct in its severity.

"I don't think we've had any three years as severe as this," Hussman said. "I hesitate to say it's historic but it sure is severe, there's no question."

DROUGHTS IN NORTHWEST NEVADA

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NOAA

By Jeff Delong / Graphics: Stephen Reich / RGJ

Three dismal winters

After the previous two winters produced mountain snowpacks barely more than half that of a normal winter, many hoped the winter of 2013-14 would turn things around.

It did anything but. December and January were nearly completely dry. Storms in February helped, but the snow deficit was simply too large to overcome. On April 1, when the snowpack is typically at its peak, it measured only 34 percent of normal in the Truckee River Basin and 47 percent at Lake Tahoe.

Low precipitation was accompanied by high temperatures. Beau Uriona, a snow surveyor with the U.S. Natural Resources Conservation Service, reported that peaks at 10,000 feet or more in elevation had the most days with above-average temperatures than any other year in 24 years on record.

Speaking at a climate conference in Reno in April, Uriona said the high-elevation snowpack was already poised to melt at that early date. He described the situation as "a worst-case scenario."

Everything combined to make for less runoff flowing into area rivers, streams and reservoirs. Latest estimates call for roughly 20 percent of average runoff in the Truckee River and Lake Tahoe basins. Much of what snowmelt did flow off the hills immediately soaked into parched soil, never making it to lakes or reservoirs where the water might be stored for later use.

"Not only was it one of the driest years we've ever had but it's the third very dry year in a row and that just compounds all the issues," said Federal Water Master Chad

Blanchard, who is charged with regulating the flow of the Truckee River. "This is something we haven't seen since 1994."

That year, Lake Tahoe dropped to 2 feet below its natural rim. In mid-June, the Truckee River dried up between central Reno and Sparks; it took discharge from the wastewater treatment plant to get the river flowing again.

Droughts of a year or two are relatively common, but when they extend to a third year or beyond it "really hits hard," said Douglas Boyle, Nevada's state climatologist.



What's to blame? Reno area residents will be asked to cut water use. Area farmers struggle, as does wildlife. Fire danger grows. As the drought enters its third year, we take a look at its many impacts. Jeff DeLong/RGJ

"It gets pretty grim pretty quickly," Boyle said, adding that the situation is compounded by an increase in annual average temperatures in the region of 1 to 1.5 degrees in recent years compared to what was recorded from 1980 to 2010.

"There's a double whammy. We don't have the precipitation we expect and the temperatures have been warmer," Boyle said. "We have those two things happening at the same time, which is problematic."

Is human-caused global warming to blame? Boyle and other experts said that's unknown. Greenhouse gas emissions appear plainly tied to rising global temperatures, but how that affects the weather, including individual droughts, is another question.

Kelly Redmond of the Western Regional Climate Center in Reno said that, if anything, models suggest that more winter precipitation, not less, might be expected to accompany a warming climate. What changes is the type of precipitation, with more in this area falling as rain rather than snow.

"It seems to show more precipitation in the winter months sort of at the expense of the other months," Redmond said. "But that really didn't happen this year."

So what did happen this year and, for that matter, during the previous two?

That answer is a little more simple. Boyle points to an "enormous" ridge of high pressure that stayed parked off the California coast at a time when winter storms should normally hit the West with rain and snow. This high pressure shunted off storms to the north like a big offensive lineman blocking the rush of an opposing player in football, leaving western Nevada and Northern California high and dry.

"That's what's been happening. It's been pretty persistent and pretty strong. We're not

seeing the storm track in our area like we expect it to be," Boyle said. "We're taking a look at that and are trying to determine how often this happens. What's normal and what's not normal?"

Whether the situation is normal or not, it plainly presents a problem. After three years of drought, some are wondering what it will take to emerge into normal situation again.



Cattle rest in a now dry irrigation ditch in the Lovelock area Wednesday May 28, 2014. (Photo: Marilyn Newton/RGJ)

El Niño and atmospheric rivers

Much hope has recently been focused on the expected arrival of El Niño, a weather phenomenon associated with warmer-than-average surface water temperatures in the ocean off the west coast of South America. Strong El Niños have produced some big winters in Nevada and California in the past.

El Niño offers no guarantee, said Michael Dettinger, a research hydrologist at the Scripps Institution of Oceanography in San Diego.

"El Niño doesn't really guarantee a wet winter," Dettinger said. "They are a really good way to get a wet winter, but they can produce some dry ones as well. At this point, I think we keep our fingers crossed."

Dettinger's research does, however, offer some hope. A 2013 study he conducted examined the effect of so-called "atmospheric rivers" on ending previous droughts. Atmospheric rivers are corridors of water vapor stretching west into the Pacific that often carry strong winter storms into the West, sometimes for weeks at a time.

The study concluded that atmospheric rivers played a "critical role as a common cause of the end of droughts on the West Coast," with those droughts tending to end abruptly during an especially wet month bringing several very large storms.

Between 1950 and 2010, 33 to 74 percent of droughts were broken by the landfall of atmospheric river storms, Dettinger's study concluded.

"Droughts have almost always begun very gradually but we can get out of them with a single, very wet month," Dettinger said.

It may take a little more this time around, he said.

"This isn't your typical drought. With this one, we're deep enough into it it's going to take quite a sustained wet winter," Dettinger said. "It's going to take a sustained string of very wet weather to get us out of this."

In Lovelock, Bennie Hodges doesn't like to think of the potential consequences should the drought extend for a fourth year or beyond.

"A lot of people would be closing doors. A lot of us could be out of jobs," Hodges said. "It could be catastrophic."

BY THE NUMBERS

3: Years the current drought has lasted.

34 percent: Spring 2014 snowpack in Truckee River Basin.

10 percent: Water use cut requested for Reno area residents.

2,000: Acre feet in water potentially saved by cut.

Zero: Irrigation allotment for Lovelock area farmers,

Source: RGJ research.

NEVADA'S MEGADROUGHTS

Research on tree stumps found in the upper West Walker River and Mono Lake indicate droughts like ones now impacting western Nevada and the lengthy ones of 1987-1994 and 1928 to 1934 are minor in contrast to what can happen. The stumps show evidence of two megadroughts, one 240 years long from 850 to 1,090 AD and another at least 180 years long from 1,140 to 1,320 AD.

Source: Nevada State Climatologist.

A five-part series

Nevada and the Sierra are now in a third consecutive year of drought, with impacts compounding as the event drags on. Water supplies are starting to dwindle as lakes, rivers and reservoirs continue to drop. Farmers and ranchers struggle, wildlife is hurting and boating is restricted in many areas. The RGJ takes a look at all the impacts of this serious drought and how it is impacting our lives.

On Monday: Wildfires

Wildfire is always a risk here but drought-dried forests are now particularly vulnerable.

On Tuesday: Wildlife

Wild horses, deer, bears and even squirrels and snakes struggle to survive

On Wednesday: Agriculture

Farmers and ranchers are in trouble everywhere but especially in the Lovelock area, where irrigation water has run dry.

On Thursday: Recreation

Ramps are closed at some popular reservoirs as the height of the summer boating season arrives.

Water restrictions ahead

The Truckee Meadows' water provider is having to tap reserve supplies for the first time in 20 years, and is asking residents to reduce water usage by 10 percent. XX

Kelly Scott: We need to discuss how we use water

Kelly Scott 10:01 a.m. PDT June 22, 2014



Northern Nevada is in the third year of a drought. And in today's RGJ, we begin a five-day series examining what that means to those of us who live here.

(Photo: RGJ)

Reporter Jeff DeLong spent almost two months reporting on how the drought affects us all —its impact on agriculture, recreation, wildlife and wildfire.

The drought is forcing the Truckee Meadows Water Authority to ask its customers later this summer to cut back on their outdoor water consumption by 10 percent. The last time that happened was about 20 years ago, which was when we had the last major drought.

As part of DeLong's ongoing drought coverage, we asked TMWA on June 2 for the name, address and water usage amounts for the top 100 users in four customer classes. After its lawyer initially denied the request, it went before the full board on Wednesday.

In that meeting, the TMWA board of directors agreed with us in a 5-1 vote that the information is public and will be released.

The information includes the name, address and amount of annual water use. It does not include any personal financial information — such as bank account numbers or Social Security numbers.

We asked for the information for the four customer classes — residential metered users, residential flat-rate users, commercial users and metered-irrigation users. Besides that, we'll also gather information on the average usage and other statistics that are relevant.

So why do we need this information?

In our community, water usage is a matter of public record through TMWA because it is a government agency. Our state public records law rightfully allows it. In fact, similar information has long been used in coverage of water issues in Southern Nevada.

Thank you to the TMWA board members for understanding that and showing their commitment to openness. The better we understand our usage and trends, the more educated we all can be in making decisions about our water resources.

This information will help us all understand how water is used, who's using it the most and what conservation measures, if any, are being utilized. Water is a shared public resource that we all need, and matters related to that resource must be open for public scrutiny — that includes who uses how much water.

When we first made the request, TMWA sent a letter to those whose water usage put

them on one of those top 100 lists. About 10 people sent emails to the board to oppose the release of information in our request, mostly citing reasons of privacy, safety and general distrust of our request.

Some of those emails pointed out that they had irrigation leaks in the last calendar year or shared lines that falsely portray them as using more water than they actually do. That's important information that enhances the context of our reporting as we delve into the topic more.

We expect to have the information in the next week so that we can begin analyzing it. While I'm uncertain of the stories that will come from the data, I am certain that the analysis will lead to a broader discussion about water usage in the Truckee Meadows.

This won't be our last drought in the region.

A community conversation now will shape water usage and conservation efforts for years to come. The more we all know, the better our decisions will be for now and as we prepare for the next dry years.

Kelly Scott is the RGJ's executive editor

POLITICS

Will Storey County get Reno's gray water?

Last week, city of Reno staff quietly approached the Truckee Meadows Regional Planning Governing Board with a nascent



ANJEANETTE DAMON

proposal to begin shipping effluent water from the treatment plant east of Sparks to the Tahoe Reno Industrial Center — which is one of the top locations scouted by Tesla for its planned gigafactory. The plan would meet a couple of objectives: It would reduce the amount of nitrogen and phosphorus-rich effluent being pumped back into the Truckee River and would provide the booming industrial park 15 miles down the road in Storey County with a needed resource.

The water idea is in its very early stages. To even be viable, it would require an amendment to the 2012 Regional Plan, which requires effluent water to be used within the Truckee Meadows Services Area. Reno city staff want the governing board to sponsor that amendment. But there's a reason for that provision in the regional plan.

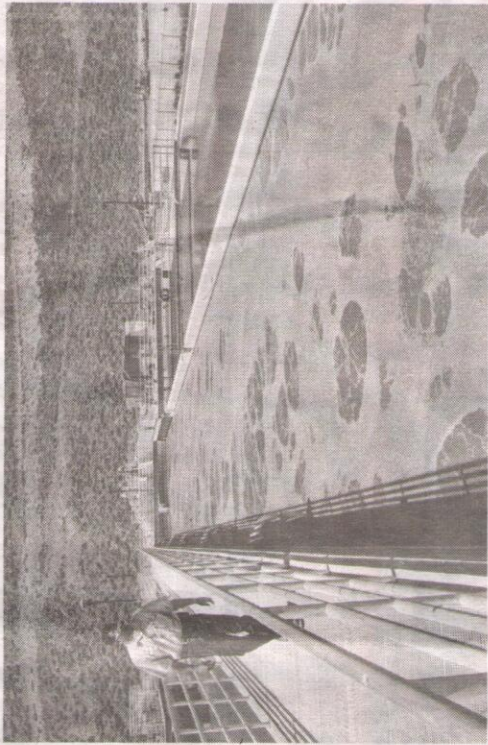
Effluent water is an increasingly valuable resource, and the regional plan was crafted under the idea that valuable resources be kept within the service area.

The idea to sell the water to the Tahoe Reno Industrial Center never came up at any Reno City Council meeting before city staff decided to present it to the regional planning governing board, which is made up of elected officials from Reno, Sparks and Washoe County.

Instead, staff sent a memo to council members the day before the governing board meeting describing the idea.

"Recent discussions around economic development have indicated the likelihood of substantial growth at the Tahoe Reno Industrial Center," the memo reads. "It is forecast that future industrial users at TRIC could be potential large volume users of (Truckee Meadows) effluent. Storey County staff have also indicated a desire to bring (Truckee Meadows) effluent to the TRIC."

Of course, this sparked speculation that the water idea was part of quiet preparations for sealing the deal on Tesla's battery factory. Tesla has



City of Reno staff is looking into a proposal to ship effluent water to the Tahoe Reno Industrial Center. TIM DUNN/RGJ FILE

named Nevada as one of four states in contention for the factory and signs point toward the Tahoe Reno Industrial Center as the location.

A permit for site preparation on a massive but secret project has been pulled at the center. A local construction firm is under a nondisclosure agreement not to discuss Tesla, and economic development officials have said rumors point to the Storey County site.

All that speculation aside, however, it appears the water idea really has nothing to do

the industrial center. Oh yeah? What project is that?

"Well, I can't disclose that," Gilman said. "But it's the kind of industry that uses a hell of a lot of water."

Regardless of the specific project that might need the water, a significant community discussion should probably be had on whether to let Storey County use the resource.

Technology is improving, and communities in arid regions across the world are making better use of so-called gray water. To get past the ick factor, this water is now commonly referred to as purple-pipe water — the color of the pipe used to transport the water.

Gray water isn't safe for drinking, but it's safe for gardening, landscaping, manufacturing and other uses. Already in the Truckee Meadows, effluent is being used for irrigation in a number of sites.

That use could probably be increased. And as we head into year three of a prolonged drought, it might be a good idea to hold on to every drop of water we've got.

Contact Anjeanette Damon at adamon@rgj.com or on Twitter @anjeanettedamon.

Major miner's jumpstarts co

By John Seelmeyer
jseelmeyer@nnbw.biz

A stalled copper project near Yerington got a shot of momentum last week as a major mining company agreed to spend at much as \$138.6 million on exploration and other work during the next four or five years.

Quaterra Resources Inc. said it struck a deal with a subsidiary of Freeport-McMoRan Copper & Gold, a \$20.9 billion (annual revenues) company headquartered in Phoenix.

Freeport-McMoRan will invest \$2.5 million in the Lyon County project — its center is the old Anaconda copper pit just northwest of Yerington — during the agreement's first year.

If Freeport-McMoRan decides to continue, it can invest a total of about \$40 million to earn a 55 percent stake in the Quaterra holdings at Yerington.

For another \$100 million in funding, Freeport-McMoRan can earn a 75 percent interest in the property.

For Vancouver-based Quaterra, the transaction comes in the nick of time as it struggles to survive.

"Our cash position is minimal, and we are working on ways to top off the treasury," its chief financial officer, Scott Hean, told investors last week.

The publicly held company posted a loss of \$467,659 in the first quarter, and its strategy has been simple: Raise cash by selling off other assets such as uranium properties in Arizona, Utah and Wyoming and focus its attention on the



COURTESY OF TMWA

TMWA earned energy-conservation credits for the construction of a new canal that reduced its need to power pumps at a treatment plant.

Energy-savings incentive program widens its reach

By John Seelmeyer
jseelmeyer@nnbw.biz

An NV Energy program that provides incentives for companies that invest in electric conservation is widening its reach with a marketing program.

"We don't want to miss anyone," says Adam Grant, the utility's manager for energy efficiency and conservation.

The SureBet program, now in its 11th year, still has funds available this year for companies that invest in systems that reduce their use of power. A three-year-old program that provides incentives for savings of natural gas, however, is fully committed for this year.

Despite wide use of the incentives program during the past decade, Grant said commercial customers continue to use the funding to help pay the cost of improvement to lighting systems — exterior lights are getting a lot of attention these days — as well as controls for big electric motors.

The Peppermill, for instance, received a \$92,000 rebate from the SureBet program to help pay for installation of LED lighting in the parking lot at its Reno property as well as its Western Village in Sparks.

With the rebate, the project will pay for itself in 1.7 years, says Dean Parker, executive facilities director at Peppermill.

Some of the incentives are more esoteric.

Truckee Meadows Water Authority, for instance, earned nearly \$115,000 in rebates in the past couple of years for reconstruction of the Highland Canal, one of the water sources for its Chalk Bluff Water Treatment Plant in west Reno.

The canal reduced the utility's need to pump water into the plant, saving about 3.5 million kilowatt-hours of electricity annually. That's enough electricity to power 379 homes in northern Nevada.

The SureBet staff includes engineers who help commercial customers calculate potential energy savings from new installations and retrofits. There's no cost to commercial customers who use the service.

Rebates are available for up to 50 percent of the cost of a project.

A public-policy initiative that's working to increase energy conservation in Western states welcomes the initiative to market the SureBet program to more businesses.

"Utility energy efficiency programs for businesses — as great as they are — do not sell themselves," says Tom Polikalas, Nevada representative for the policy organization, Southwest Energy Efficiency Project. "We have learned that it takes contactors like SureBet going out and telling people about the programs, how they work, and what the benefits are before people apply it to their own business."

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10 things you should know about the drought

Jeff DeLong, RGJ 1:03 a.m. PDT June 23, 2014



(Photo: Marilyn Newton/RGJ)



Ten things to know about the drought

- 1) The drought is now in its third year, compounding its impacts. Last winter was particularly dry and followed two other subpar winters.
- 2) Lake Tahoe is dropping and is expected to drop below its natural rim sometime in September, the earliest that has occurred in a decade.
- 3) By late July or early August, flows of the Truckee River — the primary source of drinking and irrigation water for Reno-Sparks — will drop to the point the Truckee Meadows Water Authority will need to tap backup water supplies for the first time in 20 years.
- 4) Once drought water reserves are tapped, the water authority will ask its customers to reduce water consumption by 10 percent. That goal can be achieved by cutting back on outdoor watering.
- 5) A 10 percent reduction will save an estimated 2,000 acre-feet of water. The savings will allow the water authority to avoid tapping its largest drought reserve supply, Independence Lake, in case that water is needed next year should the drought continue.
- 6) Farmers and ranchers are struggling across Nevada. Perhaps hardest hit are those in the Lovelock area. There, due to a dry lower Humboldt River and a nearly empty Rye Patch Reservoir, growers are getting zero irrigation water this summer.
- 7) Extended drought has dried forests in western Nevada and the Sierra, leading to mounting concern that destructive wildfires are likely to erupt at any time.
- 8) Boating is impacted, with boat ramps at Rye Patch and Lahontan reservoirs already closed. Lake Tahoe's Sand Harbor boat ramp will close soon and some Tahoe marinas are dredging channels to stay in operation.
- 9) Wildlife is hurting, with wild horses in some places having trouble finding needed forage and water. Mule deer numbers are down and some animals are increasingly wandering into urban areas to find food and water. Predators such as coyotes and snakes follow them.
- 10) Experts say it will take a big winter bringing a significant string of storms with heavy snow or rain to turn things around. Many are hoping El Niño will provide that next winter but even if El Niño does develop, it offers no guarantee

Re "Deepening drought threatens Nevada's very way of life" [RGJ, June 22]:
There's nothing more important than water.

To Nevadans, our waterways are a treasure, and in this drought their importance to us has only become clearer. But waterways across Nevada are at risk.

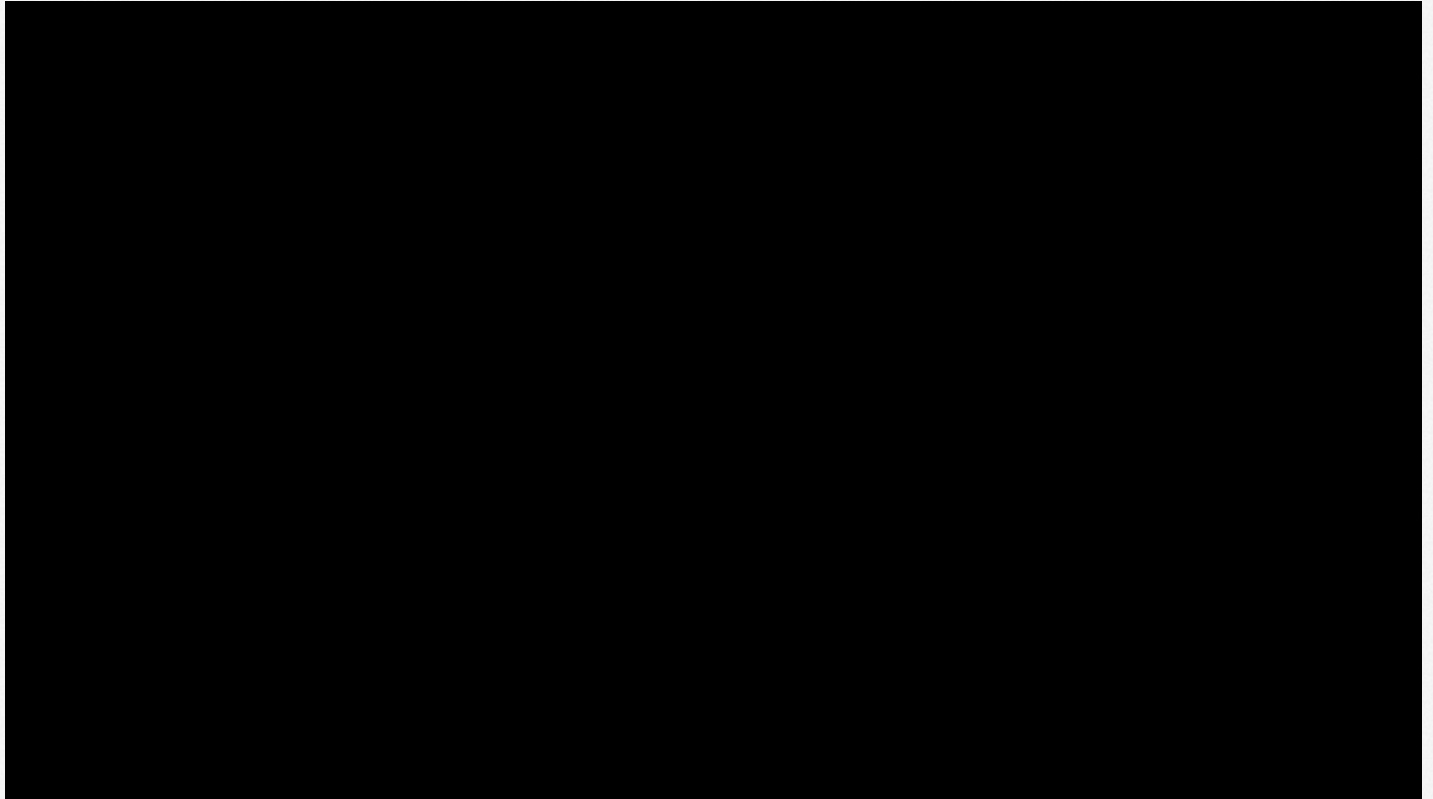
According to Environment Nevada Research and Policy Center's new report, "Wasting Our Waterways," polluters dumped more carcinogenic and developmental toxics into Nevada's waterways than they did in any other state. We need to take steps to cut down on this pollution.

This summer, the Environmental Protection Agency is working to close the loopholes in the Clean Water Act and restore critical protections to nearly 90 percent of Nevada's streams. This could be the single largest step taken for clean water in more than a decade. But polluters are pressuring the EPA to back down.

We know protecting Nevada's waterways is critical to our way of life. That's why it's critical for the EPA to move swiftly to close these loopholes and restore CWA protections, so that all of Nevada's waters get the protection they need and deserve. To urge the EPA to protect our waterways, go to iheartcleanwater.org.

Jack Sears, Washington, D.C., Environment Nevada Research and Policy Center



Nevada drought: The most crucial facts and figures



A few simple steps can achieve the 10 percent reduction in water use sought by the Truckee Meadows Water Authority. Jeff DeLong/RGJ

Staff reports 7:42 a.m. PDT June 24, 2014



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(Photo: Hilary Swift/RGJ, HILARY SWIFT/ RGJ)

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Water is quickly growing scarce as western Nevada enters a third year of drought. Here's a quick look at facts and figure.

For special in-depth drought reporting from Jeff DeLong, visit RGJ.com.

DROUGHT NUMBERS:

- * 3: Years the current drought has lasted.
- * 34 percent: Spring 2014 snowpack in Truckee River Basin.
- * 10 percent: Water use cut requested for Reno area residents.
- * 2,000: Acre feet in water potentially saved by cut.
- * Zero: Irrigation allotment for Lovelock area farmers,

WILDLIFE:

- * Mice, squirrels and other little critters: Increasingly are clustering in urban areas where water and food is available.
- * Snakes, coyotes and other predators: Follow their prey into neighborhoods and are seen increasingly more frequently.
- * Wild horses: Appear OK for now but are lacking forage and water.
- * Mule deer: Numbers are down. A big winter after drought could be disastrous.
- * Black bears: With the drought killing natural vegetation, bears will likely turn to trash and other human food sources. This summer could be a big problem.
- * Mormon crickets: They may make a reappearance this year. Droughts contribute to infestations because mild winters allow more eggs to survive.

FIRE:

Fire is one of the more worrying consequences of the drought now withering western Nevada and the Sierra. Drought-stressed forests are in particular danger from wildfire during the summer of 2014. The danger is said to be notably severe in the timbered high country.

"The conditions are right. We could have a rough go of it this summer," said Russell Bird, fire management officer for Humboldt-Toiyabe National Forest. "The drought has really affected the moisture in the trees," agreed Scott Rasmussen, fire program manager for NDF, adding that the situation becomes particularly dangerous after drought-stressed trees succumb to attack by bark beetles – a situation foresters say is already occurring in some areas across the region

Drought: Nevada farmers watching the land die

Jeff DeLong, RGJ 5:34 a.m. PDT June 25, 2014



(Photo: Marilyn Newton/RGJ)



Dan Knisley stands at drought's ground zero.

In a field where wheat grew last year, there's now little but stubble and dirt. There's no water to allow planting and like many farmers in the Lovelock area — one of the places hit hardest by a drought now three years in duration — Knisley is forced to leave fields bare.

"It is a grief to be a farmer without water and not be able to plant or harvest or be involved with what you like to do in life," said Knisley, 50 and a third-generation Lovelock farmer and rancher.

"When you watch the land die, that kind of stuff is no fun," Knisley said.

Agriculture, a mainstay Nevada industry deeply rooted in history, is feeling some of the biggest impacts from a drought many call historic in its intensity. It's being felt at fields tilled by farmers like Knisley. It's being felt on the open range, where cattle crunch across a dry landscape in search of limited forage and scarce drinking water.

The country's most arid state is no stranger to drought. Its farmers and ranchers are no strangers to dealing with it. Still, many agree this event stands out and stands out in a big way.

"It's the worst that I've seen, without a doubt," said Jay Davison, a Fallon-based crops specialist with the University of Nevada Cooperative Extension.

On a normal year, Davison said, alfalfa farmers in the Fallon area might manage to irrigate fields nine times. This year, there will be four or five at most.



Dan and Tracy Knisley, Lovelock farmers and owners of County Equipment in their office May

"Everyone's going to be shutting down about three months earlier than normal," Davison said. "We're normally irrigating until October. If we get to mid-July this year, that will be pretty good."

Water is limited to the extent that directors of the Truckee-Carson Irrigation District voted in May to cut water allotments to 45 percent of the normal amount of irrigation waer provided, a reduction Davison said will result in a substantial impact to agricultural production in the area.

To growers in Lovelock, a 45 percent irrigation allotment would be decidedly welcome.

"To us, that would be a godsend," said Bennie Hodges, secretary-treasurer of the Pershing County Water Conservation District. "That's how bad it is."

That's because the Humboldt River, the sole source of irrigation water to Lovelock growers, is flowing at a trickle. After receiving an 80 percent allotment in 2012, the first year of the current drought, allotments were cut to only 10 percent in 2013. This year there is none.

Rye Patch Reservoir, which can hold 200,000 acre-feet of water when full, now holds only about 9,500 acre-feet. What little water it holds is reserved to try and keep the reservoir's fish alive. If any water were released, Hodges said, it would simply soak into parched soil.

"There's zero flow," Hodges said.

The situation in Lovelock, Davison agreed, stands out.

"They're pretty much shot," Davison said. "It's as bad as you can get. It's the worst of the worst."

While spring rains helped improve a dismal scenario for cattle grazing on public land, the situation remains serious, and "conditions have stressed all resources on the public lands making grazing throughout most of Nevada unsustainable at permitted levels," according to a May 16 statement issued by the Bureau of Land Management.

"It's just getting worse and worse. These are really dry conditions," said Mark Coca, vegetation management specialist at Nevada BLM.



Seen through heat waves a dust storm blows behind this farm west of Lovelock Wednesday May 28, 2014. (Photo: Marilyn Newton/RGJ)

BLM has asked some ranchers to voluntarily halt grazing in some hard-hit areas and more decisions affecting grazing on public land are likely later this summer, Coca said, adding that similar problems exist in other western states hit hard by drought. Water hauling has been authorized in some locations, he said.

High beef prices help some, but lack of forage is forcing many ranchers to feed livestock with costly hay, said Ron Torell, an Elko rancher who is president of the Nevada Cattlemen's Association. Due to drought, most ranching operations have been forced to reduce their numbers of brood cows by 20 to 30 percent over the last three years, Torell said.

"The main issue is stock water," Torell said. "We can have all the grass we want but that water just isn't out there."

Federal aid and crop insurance is proving critical to Nevada growers struggling with drought. At the Knisley spread in Lovelock, diversification is helping save the day.

Knisley, who also owns a farm supply business, is selling equipment in other states not so severely impacted by drought. He's moved some farming activity to the Winnemucca area, where groundwater wells are still pumping out water. And he's getting into real estate, having recently purchased a mobile home park to supplement income.

Knisley has survived droughts in the past and is confident he'll get through this one as well.

"I have faith that God will meet my needs," he said.

But he acknowledges that many growers are seriously concerned, particularly over the possibility the drought will continue another year or beyond.

"What's in front of us is very alarming," Knisley said.

BY THE NUMBERS

200,000: Acre feet of water in a full Rye Patch Reservoir.

900,500: Approximate amount currently in reservoir.

80 percent: Irrigation allotment to Lovelock farmers in 2012.

10 percent: 2012 irrigation allotment.

Zero: This year's allotment.

Source: Pershing County Water Conservation District.



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Drought Prompts Reno To Tap Into Water

Reserves

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Tuesday, June 24, 2014 | Sacramento, CA | [Permalink \(/26710\)](#)



morganhh / Flickr

This year, the Truckee River will be the lowest it's been in 20 years.

A water manager in the Reno area says the Truckee River is expected to be reduced to "just a trickle" in some places this year because of the drought.

The Truckee Meadows Water Authority's Andy Gebhardt, says for the first time in 20 years, the agency will release "banked" water from Independence and Donner Lakes to keep the taps flowing.

"The river is going to drop out and in order to provide enough water for the community we have to release some of our water out of there and start using that," says Gebhardt.

Gebhardt says the authority plans for a maximum of 9 years of drought. This is the third year of the current drought.

The Authority is asking people to cut outdoor water use by 10 percent and it's expanding mandatory no-watering times.

Gebhardt says more restrictions could be on the way.

"It depends on what is going to happen," says Gebhardt. "We just don't know, it is a mother nature crap shoot."

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Comments



'It's going to be awful': Drought hampers Nevada boating

Jeff DeLong, RGJ 7:14 a.m. PDT June 26, 2014



(Photo: HILARY SWIFT/ RGJ)

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The irony doesn't escape Aaron Rudnick.

To maintain legally mandated flows of the Truckee River, the federal water master released more water from the Lake Tahoe Dam into the river earlier than usual this spring. That allowed Rudnick to start

renting rafts to folks wanting to drift that slow-moving stretch of the river between the dam and the Alpine Meadows area a few weeks ahead of normal.

Problem is, early season business is slow and he doesn't know how much longer he'll be able to operate during this drought-impacted year. He's concerned Truckee River Raft Co. will miss the busiest part of the summer season, that he could be forced to pull his rafts out of the water even before the Fourth of July.

"Right now it's OK, but in a few weeks it's going to be awful," Rudnick said. "It's the first time we've had the water but not had the people, ever."

Most years, hundreds of people daily rent rafts in a season that often lasts through summer until Labor Day. This year, Rudnick expects to shut down operations by mid-July at the latest, idling more than 80 seasonal workers at significant economic cost to the Tahoe City area.

"It's not looking very good," Rudnick said.

In Nevada, other popular boating destinations are in worse shape. The boat ramps at Lahontan and Rye Patch reservoirs are closed. Boaters can still launch from shore, but they do so at their own risk. Rangers warn of rock and sandbar hazards.

Boats need water, and in this third year of drought, it's a scarce commodity.

"In general, it's reduced," Nevada State Parks administrator Eric Johnson said of boating-related recreation in western Nevada.

The three-year drought has resulted in two back-to-back years of low water at Lahontan, which has experienced a 90 percent reduction in boating activity compared to 2012 and an associated drop in camping of 30 percent in May and 40 percent in June. June boating at Rye Patch was down 49 percent and camping 51 percent.

Lake Tahoe is low as well, but of course still has lots of water. Despite that, Johnson reports a 53 percent reduction in the number of boats launched at popular Sand Harbor State Park in May 2014 compared to May 2012 — 146 vessels compared to 308. The Sand Harbor boat ramp is expected to close by July 1.

Last winter, declining water levels prevented popular paddle wheel tour boats from entering Emerald Bay. Spring snowmelt raised lake levels sufficiently to allow the M.S. Dixie II and Tahoe Queen to return to the landmark site and, for now, business

and boating conditions are good, said John Kenny, general manager of the tour boat operation.

"We're doing good right now. It's going to get tougher later," Kenny said.

"Realistically, we might have some problems, but we're hoping for a full season."

Tahoe's marinas are starting a busy summer, but some have already conducted or are planning to dredge channels to keep it that way. Among them is Tahoe Keys Marina, which needs to dredge to allow sailboats to enter and leave the marina, said manager Chad Holdren.

Dredging was recently completed at Meeks Bay Resort, said Bob Hassett, who manages the marina there as well as at Tahoe's Camp Richardson Resort and Round Hill Pines Beach Resort.

Lake Tahoe might actually benefit from the drought as boaters leave other drought-ravaged lakes such as California's Folsom Lake and take their vessels to Tahoe, Hassett said.

"We're in better shape than many places because we have so much water here," Hassett said. "We're hoping for a very good year just because we are in better shape than many places."

Lowering water levels at Tahoe will bring problems later in the summer as more obstacles come near the surface in places where they are normally deep underwater.

"It's going to be an issue this year," said Chief Travis Fraser of the U.S. Coast Guard's Tahoe station. "Rocks that were covered by 1 or 2 feet of water last year might be covered by only an inch or two."

That could make for a dangerous, hull-crunching hazard. Fraser's advice to boaters: Take it slow in unfamiliar areas and make sure you have required life jackets and other lifesaving gear, a marine radio or at least a cellphone to report problems.

"As the water lowers and boating traffic increases, the potential is high" for accidents, Fraser said. "The thing to do is slow down."

BOATING AT NEVADA STATE PARKS

- Lahontan Reservoir: Boat ramps closed; 90 percent decrease in boating activity compared to 2012.
- Rye Patch Reservoir: Boat ramps closed; 49 percent decrease in June boating activity compared to 2012.
- Sand Harbor State Park: Boat ramp should close soon; 53 percent decrease in May boating activity compared to 2012.
- Lake Tahoe Marinas: Open and busy; some are dredging channel openings

Here's how to cut water use during drought

Jeff DeLong, RGJ 10:17 a.m. PDT June 26, 2014



(Photo: RGJ FILE)



When Reno-area residents are asked to cut back on water use a few weeks from now, the targeted reduction of 10 percent shouldn't be difficult to achieve.

"I think it's very easy," said Andy Gebhardt, manager of customer services for the Truckee Meadows Water Authority.

The request, expected in late July or early August at the latest, will come at the point when the water authority is forced to tap its drought reserves to meet summer demand. No changes in water use habits are sought before then.

"That's when it can really help us," Gebhardt said. "That's when we will be dipping into our savings account."

The water authority — jointly operated by the cities of Reno and Sparks and Washoe County — hopes to achieve the 10 percent reduction by cutting back on outdoor watering, with no reduction in indoor water use believed necessary. During the summer, the average customer's water use is about four times higher than the rest of the year due to outdoor water use.

Ways to achieve the reduction, utility officials say, are relatively simple:

- Reduce your hose timer by 10 percent. If you water your lawn at 10-minute cycles, adjust sprinkler clocks to 9 minutes.
- Set sprinkler controllers at a 90 percent budget (sometimes called a seasonal budget).
- Do not spray water on a driveway or sidewalk.

Once the utility begins using drought reserves, the amount of time during which watering will be prohibited will be expanded by two hours — from the current period of noon to 6 p.m. to 11 a.m. to 7 p.m.

Do not water when it's windy, Gebhardt said, "because it's not doing you any good."

Make sure your sprinkler heads are spraying water where you really want them to. Check irrigation systems, including drip lines, for leaks. Always fix a shutoff nozzle to a hose.



Improvements

This article was published on [06.26.14](#).



A water truck sprays water on Tenth Street in Sparks to hold down the dust. The pavement on Ninth and Tenth streets has been removed in preparation for a water main replacement project. Controls for the mains are in the foreground awaiting installation. On April 17, a repair crew was called out in the a.m. hours to repair a main one block from this location that had begun leaking ("Urgent call," RN&R, April 24).
PHOTO/DENNIS MYERS

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June 29, 2014

The Water Crisis in the West

Introduction



In California, cutbacks in state water deliveries

are forcing some growers to fallow fields. Jae C. Hong/Associated Press

With water increasingly scarce in the drought-ravaged American West, many states [could face drastic rationing](#) without rain.

Even with more sustainable practices, the future of water in the West is not secure. Population growth, conflicting demands for resources, and the unpredictable nature of a changing climate will all exacerbate the crisis of an [already parched landscape](#).

What are the best ways to share the water? And how can we ensure it lasts for the foreseeable future?

[Read the Discussion »](#)

Debaters

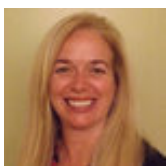


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[How We Should Pay For Water](#)

Robert Glennon, author, "Unquenchable"

We need to price water appropriately: people who use more should pay more.



•

[Recycled Water Is Crucial](#)

Melissa L. Meeker, WaterReuse

Americans have embraced “sustainability” in so many aspects of modern life, but not when it comes to water resources.



•

[Allow Water Rights Trading](#)

Ellen Hanak, economist

Those with older, more valuable water rights should be able to lease or sell their water to the have-nots.



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[Conserve Energy to Save Water](#)

Newsha Ajami, urban water policy expert

Have you ever considered how much water is needed to power your lights, computers and cars?



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[To Save Water, Change Your Diet](#)

Arjen Y. Hoekstra, University of Twente, Netherlands

An incredible 40 percent of the water consumed by Americans goes into meat and dairy production.



•

[Shared Sacrifices for Cities and Farms](#)

Pat Mulroy, University of Nevada, Las Vegas' Brookings Mountain West

California's flawed water system can't track usage

Jason Dearen and Garance Burke 9:13 p.m. PDT June 28, 2014



(Photo: Jae C. Hong/AP)

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SAN FRANCISCO – Call them the fortunate ones: Nearly 4,000 California companies, farms and others are allowed to use free water with little oversight when the state is so bone-dry that deliveries to nearly everyone else have been

severely slashed.

Their special status dates back to claims made more than a century ago when water was plentiful. But in the third year of a drought that has ravaged California, these "senior rights holders" dominated by corporations and agricultural concerns are not obliged to conserve water.

Nobody knows how much water they actually use, though it amounts to trillions of gallons each year, according to a review of their own reports by the Associated Press. Together, they hold more than half the rights to rivers and streams in California.

The AP found the state's system is based on self-reported, incomplete records riddled with errors and years out of date; some appear to be using far less water than records would indicate.

"We really don't know how much water they've actually diverted," said Bob Rinker, a manager in the State Water Resources Control Board's water rights division.

With a burgeoning population and projections of heightened climate-related impacts on snowpack and other water supplies, the antiquated system blunts California's ability to move water where it is most needed.

When gold miners flocked to the West in the 1800s, the state drafted laws that rewarded those who first staked claims on the region's abundant rivers and streams. Today, California still relies on that honor system, even during drought.

The system's inequities are particularly evident in California's arid Central Valley.

"In a good year, we wouldn't be able to stand here unless we got wet. This year, it won't produce anything," said second-generation rice farmer Al Montna as he knelt in the dust, pulling apart dirt clods on the 1,800 acres he left idle because of scarce water.

About 35 miles north, fourth-generation rice farmer Josh Sheppard had more than enough water, thanks to his water district's superior rights to Feather River water dating to the late 1800s.

"No one thinks of it when there's ample water and plenty to go around, but in these times of tightness it is a very contentious resource that gets fought over," Sheppard said, standing next to his flooded fields.

To find out how many entities hold these superior rights and how much water they use, the AP obtained the water board's database for 2010 — the last complete year

of water usage reports — and interviewed state officials and dozens of landowners.

The state only collects the records every three years on a staggered basis, meaning its information is always out of date.

Tom Howard, the board's executive director, acknowledged the state should get a better handle on water use. "Anything to improve the information we have would help," he said, citing the need for annual reporting of usage and real time stream flow data.

But he rejected any suggestions that special rights granted under the system should be ended. "People have made investments based on promises in the existing system. Towns grew up and land was developed based on promises of a secure water supply. Do we strand those investments to start over?" he said.

While much of the water reported by this group is consumed by people or farms, some of the biggest users generate hydroelectric power for profit then return that water to the river for use downstream. The state doesn't know how much is used for each purpose.

More than half of the 3,897 entities with active senior and riparian rights to water are corporations, such as the state's biggest utility, Pacific Gas & Electric Co., which creates hydroelectric power, and the Hearst Corp., which has water rights for its remote, Bavarian-style forest compound called Wyntoon.

Also among the biggest rights holders are rural water districts and government agencies such as the water departments of San Francisco and Los Angeles.

San Francisco, whose water rights date to 1902 when its mayor nailed a handwritten notice on a tree, also uses free Sierra Nevada water to generate power for its airport, schools and firehouses.

This year, the state cut water deliveries to farmers and cities by 95 percent, and the federal government also imposed sharp restrictions on its water customers. But companies, farmers and cities with water rights that pre-date 1914 were exempt this year from mandatory cuts, even though they collectively are the biggest water users in the state.

The AP independently verified that just 24 of the rights holders reported using more than twice the volume of water that California's vast system of state and federal dams and aqueducts ships to cities and farms in an average year.

As summer looms, some water scientists question the utility of conservation efforts that do not restrict consumption by most water users with old rights. "Obviously, senior water rights holders have the most to benefit from the current system," said Peter Gleick, director of the nonpartisan Pacific Institute.

Those with century-old rights say the system works well because it provides a reliable supply of water. And in a drought, the state lets some of them sell any extra water, at the market rate.

The water board does not require monitoring or meters for users whose rights date back a century or more, or who have rights to draw from a waterway adjoining their land.

Rights holders have successfully defeated legal and legislative efforts to strengthen California's oversight, said Andy Sawyer, an attorney with the board.

California made progress toward accountability in 2009, when a new law required

rights holders to report their water use and gave the board power to punish them for failing to file statements properly. But the rights holders could gain exemption from the strict monitoring requirements in that law by convincing authorities it was too costly.

The water board doesn't have staff to systematically check even obvious mistakes in the records, said Aaron Miller, a board senior engineer. He said the state nonetheless uses this inaccurate data to make decisions about when to grant new water permits.

Editorial: Water is too important to waste

The opinion of the RGJ's Editorial Board 10:33 a.m. PDT June 29, 2014



(Photo: Marilyn Newton/RGJ)



We live in an area that is prone to droughts.

It shouldn't be necessary to remind anyone who's live here for any length of time of that fact.

But it is.

That's because it's so easy to forget that *dry* is the natural state of the climate in these parts, thanks in large part to the shadow effect of the Carson Range to the west.

Instead, we're lured into think that *wet* is normal — by the lakes to the west (Tahoe) and north (Pyramid), by the sometimes lush landscaping, by the golf courses. This is the Truckee *Meadows*, after all, not the Truckee *Desert*.

It was just a few years ago (2011, to be exact) that we were talking about how much water we had. That winter, the snowpack was reported to be double the normal reading, and ski resorts were celebrating; Lake Tahoe was more than 200 percent of normal; and, in the Truckee Meadows, the talk was about how we were going to prevent a repeat of the New Year's Flood of 1997. Drought was the furthest thing from our minds (although officials warned us that "the drought isn't over").

How things have changed.

If anyone needed a reminder of the true nature of our environment at 4,500 feet of elevation and sitting on the western edge of the Great Basin, the summer of 2014 should be as big a reminder as we could ever ask for.

As the Gazette-Journal's Jeff DeLong reported in a series on the current three-year-old drought this past week, it is as bad today as it's been in recent memory. For the first time in about 20 years, residents will be asked later this summer to cut back on their water use by at least 10 percent to help minimize the need to dip into drought reserves.

There should be no question of compliance with the request. Water is far too precious a resource to waste, and we all benefit from conservation.

Not for growth

It's important for every to understand what *won't* happen when we conserve water. Officials won't turn around and use that water to fuel growth in the Truckee Meadows and surroundings. They can't.

Overall, Northern Nevada has been pretty smart when it comes to doling out the limited amounts of water that are available, thanks to a complex system of water rights developed by more than a century of wrangling among various Indian tribes, ranchers, water purveyors, politicians and the courts.

No one gets to use significant amounts of water, not even homeowners, without the

rights to the water (held for residential developments by the Truckee Meadows Water Authority, Washoe County or another water supplier), and new rights aren't being created. Want to build a 50-lot subdivision or a factory? Obtain the necessary water rights (including an additional percentage for drought storage) first.

Compare that to Southern Nevada, where builders build and the water district provides the water, even if it has to build a new pipeline to Lake Mead or buy water rights 300 miles away in rural Nevada.

As DeLong vividly demonstrated in his series, however, the water shortage doesn't just affect your landscaping or your ability to take a nice, long shower.

Water affects everything that we love about Northern Nevada, from recreation opportunities (boat ramps that lead not to water but to dry land in a drought, for instance), to wildlife (the lack of water could have a bigger impact on sage grouse and wild horses than any other factor), to the wildlands (fire restrictions go into effect in western Nevada on Monday), to economic development (if a project needs a lot of water, it may have to look elsewhere).

So conservation isn't simply about following seemingly arbitrary (they're not) rules about the days and times we water our lawns. It's about protecting our way of life in Northern Nevada.

Wet year or dry, water simply is too important to take lightly ... or waste

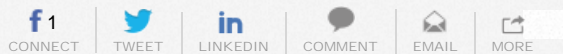
Tales of California water rights holders

Jason Dearen and Garance Burke 9:13 p.m. PDT June 28, 2014



(Photo: Jae C. Hong/AP)

how they obtained the right to draw water from waterways and how they use it:



SAN FRANCISCO – Nearly 4,000 corporations, farms and others hold senior water rights in California, exempting them from government-mandated cuts in water use during the third year of drought. Here is a look at some of them, along with

San Francisco

In a Sierra Nevada hamlet of Moccasin near Yosemite National Park, San Francisco's official seal adorns art deco-style buildings facing a hydroelectric plant and reservoir. Though located 140 miles east of the city, the plant is run by its employees.

Tuolumne River water rushes through the plant, creating electricity, then into Moccasin reservoir before being carried by tunnels to San Francisco Bay Area taps.

The city pays just \$30,000 annually for the right to use pristine water for drinking and electricity for the airport, schools and firehouses.

The sweet deal is thanks to San Francisco Mayor James Phelan, who in 1902 tacked a handwritten notice on an oak tree over the mighty Tuolumne's Hetch Hetchy Gorge.

That note was all it took in those days to claim the water, and today San Francisco is among the lucky few that enjoy the state's highest-level rights to use of water from rivers and streams. And that's especially valuable during drought, when the state is cutting deliveries to everyone else.

"The system seems cumbersome to a lot of people, and it certainly is," said Steven Ritchie, assistant general manager at San Francisco's Public Utilities Commission. "It certainly works for San Francisco."

Hearst

On the Upper McCloud River near Mount Shasta sits a rustic estate, perched amid ponderosa pines on 67,000 acres. The gingerbread-style buildings and Julia Morgan-designed main house are Hearst Corp.'s Wyntoon — the other, less well-known Hearst castle.

The Hearst family claimed water rights on the McCloud in the 1920s, and today the corporation still holds those rights, which provide water for fountains, fire protection, irrigation and domestic purposes.

While the state's rights system allows Wyntoon to draw the water it needs, the nearby town of Montague, which has no such water rights, is perilously close to running out of water for its 1,500 residents.

Still, the state doesn't know how much water Wyntoon uses. Records putting the estate's reported water usage at 1.8-million acre-feet in 2010— enough to sustain

more than 7 million people — are wildly inaccurate, said Hearst Corp. spokesman Paul Luthringer.

Actual use, he said, is 448 acre-feet.

It appears to be one of a number of cases where water use was mistakenly reported or recorded as acre-feet instead of gallons, and It's not clear how many of the nearly 4,000 rights holders use more or less water than state records show.

Hearst didn't know about its records problem until contacted by AP. "We are concerned and will contact the agency about the discrepancy," Luthringer said.

Hayashi

The Hayashi family was part of a pioneering group of Japanese-American farmers who settled along the central California coast to till the land about a century ago.

They planted bush peas near what is now San Luis Obispo, but California's Alien Land Act, enacted in 1913 and later struck down, prevented the Hayashis and other non-U.S. citizens from owning land.

The family eventually got their own parcel when a friend who was a U.S. citizen bought it and sold it to them, said Alan Hayashi, a third-generation farmer who manages Y. Hayashi & Sons' office.

In the 1930s, the family started using water from the Arroyo Grande creek next to their farm. This simple act established the family's superior right to the water and has helped to sustain their business, he said.

But after Japan's attack on Pearl Harbor drew the nation into World War II, Hayashi's forebears were sent to an internment camp for people of Japanese heritage. Farming came to an abrupt halt, and crops were left in the fields.

Friends and neighbors watched over the family's land to keep it from being taken, Hayashi said. But, when the elder Hayashis returned several years later, they continued to face discrimination.

"While some people were still calling names, there were others who said, 'if you need to use my tractor, use my tractor,'" Hayashi said.

Today, the family uses its water rights to irrigate about 94 acres of leafy green vegetables, strawberries, corn and tomatoes.

Hayashi was surprised to learn that state records showed the farm had used 875,000 acre-feet of water in 2010 to irrigate its farm.

"That's a huge, crazy number," Hayashi said. In reality, he said, they only used about 550 acre-feet.

Joint Water Districts Board

As the air warms and soil is plowed for planting, water master Donnie Stinnett prepares for rice farmers' springtime ritual: flooding the fields with water.

The farmers who belong to the Joint Water Districts Board Stinnett manages about 60 miles north of Sacramento face no drought-related restrictions this year because they have century-old water rights.

In the 1880s, farmers, land developers and investors established them by building canals from the Feather River to nearby fields, said the district's attorney, Paul

Minasian.

By 1904, he said, a group of landowners signed an agreement to buy and distribute some of the water from what became known as the Sutter Butte Canal, cementing the right to the water.

The Joint Water Districts Board now operates that same canal for four water districts that inherited the water rights.

When state water officials dammed the river and built Lake Oroville, the districts retained the right to use 555,000 acre-feet in the typical growing season, except in conditions that are more extreme than the current drought.

They use the water to irrigate rice, alfalfa, row crops, and fruit and nut orchards. And the flooded rice fields double as habitat for migratory birds.

Hacienda

A quiet retirement community in Carmel seems a most unlikely candidate to be listed among state's top water users — but California water data showed the Hacienda Carmel Retirement Community had reported using roughly 8.36 million acre-feet from the Carmel River in 2010 — more than Los Angeles or San Francisco.

"Obviously, 8 million acre-feet is a small inland sea, so it's just not reasonable," said accountant Jeanne Mileti. "It was just a clerical error, so I'm talking to them and getting it rectified."

The 300-home condo community was built in 1962 on about 50 acres next to the Carmel River, said general manager Robert Hedberg.

The facility uses its water rights to irrigate the grounds, including the trees and lawns. But, out of sensitivity to the state's water shortage, the community recently started converting to drought-resistant landscaping and installing rainwater collection barrels to conserve water.

"We have made a good start at changing over because we recognize the need for change in that regard," Hedberg said

1. PLEASE SHARE! TMWA's drought supply reservoirs – Donner and Independence Lakes – are full. Until there is room in the reservoirs, TMWA has no place to store additional conserved water. TMWA is planning to use drought reserves as late in the summer as possible and will ask customers for their help in conserving when it counts. READ MORE: <http://is.gd/RenoWaterFAQ>



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TMWA answers questions about drought, water conservation

 June 29, 2014 by [ThisIsReno](#)  [Leave a Comment](#)



0 Sidenotes

TMWA Water Supply Update and Forecast+

Overview: At the end of July, TMWA customers will be asked to reduce their outdoor water use by 10% and not water from 11 a.m. to 7 p.m. When mandated Truckee River flows cannot be sustained, and drought reserves are needed, TMWA ask customers for additional conservation. Fortunately, TMWA has planned for these types of dry cycles and will be able to use i upstream drought reserves to augment reduced river flows, as well as use its groundwater reserves, to meet customer demands. July is the time when our customers can make a difference by conserving water, which will reduce the amount of drought reserve TMWA needs to release.+

When will “Reduce Your Use by 10%” start?+

TMWA will begin asking customers to “Reduce Your Use by 10%,” and avoid watering between 11 a.m. and 7 p.m., when manda river flows cannot be sustained and drought reserves are needed. This is projected to happen in late July. Reservoir releases from Lake Tahoe and Boca Reservoir (which are not TMWA drought reserves) are required to meet mandated river flows at the CA/NV state line. These releases are administered by the Federal Water Master under court decrees from the 1940’s. The current water supply forecast shows that upstream reservoir storage will be sufficient to provide releases for the required rates of river flow thro the end of July. When the water levels in Lake Tahoe and Boca Reservoir are no longer sufficient to release water for minimum f Truckee River flows will begin to drop off. At that time, TMWA plans to make releases from our drought storage reservoirs (Donn and Independence Lakes) to supply water to our treatment plants. *That is the time* when we will be asking our customers for thei assistance. By reducing outdoor water use by 10%, customers will help minimize the amount we need to release from drought reserves.+

Can't TMWA save conserved water now?+

The good news is that right now, TMWA's drought supply reservoirs – Donner and Independence Lakes – are full. Until we have room in our reservoirs, TMWA has no place to store additional conserved water. We are planning to use our drought reserves as in the summer as possible and will ask our customers for their help in conserving *when it counts*, which will be when we start using those reserves. TMWA will continue its three-day-a-week watering schedules throughout the summer and encourages everyone to use water responsibly. Our customers have always been diligent about conservation and are encouraged to keep up the good work.

Why only focus on outdoor watering? +

The average customer's water use is approximately four times higher in the summer, due to outdoor water use. Customers have a great conservation ethic and are already very efficient using water indoors. So, focusing on outdoor water use is where we can get the biggest impact in water savings.+

Why 10%?+

Projections show a 10% reduction in water use during late summer will allow TMWA to keep Independence Reservoir full this year and result in robust drought reserves for next year, should the dry cycle continue.+

Why is there no watering from 11 a.m. to 7 p.m.?+

The no-watering times will be expanded from noon – 6 p.m. to 11 a.m. – 7 p.m. This is at the hottest and windiest time of the day when more water is lost to evaporation and saves more water. It is also one of the measures to be deployed when river flows are impacted before Labor Day (as cited in TMWA's 2010-2030 Water Resource Plan).+

How will the community be informed?+

TMWA will begin an educational, community outreach plan on radio, print, TV and online. We will start the campaign about a week in advance to remind our customers of how they can help.+

How much water do we get from the Truckee River? +

The amount of water that TMWA draws from the Truckee River is probably a lot less than you would think. Typically, TMWA meets more than 85 percent of our annual customer demand using the Truckee River. Yet, the aggregate, TMWA is the smallest major user on the river system, only using eight percent during a dry year and three percent in a normal year.

How is the Truckee Meadows prepared for a drought?+

Drought is a natural occurrence in the high desert and this community is well prepared. We are fortunate to have a robust supply system of upstream reservoirs and underground reserves available for use during dry years. Groundwater supplies are also enhanced and protected each winter when TMWA injects approximately five million gallons of treated water *per day* through its wells into the groundwater aquifer for future drought-year use.+

TMWA plans for dry years. Our staff continually monitors weather and snowpack conditions and plans for a nine-year dry weather cycle, which is one year longer than the worst drought on record. For a deeper look at TMWA's resource planning, see the "2010-20

Water Resource Plan” can be downloaded here: www.tmwa.com/water_system/resources/2030wrp. Portions of the plan, which was adopted by the TMWA Board of Directors in 2009, are incorporated into the Regional Water Management Plan which is maintained by the Western Regional Water Commission. +

In addition, this is a community that has always focused on water conservation, not only in dry years, but in plentiful years. The average household is using 15 percent less water than 10 years ago. Our citizens have always valued our precious water resources and conservation. Here’s more information on our water resources: www.tmwa.com/water_system/resources/2030wrp. +

Assigned-Day Watering details:+

Assigned Day Watering is in effect. As a reminder, each home or business has three days to water each week. If the last number of your home or business address is even (0, 2, 4, 6, 8), please water on Tuesday, Thursday and/or Saturday. If the last number of your home or business address is odd (1, 3, 5, 7, 9), water only on Sunday, Wednesday and/or Friday. Please don’t water on Monday, as it is a day of rest for the water system, giving it a chance to recharge. Starting the end of July, please do not water from 11 a.m. to 7 p.m. Keep in mind weather-wise watering: water deeper and less often; water at cooler times of day to avoid high temperatures; never water when it is windy; and reduce watering in the fall to help lawns and plants go dormant. +

How will the conservation rules be enforced?+

We are serious about encouraging responsible water use and preventing waste. If you see water being wasted, please let us know and call the conservation department at 834-8005, or use this form:

www.tmwa.com/conservation/assigned_day_watering/report_waste. Those customers who waste water will be contacted. We will have staff patrolling during the summer and will look out for water waste, as we have done for many years. +

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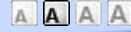
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Truckee River water flow at the minimum

Video Images



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RENO, Nev. (MyNews4.com & KRNV) -- The Truckee River was visibly lower on Tuesday, and it has little to do with the changes caused by a third straight summer of drought.

The Truckee River must maintain a water flow rate of 500 cubic feet per second, and on Monday, the river lost 150 CFS as runoff from the Stampede Reservoir in Truckee was shut off.

State Climatologist Doug Boyle watched from Rock Park as the water dropped. "Up till July 1, they were running an extra 150 CFS for the fish that was being released out of Stampede."

County and tribal stream flow permits end in July, and officials from the Federal Water Master's office said the area has enough storage to maintain 500 CFS through the rest of the month. The Stampede water, in part, was used to sustain a healthy fish habitat.

Nevada Department of Wildlife Public Information Officer Chris Healy said river flow will be manageable through the summer. "They're not going to be ideal for fishermen or ideal for people who want to wade the river."

He also says fish are searching for cold, oxygenated water and those deep, shaded holes are now fewer and far between

In dry California, water fetching record prices

In bone dry California, water fetching record prices as sellers cash in on drought

AP By Garance Burke, Associated Press Writer
July 2, 2014 1:32 AM



SAN FRANCISCO (AP) -- Throughout California's desperately dry Central Valley, those with water to spare are cashing in.

As a third parched summer forces farmers to fallow fields and lay off workers, two water districts and a pair of landowners in the heart of the state's farmland are making millions of dollars by auctioning off their private caches.

Nearly 40 others also are seeking to sell their surplus water this year, according to state and federal records.

Economists say it's been decades since the water market has been this hot. In the last five years alone, the price has grown tenfold to as much as \$2,200 an acre-foot — enough to cover a football field with a foot of water.

Unlike the previous drought in 2009, the state has been hands-off, letting the market set the price even though severe shortages prompted a statewide drought emergency declaration this year.

The price spike comes after repeated calls from scientists that global warming will worsen droughts and increase the cost of maintaining California's strained water supply systems.

Some water economists have called for more regulations to keep aquifers from being depleted and ensure the market is not subject to manipulation such as that seen in the energy crisis of summer 2001, when the state was besieged by rolling blackouts.

"If you have a really scarce natural resource that the state's economy depends on, it would be nice to

have it run efficiently and transparently," said Richard Howitt, professor emeritus at the University of California, Davis.

Private water sales are becoming more common in states that have been hit by drought, including Texas and Colorado.

In California, the sellers include those who hold claims on water that date back a century, private firms who are extracting groundwater and landowners who stored water when it was plentiful in underground caverns known as water banks.

"This year the market is unbelievable," said Thomas Greci, the general manager of the Madera Irrigation District, which recently made nearly \$7 million from selling about 3,200 acre-feet. "And this is a way to pay our bills."



In this May 1, 2014 photo, irrigation water runs along a dried-up ditch between rice farms in Richva ...

All of the district's water went to farms; the city of Santa Barbara, which has its own water shortages, was outbid.

The prices are so high in some rural pockets that water auctions have become a spectacle.

One agricultural water district amid the almond orchards and derrick fields northwest of Bakersfield recently announced it would sell off extra water it acquired through a more than century-old right to use flows from the Kern River.

Local TV crews and journalists flocked to the district's office in February to watch as manager Maurice Etchechury unveiled bids enclosed in about 50 sealed envelopes before the cameras.

"Now everyone's mad at me saying I increased the price of water. I didn't do it, the weather did it," said Etchechury, who manages the Buena Vista Water Storage District, which netted about \$13.5 million from the auction of 12,000 acre-feet of water.

Competition for water in California is heightened by the state's geography: The north has the water resources but the biggest water consumers are to the south, including most of the country's produce crops.

The amount shipped south through a network of pumps, pipes and aqueducts is limited by the drought and legal restrictions on pumping to save a threatened fish.

During the last drought, the state Department of Water Resources ran a drought water bank, which helped broker deals between those who were short of water and those who had plenty. But several environmental groups sued, alleging the state failed to comply with the California Environmental Quality Act in approving the sales, and won.



This year, the state is standing aside, saying buyers and sellers have not asked for the state's help. "We think that buyers and sellers can negotiate their own deals better than the state," said Nancy Quan, a supervising engineer with the department.

Quan's department, the U.S. Bureau of Reclamation and the State Water Resources Control Board have tracked at least 38 separate sales this year, but the agencies are not aware of all sales, nor do they keep track of the price of water sold, officials said.

The maximum volume that could change hands through the 38 transactions is 730,323 acre-feet, which is about 25 percent of what the State Water Project has delivered to farms and cities in an average year

in the last decade.

That figure still doesn't include the many private water sales that do not require any use of government-run pipes or canals, including the three chronicled by the AP. It's not clear however how much of this water will be sold via auctions.

Some of those in the best position to sell water this year have been able to store their excess supplies in underground banks, a tool widely embraced in the West for making water supplies reliable and marketable. The area surrounding Bakersfield is home to some of the country's largest water banks.

The drought is so severe that aggressive pumping of the banked supplies may cause some wells to run dry by year's end, said Eric Averett, general manager the Rosedale Rio Bravo District, located next to several of the state's largest underground caches.

Farther north in the long, flat Central Valley, others are drilling new wells to sell off groundwater.

A water district board in Stanislaus County approved a pilot project this month to buy up to 26,000 acre-feet of groundwater pumped over two years from 14 wells on two landowners' parcels in neighboring Merced County.

Since the district is getting no water from the federal government this year, the extra water will let farmers keep their trees alive, said Anthea Hansen, general manager of the arid Del Puerto Water District.

Hansen estimated growers would ultimately pay \$775 to \$980 an acre-foot — a total of roughly \$20 million to \$25.5 million.

"We have to try to keep them alive," Hansen said. "It's too much loss in the investment and the local economy to not try."

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■ Farmers in Nevada look with longing at water that goes to lawns, not crops

In some parts of the drought-ridden state, farmers are getting no water while sprinklers abound in Reno

July 11, 2014 5:00AM ET

by [Steve Friess](#) - [@stevefriess](#)

RENO, Nev. — A sprinkler head had cracked, so water spurted not only into Amanda Beyer's thriving flowerbeds and lush lawn but also onto the driveway and then into burbling pools in the gutter. Rather than be concerned, Beyer was defiant, offended by anyone pointing out the waste of the region's most precious resource at a time when farms a few miles away were browning.

"It's none of your or anybody else's business," she said through the screen door as the water continued to gush before she slammed her front door. "We pay our water bills. I'll get the thing fixed whenever I get around to it. Until then, that's the way it is."

As brash as Beyer is about it, she's also right. As one of 400,000 residents of the Reno-Sparks area, which is mainly served by water that flows from rivers sourced at Lake Tahoe, she's under no legal obligation to change her approach.

In fact, while the folks at the Truckee Meadows Water Authority (TMWA), which oversees her

service, don't condone or encourage such wanton and brazen waste, they also spent the spring reassuring customers that the extreme drought that has parched swaths of California and Nevada agricultural areas will have minimal impact on urbanites.

"We are fortunate to have a robust supply system of upstream reservoirs and underground reserves available for use during dry years," a [FAQ page](#) on TMWA's website explained as recently as early June. The missive suggests customers "continue to be diligent in using water," but the only specific restrictions — and TMWA brass bristle at the use of "restrictions" — are alternating assigned days for watering lawns and a prohibition on daytime watering. In late June, the TMWA added to that a request that as of late July customers shave a few minutes off each cycle as a conservation measure. Further requests may come as the summer progresses, but they're voluntary.

Ranchers and farmers in the surrounding area, unsurprisingly, are envious and irritated. The distribution of water from the Truckee and Carson rivers is set forth by decades of law and negotiation, but times like this — the third year of a brutal drought — often exacerbate dueling interests of city life and agriculture.

It's all about planning

Unlike in [Northern California](#), where both farmers and urbanites are being forced to cut back in substantial ways this summer, in these parts the drought's damage is almost entirely absorbed in rural areas.

The U.S. Bureau of Water Reclamation, who determines water distribution from Tahoe, has dictated that the rural areas get just 45 percent of their normal water allotment this year — meaning the water for agricultural irrigation will be shut off later this month for the year.

“I’d
love
it if



A sprinkler nourishes some new grass seed in Reno, Nevada, where despite the drought elsewhere in the state, residents have plenty of water.

Steve Friess

they would share, but those are long-standing water rights,” said Nathan Wadsworth, an alfalfa farmer in Fallon, about 60 miles east of Reno. “It seems more fair, doesn’t it, that if we’re at 45 percent, they should be at 45 percent? It’s not right. It’s all politics.”

TMWA officials insist it’s actually all about planning. The water from the Truckee River will dry up for everyone this summer, but the utility owns a [variety of water rights](#) aside from what it gets from Lake Tahoe and has two key reservoirs, Donner and Independence lakes, that remain full of water stored in years of plenty. These contingencies, which cities in Northern California don’t have, were arranged to provide for Reno-area residents for this very situation.

“I’m sure there is some tension” between the city and the farms, said John Erwin, the TMWA’s director of natural resources planning and management. “Our job is to meet the demands of our customers. That’s why our system is designed the way it is. We design it to meet an eight-year drought cycle, which is somewhat unheard of in planning in the West.”

Those backup plans, Erwin said, were funded by rate payers. So, Erwin said, “The question is, is there anything wrong with asking our customers, ‘Let’s save more water so we can leave more water in the river for someone else to use downstream’? And the next question is, ‘What is the benefit to this community to do that? Who’s going to pay us to do that?’”

Water flows toward money

Still, there are calls — albeit wistful, doubtful ones — for someone to do something. In January, as it became clear that the lack of snowfall foretold a miserable summer ahead for farmers, [fourth-generation rancher J.J. Goicoechea](#) said it’s troubling to see urbanites going on as usual while crops die, cattle herds are thinned out, ranchers go bankrupt and wildfire dangers surge.

“As farmers and ranchers are going under, people in Reno will still be able to wash their cars, and the fountains will still go on in town,” said Goicoechea, 39, a county commissioner in Elko County. “We should all be in this together.”

Erwin said Goicoechea’s remarks were baffling because the farmers in Elko County, in northeastern Nevada, get their water — or don’t, as is the case

this year — from an entirely different system. But Wadsworth, the Fallon farmer who could benefit if Reno allowed the use of extra water for irrigation to prolong the growing season, sounded a similar complaint.

“Here’s the way it works with the water. The farmers are on the bottom of the spectrum,” he groused as he rode a pickup truck across his family’s 500-acre spread. “So Reno, the Indians, everybody else gets their water before we do. We don’t have much power to fight it.”

Or as climatologist Kelly Redmond of the Desert Research Institute in Reno put it, “There’s a saying in the West. Water flows towards gravity, and it flows towards money.”

Use it or lose it

Perhaps, but water policy experts say the real force here is history. Many of the West’s water distribution arrangements were made decades or even a century ago, when high-desert agriculture was a sidekick industry to the region’s mining interests and then growing cities. One tenet of water rights throughout the American West is use it or lose it, so not using the water you get — even if it means helping out other regions in times of crisis — is an invitation for a federal court or water overseer to consider redistributing it permanently.

The cries from northern Nevada farmers to reconsider the arrangements are, intriguingly, mirror those from the southern metropolis of Las Vegas. The Vegas region, now at about 2 million residents, is largely locked into a limit of water it can take from the Colorado River that was set in 1922, when about

5,000 people lived in the area. The Southern Nevada Water Authority has controversially spent billions [building pipelines](#) and buying groundwater rights, all the while complaining that farmers in Southern California, who receive a larger allotment, are wasting huge amounts of Colorado River water with inefficient irrigation methods.

“These are classic Western water stories,” Redmond said. “The miners were first, and that’s what the water laws are based on — first in time, first in rights. The 19th century is still governing the Western water law even in the 21st century.”

Nonetheless, Erwin is well aware of the lousy image it projects to have Reno residents frolicking while the rest of the region is so thirsty. The TMWA’s obligation, though, is to its customers.

“I get it — shouldn’t we all be suffering?” he said. “Our system was designed to avoid that kind of suffering. We don’t want to go to more severe rationing unless we really had to.”

Dealing with Drought part 2 of 5: What's the best way to conserve water?

July 8, 2014 by TR Reno [Leave a Comment](#)



Dealing with Drought part 2 of 5

By Bob Conrad, video interview by Bob Conrad and Chris Vega

THIS IS RENO: What is TMWA's water usage and conservation potential by customer class?



Kim Mazeres, Truckee Meadows Water Authority: First up, let's discuss **commercial** customers. Keep in mind that commercial customers pay for their water twice—from TMWA for delivery, and for sewer as they are billed by volume of water used—often times significantly more than their water bill.

Irrigation customers pay the highest rate per 1,000 gallons.

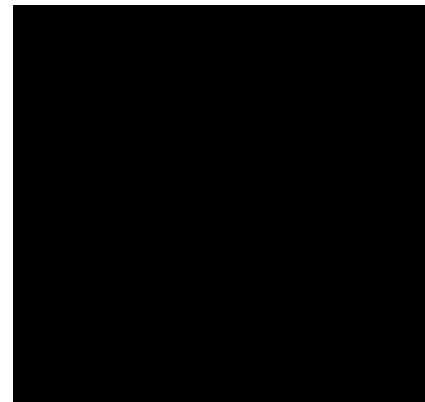
These customer groups are very motivated to be as water efficient as possible, and they find every possible way to save water.

That leaves the **residential** customers. Indoor usage has become dramatically more efficient with modern, low-flow fixtures and appliances. The average usage for a family of four in the winter, which is all indoor use, is 6,000 gallons per month. That leaves outdoor usage. The average metered-residential customer uses 21,000 gallons a month in the summer, or 15,000 gallons a month outdoors on landscaping.

That being said, residential metered customers are paying for the water they use and have a reminder and trigger every month when they pay their bill. Anything that is not normal is usually noticed. For flat-rate customers, that might not be the case, unless they constantly review the monthly water usage which is on their bills.

As you can see by the graphs supplied (at right). The biggest portion of our water use, over 61 percent, is by residential customers. It makes sense to concentrate our efforts there.

Is it safe to say that targeting cumulative water usage for conservation during specific times (i.e., summer, outdoor irrigation by residential



About this series

This is Reno sat down with Kim Mazeres, Truckee Meadows Water Authority's director of customer relations, to explore the complex topic of how a water purveyor deals with the tough realities of drought. We sought to find out more about our area's water use in key areas:

1. How well prepared our region is to deal with drought.
2. Why TMWA schedules water conservation for specific times rather than year-round.
3. Why TMWA is tapping its reserves for the first time in 20 years.
4. Which water users are not targeted for conservation and why.
5. What rules and regulations require TMWA to act and

customers) is one of the best ways to get results from conservation when TMWA has to use its reserves? Why is this so?

Yes. First of all, we have planned well in advance and our drought reservoirs are full, so we have no place to save any water the community conserves at present. (We will create room when we start using these reserves.) Secondly: customers are very efficient indoors. Total production for a typical winter day is 30 million gallons. Right now, in the hottest part of summer, we are producing about 120 million gallons a day. We know that the difference is related to outdoor watering. Therefore, TMWA has asked customers to concentrate on efficient outdoor water use.

That is also why during this drought and while we are using our drought reserves, we are asking for 10-percent reduction in outdoor water use, as we believe it is our biggest bang for the buck and where the community should be focusing their efforts. And, 10 percent is very achievable – TMWA customers have responded positively in the past, and I know they will again.

This is where our customers can really help us – by all 94,000 of them reducing their outdoor water use just a small amount. With this help, we are projecting that all of the water in Independence Lake will be held over in case we need it next year. That is good insurance to have. (A 10-percent reduction will save 2,000 acre feet of water, or over 650 million gallons. We anticipate our customers will use 4,700 acre feet of drought reserves this summer, leaving us with 25,000 acre feet in reserve.)

When it comes to conservation, where does TMWA get greater results in terms of achieving reduced water use? [Previous news suggests](#) that targeting homeowners for better irrigation practices has been successful, but what other strategies are involved?

Our primary emphasis is always going to be where waste most frequently occurs. The big one is irrigation, i.e., sprinkler systems. Leaks, overly long watering cycles and broken or poorly set sprinkler heads always need to be addressed. Beyond that, adjusting valves in water features or evaporative coolers, and fixing leaky toilets really can produce a lot of savings. For example, we have found tens of thousands of gallons being wasted a month by an improperly set irrigation timer, a broken irrigation or drip line or a running toilet.

We always offer help to our customers who may not know what to do when they receive a high bill. If the bill is unusually high for property, we proactively contact the customer and advise of the high usage. If requested, we will come out to a customer's property and perform a water-usage review. We may find a leak, and we always offer advice on reducing use.

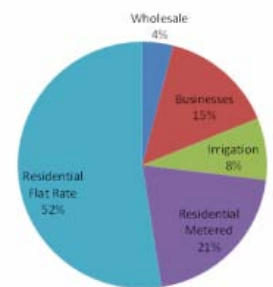
Usage reviews are free of charge. Simply contact us at 775-834-8080, option #2, and our representative will schedule one for your property. For the do-it-yourselfer, we have help in many forms: brochures, workshops, information on our website, how-to videos

when.

6. What key agreement, no court, will greatly improve our region's ability to respond to drought.

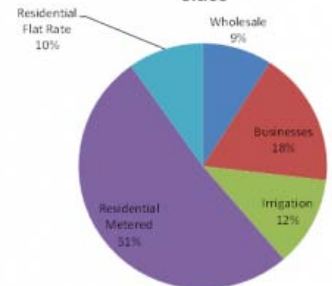
Video interviews accompany each post in this series, exploring these topics in more detail.

2003 Water By Major Customer Class



Click to enlarge.

2013 Water By Major Customer Class



Part 3 will be published tomorrow.

FIND OUT MORE

Here's more information on TMWA's water resources: www.tmwa.com/water_system/resources/2030wrp. For a deeper look at TMWA's resource planning, the "2010-2030 Water Resource Plan" can be downloaded here: www.tmwa.com/water_system/resources/2030wrp. Portions of the plan, which was adopted by the TMWA Board of Directors in 2010, are incorporated into the Regional Water Management Plan, which is maintained by the Western Regional Water Commission.



Tap out

Water supply reserves may be exhausted this summer

By Sage Leehey

This article was published on [07.03.14](#).

For the first time in 20 years, we'll be tapping into our water supply reserves this summer.

Truckee Meadows Water Authority says that the upstream drought reserves will be needed around the end of July or beginning of August. At that time, the Truckee River will be extremely low, too low for the flow standards set by the federal government to supply the area.

"We have water that we've stored in Donner and Independence reservoirs, and it's kind of like your savings account," said TMWA manager of customer services Andy Gebhardt. "We've just stored it up there waiting for, well, the opposite of a rainy day, a dry day."

The water flow standards for the Truckee River were set back in 1944 with the Orr Ditch Decree, and they require a certain amount of water flow in the area.

"As long as water is flowing out of Boca and out of Tahoe, they're meeting the demands," Gebhardt said. "About the end of July, beginning of August, that water's not going to flow anymore, and it'll be drastic. People will be playing in the river on one day, and the next day they're going to be saying, 'Where did all the water go?' It's going to be really low. At that point in time, in order to meet the community's needs, we're going to release some water."

But like a savings account, TMWA doesn't want to release more than absolutely necessary, so they will be asking for a 10 percent outdoor water usage reduction from the public. Currently, TMWA disallows watering from noon to 6 p.m., but when they begin using the reserves, they will extend that time period two hours. It will be from 11 a.m. to 7 p.m.

"You never know what next winter is going to bring, so we want to make sure that if we don't have to use it, we're not going to," Gebhardt said. "That's why we're calling on people to voluntarily take a look at their irrigation system, take a look at your sprinklers, get on leaks as soon as you can, make sure everything is operating properly. A 10 percent reduction is pretty easy. It can be as simple as taking a look at your sprinkler clock, and your cycles are probably on 10-minute cycles, take it to nine minutes."

TMWA is asking for reduction in outdoor water usage and not indoor water usage because indoor water usage reductions won't have the same effect. The indoor use is already relatively low, but as a community, we use four times the water in the summer than in the winter, and that's mainly for outdoor use, like watering the lawn.

Gebhardt said they will not be asking for the public to reduce their usage until just before TMWA taps into the reserves because reducing water at that time will help TMWA be able to store more water in the reserves for the future. Conserving water is always a good idea for the community, but it just won't have the same effect until TMWA has tapped into the reserves.

The river will be very low come the end of July and beginning of August, though, so Gebhardt said the public should be prepared for that.

"And if you're planning on floating the river, I would float it before the end of July," Gebhardt said. "You're going to be dragging rock a bit at the end of July and in August."



Andy Gebhardt is the customer services manager for Truckee Meadows Water Authority. PHOTO/SAGE LEEHEY

For more about the water supply forecast, visit <http://tinyurl.com/ky9xvc9>.

Advertisement

Water Secret Takes Fluoride Out
Free video reveals little secret which takes out fluoride and heavy metals out of your water. [Click here to watch this video.](#)



Ken:

Thanks so much for your concern regarding conservation. TMWA does encourage all customers to be water efficient. However, we are not in a position to change CC&R's in homeowners associations. The landscaping approvals are given by the respective jurisdictional agencies at the time subdivisions are approved. In Somerset's case, this approval would have been given by the City of Reno. In order to change your community's CC&R's, you would need to work through your homeowner's association. The good news is that it sounds like you are able to eliminate grass for junipers in the mow strip in your particular case.