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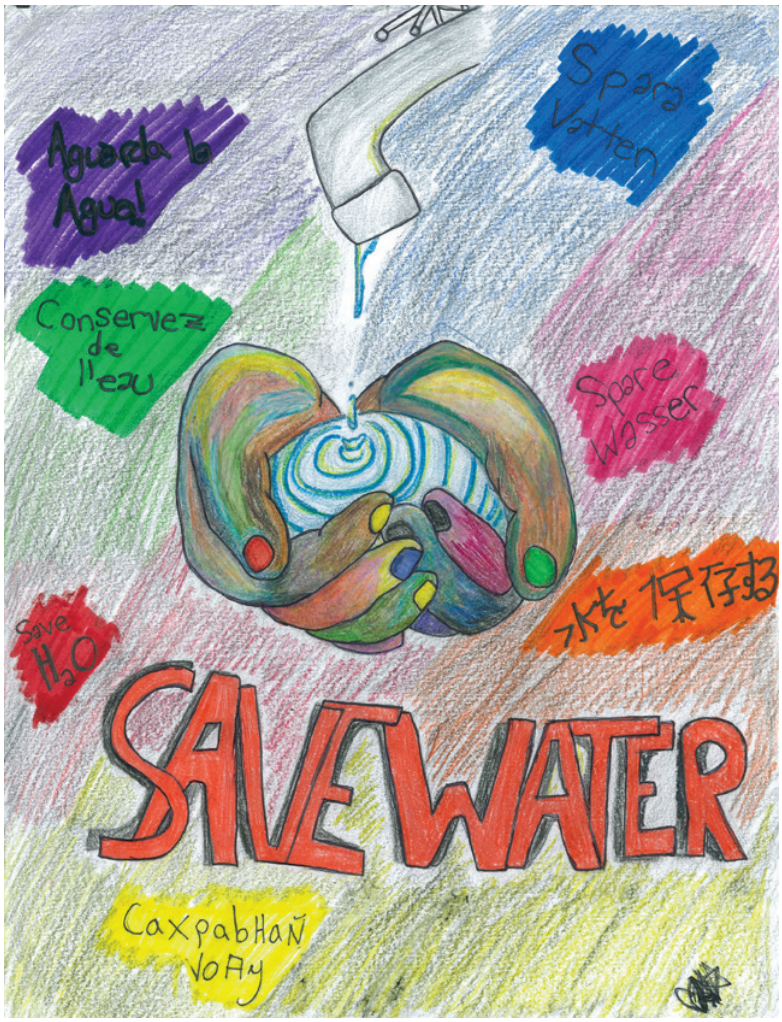
TMWA Board Meeting

Wednesday, February 17, 2016

Press Clippings

January 12, 2016 – February 10, 2016



Katherine Horton (Archie Clayton Middle School)
2010 Poster Art Contest – Honorable Mention, Grades 7-8

Truckee River Agreement Benefits Nevada

800px-truckee_river_reno_nv.jpg

Mark Kobayashi-Hilary/Flickr

Truckee River running through downtown Reno, Nev.

Jan 11, 2016
by:
Chris Sieroty

The Truckee River, which runs for some 120-miles from Lake Tahoe to Pyramid Lake, has been one of the most fought over waterways in the country.

But for the last 30 years, negotiations and some litigation has been ongoing about how the water would be used.

Now a landmark agreement reached by federal, state, tribal and local officials is promising better management of the region's precious resource.

The Truckee River Operating Agreement, called TROA for short, was officially implemented on Dec. 1. The agreement also settles allocations between California and Nevada, with Nevada getting 90 percent of the Truckee's water.

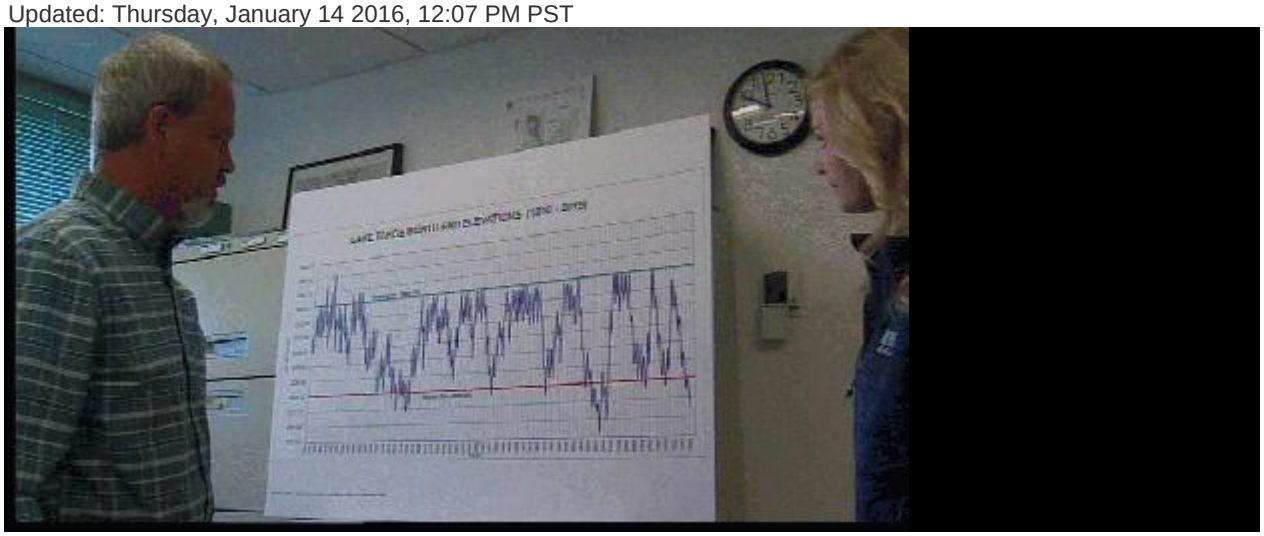
"The Truckee Meadows Water Authority, which is the main supplier to the Reno-Sparks metropolitan area has already been able to store almost 3,000-acre feet of water in upstream reservoirs," said Jason King is Nevada State Engineer with the Department of Conservation and Natural Resources.

King said the immediate benefits are having the water during a drought cycle. As for it taking almost 30 years to reach a deal, King was not surprised.

"There has always been this conflict … you have these very different parties that have very different and distinct interests on how that water is to be used," King said. "So that has been a constant conflict since the beginning of the 20th Century, perhaps even before then."

Weather Blog: Update on Truckee River flow

Updated: Thursday, January 14 2016, 12:07 PM PST



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Weather Blog from Meteorologist Cassie Wilson

RENO, Nev. -- Today, I sat down and nerded out with Water Master Chad Blanchard about where we stand with the Truckee River. Blanchard noted that, "right now, we are 164,000 ac-ft below the natural rim so we would have to have enough water to either cover 164,000 football fields 1 foot deep or 1 football field 164,000 feet deep."

Check out my saved search for some historic stream gauge data by **clicking here**.

We've seen a lot of snow, but most of this snow fell on top of dry soil. The best case scenario for a healthy Truckee River is to have a wet late fall and early winter so the soil moisture can build up. Then come early winter through the spring, we want purely snow so it locks in the layer of moisture and builds a reserve on top of it.

Why is this layer of moisture so important?

Well, because once the snow melts come spring, we want that water to stay in our basin, so if the soil is moist, you can think of it as being prepped for holding the water.

If it is dry then we lose a lot of that mountain melt water. One of the biggest keys to hydrology is not just how much snow and rain we've gotten, but soil capacity, or how well the ground can hold onto that moisture.

Now for the good news: We are operating at around average for snow pack, so this year we are heading into the spring on a good note, and - wait for it - we have an atmospheric river setting up Sunday through Tuesday!

So you can think of the atmosphere as a fluid; it moves and behaves similar to water. An atmospheric river is simply just a long band of moisture that floods on shore, bringing with it heavy and persistent rain/snow for an extended period of time.

We are still watching this event closely; model confidence is still shaky on where exactly on the West Coast it is going to land. If it shifts too far north, then it will pass us and mostly impact Oregon. But if it's staying more south, we should see snow levels around 5500 feet.

A closer look at approval of Verdi development despite concerns

Reported by: Terri Hendry
Email: thendry@mynews4.com

Print Story
Published: 1/14 6:42 pm
Share
Updated: 1/14 8:05 pm

RENO, Nev. (MyNews4.com & KRNV) -- The Reno City Council is giving its "ok" to a controversial housing development in Verdi. This approval comes even though nearby residents raised concerns about water and their wells running.

If you look at the comments on social media, many feel like their elected officials are not listening. In this "On Your Side" report, we look at the reasons behind this decision and what you need to know as a home or landowner.

City of Reno Assistant Manager Bill Thomas has a background in Community Development, land use and planning. He has seen a lot of opposition to projects, like a 237-lot housing development proposed in Verdi.

CLICK HERE to learn more about the developer, Reno Land Development Company. The company is local and also behind another major project, Rancharra.

He shares some of the decision making process used by elected officials to explain why controversial projects, get approved despite so much opposition. Thomas said, the common misperception about development is that just because someone doesn't like something, that's not grounds to allow the Council to say no.

Thomas explained the development approval process is a legal one. For elected officials, it includes a balancing act weighing the rights of residents and the rights of the developer.

In the Verdi project, residents voiced concerns about water and wells running dry. One citizen noted, There are approximately 45 basins in Nevada that are over-appropriated, meaning there are more water rights on paper than there is water in the ground.

You guessed it, the basin used by Verdi residents is among those 45 basins. Thomas was asked how this development might impact water. He answered, One of the big misconceptions is the Council at the end of the day makes a determination on whether or not there is water. He added, we don't, the City of Reno doesn't.

If the City of Reno is not responsible, then who is? We learned it is the State Water Engineer who relies on science and a complicated system of water rights laws to make the determination. State Engineer Jason King said his office has signatory authority over all subdivisions in the state. His office guarantees water quantity based on a "will serve" letter provided by the municipal purveyor.

When it comes to wells, King said it gets very complicated and its based on a priority of water rights. He also said a "reasonable" lowering of the water table is a contentious issue. Where it gets even trickier is when wells were drilled decades ago. King said, the problem may be the well simply isn't deep enough. For questions and concerns about water and wells, you can call him at 775-684-2800,

Thomas has advice for residents who might find themselves opposed to a development project. He said, get to know the process. He added, many people think it is etched in stone and it is not. What is in stone is the process but those plans and documents can be changed and amended to address concerns and objections.

In the Verdi case, the developer lowered the density of the project by 30 lots. The developer also voluntarily agreed to double the amount of money to $220,000 to go towards school improvements for schools zoned in the proposed project area.

Council gives go ahead to Verdi housing development over neighborhood water concerns

 Anjeanette Damon, adamon@rgj.com 8:49 a.m. PST January 14, 2016

 Buy Photo

Reader Jim Cooper sent this photo last year of the Truckee River from a single-lane bridge near Verdi.(Photo: Submitted to the RGJ)Buy Photo

400 CONNECTTWEET 3 LINKEDIN 7 COMMENTEMAILMORE

Over the objections of Verdi residents who said their wells are already running dry, the Reno City Council unanimously approved a 273-lot housing development in the rural hamlet on the west edge of the city.

While council members said they shared the concerns of the Verdi homeowners who worry the new houses will further stress the community's nearly tapped out aquifer, they decided to allow the project to move forward.

Before final maps of the Meridian 120 North subdivision are approved, however, the state water engineer must certify that the developer has sufficient water rights to service the new homes. The

Council also required that the developer disclose to buyers that the private water system may one day be transferred to the Truckee Meadows Water Authority.

"Your client is a very responsible developer, but the water scares me," Councilman Paul McKenzie told the developer's planner Andy Durling.

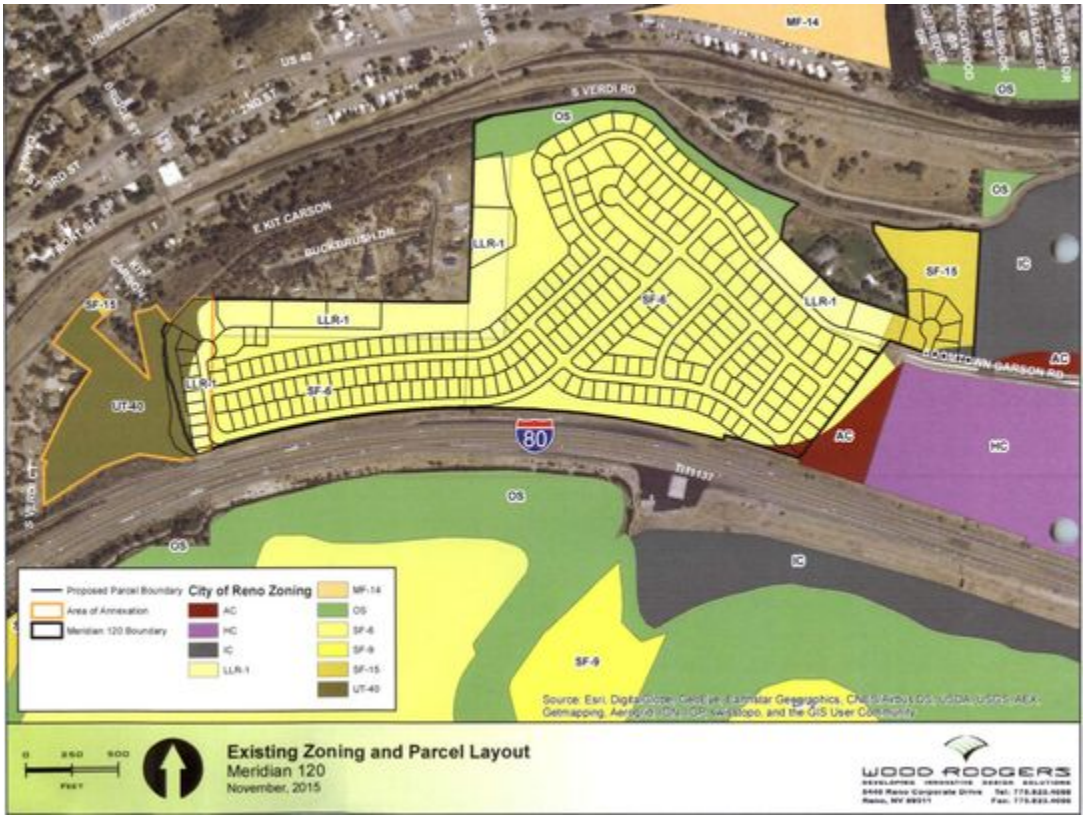
Former Councilwoman Jessica Sferrazza was the lobbyist representing the developer, Reno Land Development Co. Sferrazza also ran Mayor Hillary Schieve's campaign, prompting Schieve to disclose her relationship with Sferrazza prior to the vote.

Kelly Mosconi was one of a handful of Verdi residents who appealed the Planning Commission's approval of the project to the council.

"Our wells are pumping sand," Mosconi said. "We can't afford to drill a new well."

Mosconi, who lives in the unincorporated county jurisdiction adjacent to the Meridian 120 North project, said she has no elected official to turn to for help since she isn't represented by the Reno City Council.

"Verdi has zero representation," she said. "We're not city, we're county. You're just engulfing all of the county, land grabbing due to the sphere of influence."



A display map of the proposed Meridian 120 North housing development in Verdi. (Photo: Handout)

Durling said the developer is confident there is enough water in the Boomtown private water system to service the new homes.

"We have the data to show we have a reliable water system," Durling said.

Reacting to neighborhood concerns, the developer reduced the density of the project by nearly 30 lots, annexed more land to build a walking trail to Verdi Elementary School and offered to donate $100,000 for capital improvements at Verdi Elementary, Billinghurst Middle and McQueen High schools.

Shortly after the council approved the project, developer Chip Bowlby doubled the offer to schools, saying the development would contribute $200,000 toward capital improvements.

Water watch

Winter snowpack starts strong

By Kelsey Fitzgerald

This article was published on 01.14.16.

High on Mount Rose in early January, Natural Resources Conservation Service hydrologist Jeff Anderson stood in a snowy clearing, holding a hollow metal pole. With both hands, he plunged the pole deep into the snowpack beneath his feet, capturing a cylindrical column of snow. He weighed the sample, repeating the process from four different locations at the site to ensure accuracy. The verdict? The winter is off to a good start.

"Today what we measured was 54 inches of snow depth on the ground, and that snow depth contains 15.9 inches of water content. Right now, for this time of year, that's 110 percent of normal," Anderson said.

The snowpack is the year-round water supply for this region.

From January to May, Anderson makes monthly trips to this site—a SNOTEL (snow telemetry) station at Mt. Rose ski area—one of the NRCS's network of more than 800 SNOTEL stations in the Western U.S. Though SNOTEL data collection is automated and sent out hourly via radio signal, Anderson takes on-the-ground measurements that are used to verify the accuracy of the sensors, using a method that was developed on Mt. Rose more than 100 years ago. "This is where snow surveying really began—up on Mt. Rose," said Anderson.

The history of snow surveying in the Western U.S. has close ties to our region. During the early 1900s, Dr. James Church, a professor of classics at the University of Nevada, Reno, took an interest in the science of snow. Recognizing the important connection between snowpack and the water level in Lake Tahoe, he developed a tool called the Mt. Rose sampler to measure how much water the snow contained. Using this information, water managers could predict the amount that the lake level was likely to rise each spring.

From 1905 to 1912, Church established snowpack measurement points along snow courses at Mt. Rose and Lake Tahoe. Two of these sites have data that go back as far as 1913, providing some of the longest running snowpack datasets in the country.

"There are quite a few courses in the Tahoe and Truckee region [with data] that go back over 100 years, with measurements that he started," Anderson said. "It's quite a data legacy. Our area is fortunate to have that."

Jeff Anderson of the Natural Resources Conservation Service measures snowpack at Mt. Rose using a federal snow sampler. PHOTO/KELSEY FITZGERALD

For more information on Dr. James Church and the history of the Mt. Rose snow survey, visit: http://tinyurl.com/zolngm9 and http://tinyurl.com/gu7ag4z

For data from the Nevada NRCS Snow Survey program, visit: www.nrcs.usda.gov/wps/portal/nrcs/main/nv/snow/

For information on SNOTEL stations and how they operate, visit: www.wcc.nrcs.usda.gov/snotel/SNOTEL_brochure.pdf

Church's methods spread across the West and were adopted by the Federal-States Co-Operative Snow Survey in 1935, a program that evolved into NRCS's present-day snow survey. Today, Anderson and other snow surveyors carry on the modern rendition of Church's work.

The hollow snow tube that Anderson uses to measure snowpack—the Federal snow sampler—is an updated version of Church's original Mt. Rose sampler. Though automated SNOTEL stations have largely replaced the need for manual snow measurements, Church's historical snow courses are still visited and measured once per year, on April 1.

At SNOTEL stations, snowpack weight is now measured using an oversized scale called a snow pillow. Since the water content in an inch of light, fluffy powder snow can vary greatly from that of an inch of wet, slushy snow, snowpack weight is considered a more accurate measurement of water content than snow depth. "Water weighs the same whether it's a liquid or a solid. That's really what we're really interested in—how much water is in the snow," Anderson said.

This water, as Church realized long ago, is what will refill our lakes and reservoirs in coming months.

Lemmon Valley Annexation Approved by City

JANUARY 15, 2016 BY CARLA O'DAY LEAVE A COMMENT

A portion of the Lemmon Valley land annexed by the City.

By Carla Roccapriore O'Day

A section of Lemmon Valley was cleared Wednesday for future growth that a developer indicated could consist of several hundred single-family homes and a few million square feet of industrial buildings.

The Reno City Council unanimously approved a request by Lemmon Valley Land Company Inc. to annex 734 acres along an almost 3-mile stretch of Lemmon Drive between Patrician Drive and Oregon Boulevard. Land is contiguous on the southwest, bordering a vacant parcel.

Nobody showed up at the Reno City Council meeting to comment in support or opposition to the annexation.

Lemmon Valley Annexation Approved by City CLICK TO TWEET

The Regional Transportation Commission is conducting a traffic study that looks at impacts in the North Valleys, and the state Department of Transportation is doing a corridor study from the Red Rock area to the U.S. 395-Interstate 80 junction.

Although no specific plans have been submitted, Lemmon Valley Land Co., which plans to sell the property to a developer, drew up a scenario that showed land being cleared this year and construction taking place starting next year until 2022. It showed 454 homes, 3.5 million square feet of industrial buildings and 12,650 feet of 2-lane road being built.

That's only an example, though.

Councilman Paul McKenzie

"There's nothing cut in stone yet," Councilman Paul McKenzie said. "They haven't submitted anything for approval yet. This is all vacant land.

"The developer, who's now in the city, has to pay property taxes to the city."

McKenzie added that city annexation would allow the city to help mitigate growth impacts in the area, such as traffic and congestion.

Truckee Meadows Water Authority plans to start construction of its Vidler pipeline extension on Lemmon Drive and extend it to North Virginia Street to join its existing system. Groundwater is being drawn from Honey Lake Basin north of Reno.

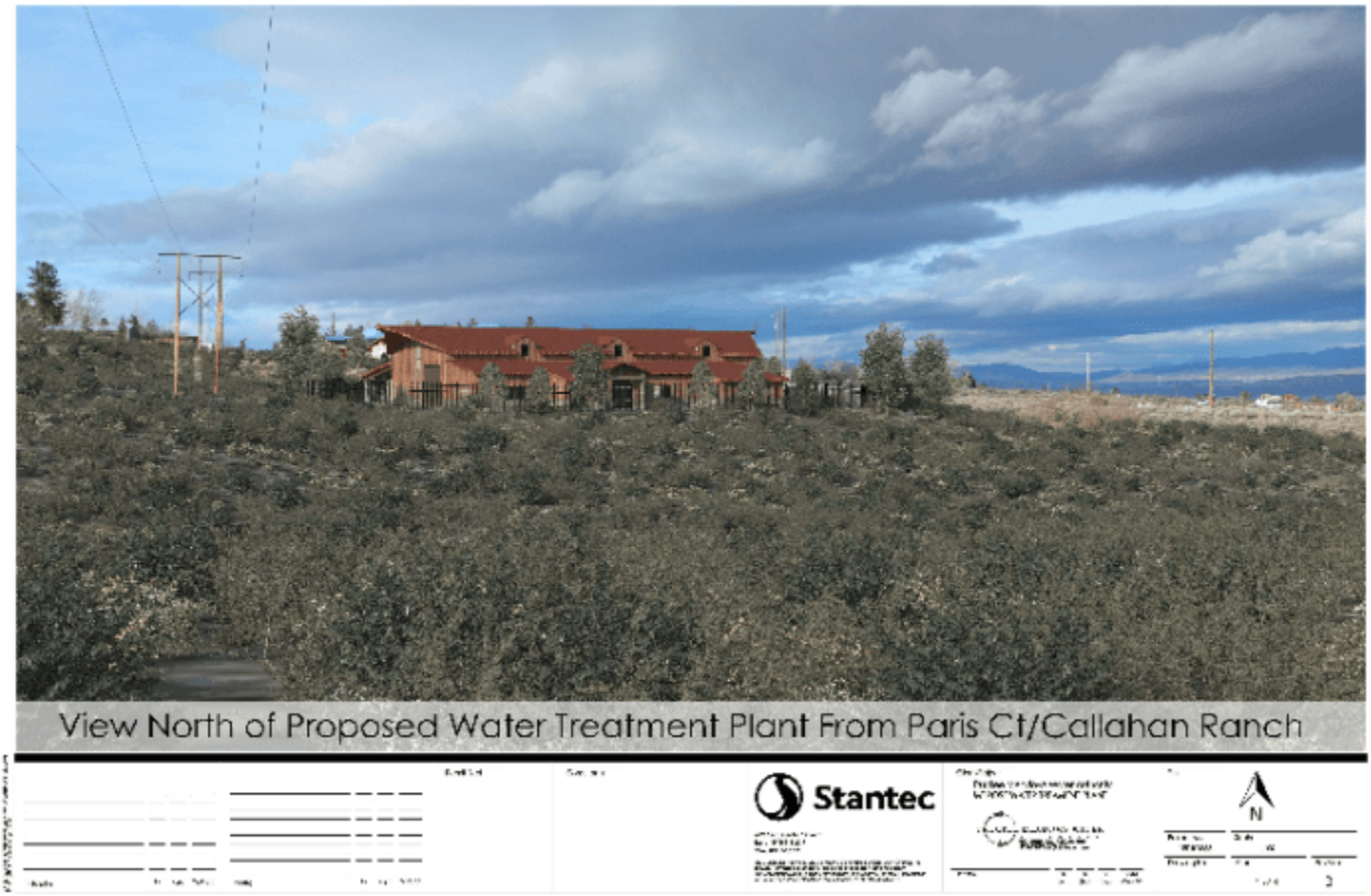
Reno Municipal Code requires property in the city to connect to the city's sewer system unless approved otherwise. Builders are responsible for making sure their developments connect to designated wastewater facilities.

An Economic Planning Indicator Committee report last year showed Washoe County will generate 34,742 new jobs through 2019, which translates into 16,676 to 25,709 new housing units.

This future project is among several recent developments in the area that include a 624,000 square foot Amazon warehouse on 39 acres at 8000 North Virginia Street, an industrial for facility for lease is being built next door on 28 acres. Petco also recently built a 770,000 square foot distribution center at 9059 Red Rock

New Water Treatment Plant Proposed for Galena Area

JANUARY 16, 2016 BY ERIN MEYERING LEAVE A COMMENT

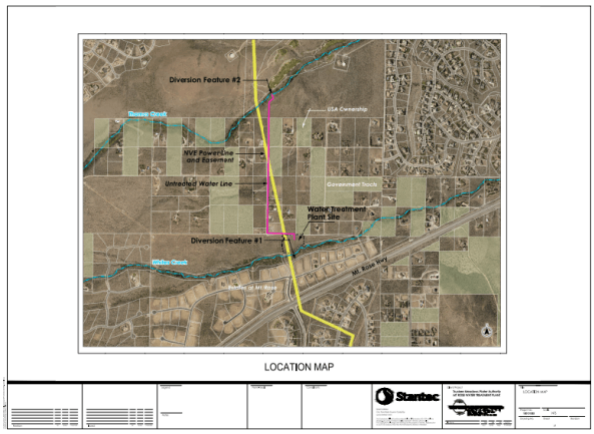


Truckee Meadows Water Authority (TMWA) is continuing work toward a new water treatment plant to enhance groundwater resources in the Mt. Rose area.

The plan, which is in its initial phase, was brought about because the area relies on groundwater for 100 percent of its water supply. With the ongoing drought Northern Nevada is facing, this could be of major concern to the area's citizens and home-owners.

As a result, engineers and planners with TMWA are seeking to provide supplemental water sources for the long-term sustainability of the local groundwater aquifer.

The plan is to construct a 8,800 square foot water treatment plant off of Whites and Thomas Creeks near Galena, just adjacent to Callahan Road. The plant is designed to fit into the neighborhood by being as unobtrusive as possible, TMWA representatives said.



The groundwater sustainability plan dictates diverting water only when adequate creek flows are available so that sufficient flows will remain in order to maintain wildlife and habitat needs.

In a letter, Mickey Hazelwood, the Truckee River Project director of The Nature Conservancy, reviewed the proposal:

“TMWA and Stantec [the engineering/design company working on the project] have gone above and beyond what is required by federal and state regulatory guidelines in assessing insert flow needs to support the existing instream and riparian habitat and the wildlife that depend on those habitats.”

A public open house regarding the proposed plant was held Monday. Concerned citizens gathered to discuss the details and the future of the plan.

Among those concerns, several area home-owners inquired about the appearance of the building and if it would disrupt the country-like views they enjoy from their home. Others were concerned about the noise. Citizens questioned the overall effect the water processing plant would have on their neighborhood.
TMWA scientists, designers and planners present addressed these concerns and are taking them into consideration in the steps forward.
“Our goal with everything in this project is to pump less groundwater than we are today, even with new development,” said John Enloe, TMWA’s operational strategies manager.

Plant construction is anticipated to start in the spring of 2017.

For details on the plan and the steps for its approval, visit https://tmwa.com.

RELATED:

- TMWA's Arrow Creek Project Aims to Replenish Groundwater…
- TMWA Holds Open House Dec. 9 on Water Resource Plan
- North Valleys Integration Project Designed to Utilize…
- Truckee Meadows Water Authority Receives National Award
- Learn About Your Water: Tour TMWA's Water Treatment and…
- TMWA Taps Into Drought Reserves From Upstream Reservoirs

Will promise of Lemmon Valley pipeline be fulfilled?

 Mark Robison, mrobison@rgj.com 12:06 p.m. PST January 19, 2016

Workers install pipe on Bedell Flat north of Reno in March 2007 as part of the North Valleys Importation Project.(Photo: Provided by TMWA)

CONNECTTWEETLINKEDINCOMMENTEMAILMORE

Will the promise to use a water pipeline to recharge a depleted aquifer in Reno's North Valleys ever be fulfilled?

• Short answer: The pipeline started recharging the Lemmon Valley aquifer in October 2014. Water levels have risen on the west side of Lemmon Valley by 20 feet in the past 10 years. On the east side, water levels have stabilized.

Full question

Excavation work is done in Dry Valley in June 2007 as part of the North Valleys Importation Project. (Photo: Provided by TMWA)

Melanie Wooden of Lemmon Valley writes, “Tons of pipeline are being laid in Lemmon Valley, to finally start the taps flowing on the Fish Lake Valley Importation Project. At the time Vidler water started the project, the intent was not only to supply Washoe County with much needed water to sustain North Valley growth plans, but to recharge the aquifer beneath the valley. Washoe County wells depleted it to almost exhaustion over the course of three decades, causing many home owner wells to go dry. As a Lemmon Valley resident, I'd like to know if Truckee Meadows Water Authority, who has taken over from the county, plans to make good on the recharge, or at the very least are retiring the county wells.”

Full reply

Wooden is referring to a project that actually comes from Fish Springs, in the Honey Lake Basin along the Nevada-California line. Water rights were acquired from the Vidler Water Co. in 2000, and millions were spent on a 28-mile pipeline to bring the water to Lemmon Valley.

RENO GAZETTE JOURNAL

Ask the RGJ: How is drought's end determined?

The pipeline was finished just as the recession hit, and officials put the project on hold. The water had been dedicated to Washoe County, but TMWA acquired Washoe County's water system last year and the pipeline with it.

John Enloe, TMWA operational strategies manager, provided responses by email.

•**RGJ:** When will TMWA recharge the aquifer in Lemmon Valley?

Pipe waits for installation on Bedell Flat north of Reno in February 2007 as part of the North Valleys Importation Project. (Photo: Provided by TMWA)

• **TMWA:** TMWA has been recharging the aquifer in the west side of Lemmon Valley during winter months since 2000. TMWA has recharged over 4,500 acre-feet (almost 1.5 billion gallons) of water to the aquifer in West Lemmon Valley (west of the Stead Airport) to help stabilize water levels for the benefit of all groundwater users in that basin. Recently, TMWA recharged 399, 276 and 368 acre feet from the Truckee River in 2015, 2014 and 2013 respectively. Water levels have risen approximately 20 feet in the past 10 years. [An acre-foot is 325,851 gallons, or about enough to supply two single-family homes water for one year.]

In East Lemmon Valley, the largest water level declines were focused around the Heppner Subdivision, where 475 domestic wells shared the same low-yield aquifer. In an effort to stabilize water levels in that part of the valley, Washoe County Department of Water Resources (WCDWR) in concert with funding from the United States Environmental Protection Agency,

extended municipal water service (starting in 2006) throughout the subdivision. WCDWR was consolidated into TMWA a year ago. Also, 14 percent of the domestic wells in the Heppner Subdivision were converted to municipal service. Within five years, water levels began to stabilize and continue to remain stable.

• **RGJ:** Does the Fish Springs Ranch pipeline (aka North Valleys Importation Project, "NVIP") play a role in the recharging?

RENO GAZETTE JOURNAL
Ask the RGJ: How much water does TMWA lose?

•**TMWA:** Yes.

•**RGJ:** How much of the recharging will come from it and how much from other sources?

Excavation work is done in Dry Valley as part of the North Valleys Importation Project. (Photo: Provided by TMWA)

•**TMWA:** Subsequent to the merger of the Washoe County water systems into TMWA, staff has operated the [North Valleys Importation Project] water supply facilities for drought mitigation and conjunctive use purposes. ["Conjunctive use" is when surface water is stored in a groundwater basin in wet years and taken out in dry years.] During 2015, over 957 acre feet of groundwater was supplied from the NVIP to the North Valleys. A portion of the water was supplied to the former Washoe County water system in East Lemmon Valley rather than pumping existing municipal wells. This type of operation is referred to as "passive recharge." So operation of the [North Valleys Importation Project] provided East Lemmon Valley with passive recharge benefits amounting to 366 acre feet compared to 2014 pumping levels, equivalent to an 80% reduction in groundwater pumping. The balance of the water, approximately 591 acre feet,

was supplied to the existing TMWA system in Stead through a connection referred to as the Bravo Intertie. A majority of this NVIP water supply to existing customers in Stead offset water that would have otherwise been supplied from the Truckee River.

•**RGJ:** When did water start flowing to the North Valleys from this pipeline?

•**TMWA:** October 2014

•**RGJ:** What is the official name of the Lemmon Valley aquifer?

•**TMWA:** Lemmon Valley West, Basin 92A and Lemmon Valley East, Basin 92B.

•**RGJ:** How full is the Lemmon Valley aquifer?

RENO GAZETTE JOURNAL

Ask the RGJ: Water savings not apparent on TMWA bill?

•**TMWA:** There is really no accurate way to answer this question. Groundwater levels have been declining in Lemmon Valley since the early 1970s, according to historic water level records. The different well types (domestic, municipal, and quasi-municipal such as mobile home park wells) share the same groundwater source and have impacted water levels as a group. In west Lemmon Valley, water levels have risen approximately 20 feet in the past 10 years due to TMWA's recharge efforts. In east Lemmon Valley, water levels have stabilized and may recover slowly over time. TMWA's ongoing programs of active and passive recharge using both Truckee River and [North Valleys Importation Project] water sources will lessen the impact from municipal pumping.

•**RGJ:** The reader asks if TMWA plans to retire any of the county wells it took over when it acquired the county's water system. Does it?

•**TMWA:** TMWA does not have plans to retire any of the county wells at this time. Two or three small wells near the southeast end of Lemmon Valley which are not currently in operation may be converted to monitoring wells in the future

New drought report could be road map for Nevada water policy

Updated:

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CARSON CITY, Nev. (AP) — A panel of water experts that spent almost a year analyzing Nevada's drought has issued recommendations that could shape Gov. Brian Sandoval's policy agenda in the coming year.

The eight-member Nevada Drought Forum included water, agriculture, climate and emergency management officials who gathered information in a series of public meetings statewide.

Forum Chairman Leo Drozdoff of Nevada's Department of Conservation and Natural Resources said some of the recommendations could be implemented quickly, while others would need significant time and resources.

The recommendations submitted in mid-December include expanding conservation efforts and strengthening enforcement, better educating lawmakers and the public about drought, and changing water law little by little.

Sandoval, who convened the panel, has said some of its recommendations could show up in his upcoming State of the State address.

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Online: Nevada Drought Forum: http://drought.nv.gov/

Verdi Development Water Concerns Explained

Posted: Jan 21, 2016 7:13 AM PST Thursday, January 21, 2016 10:13 AM EST*Updated: Jan 21, 2016 7:13 AM PST* Thursday, January 21, 2016 10:13 AM EST
By Ky Sisson
Email
Connect
ksisson@ktvn.com

With one, possibly two new housing developments coming to Verdi, one of the biggest concerns from residents is that there won't be enough water for everyone.

Hydrologist David Carlson has surveyed the area and says that because the Meridian 120 development would be getting most of its water from the Steamboat Ditch that averages 1,100 gallons of water per minute, residents shouldn't be concerned.

"The Steamboat Ditch supplies almost all the water to the Boomtown development. That is 1,100 gallons a minute off the Steamboat Ditch and around 6,000 gallons a minute infiltrates the Verdi area. Through the Power Canal and the Power Canal Bypass, both of them contribute to that system," said Carlson.

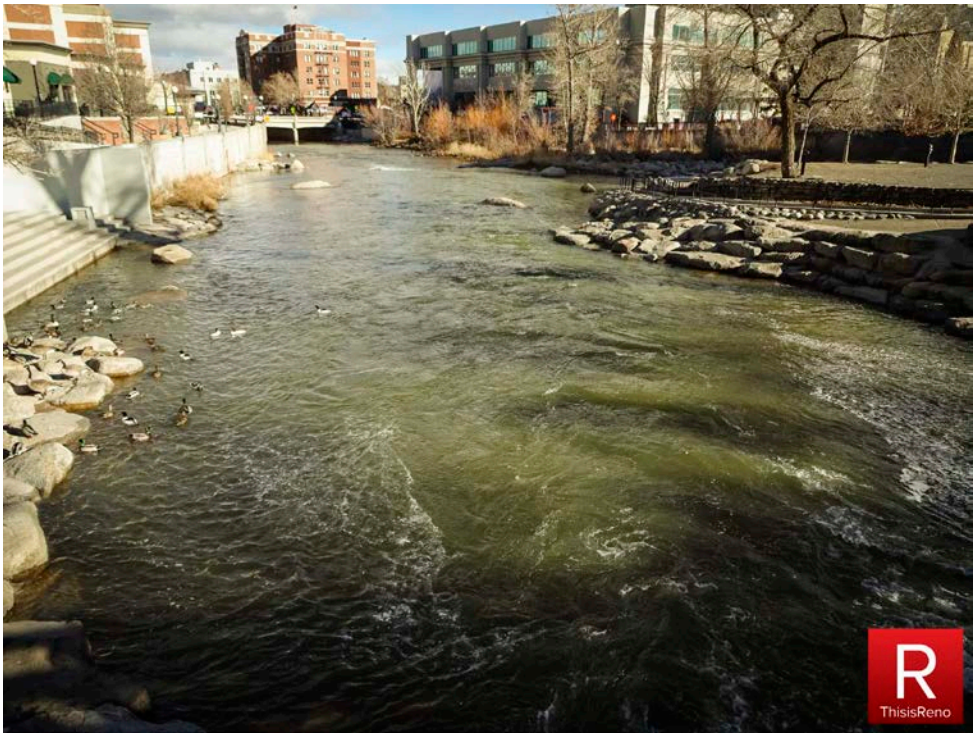
Many residents say that their own wells are running dry and question how these numbers are sustainable. Carlson says that there is a likely reason resident's wells are running dry.

"A lot of the wells in Verdi being old. It's a combination of it being shallow, perforations could be plugged, but a lot of it is that the power canal and the power canal bypass are shut off," said Carlson.

The state water engineer also has to approve the area's water sustainability, which is something developer Chip Bowbly of the Meridian 120 project says shouldn't be an issue.

Rain Catchment is Illegal in Nevada But May Get Reconsideration

JANUARY 24, 2016 BY BOB CONRAD LEAVE A COMMENT



Rain catchment could impact Truckee River water right holders, but the small-scale use of rain barrels may be up for review during the next session of Nevada's Legislature.

A strict interpretation of Nevada law reveals that collecting water with rain catchment systems, such as rain barrels, is illegal.

With ongoing drought conditions, Nevada's State Engineer Jason King said last week at the Truckee Meadows Water Authority Board of Directors meeting that there should be some exemptions for small-scale rain catchment.

"In the strict reading of the water law, under NRS 533.030 … it states that 'all water shall be appropriated for beneficial use as provided in this chapter, and not otherwise,'" King said. "So in the very strict reading of that, any beneficial use of that water, any capture of it, has to be first appropriated before you can use it."

King's office, the Nevada Division of Water Resources, is charged with adjudicating and appropriating Nevada's ground and surface water, which are owned by the people of Nevada.

The Governor's drought forum was tasked last year with addressing the state's water resource challenges and released its recommendations in December. One recommendation is to re-examine the use of rain catchment as long as such use does not infringe upon other water rights.

King, a member of the forum, said that one suggestion is to change Nevada water law so that rain collection on a small scale, up to a certain number of gallons, would be allowed. Rain collection on a large scale, though, could impact existing water rights.

DROUGHT FORUM: Explore changing water law to allow for the use of small scale precipitation capture devices in areas where capture increases the water supply and does not conflict with existing rights."

"Isn't that water that would normally be running off, recharging aquifers and maybe making into the streams, where other people have water rights on those water resources and therefore the catchment of it would be in violation of their rights?" he asks. "I just believe that there needs to be an exemption in water law for some *de minimus* volume of water for for rain barrels.

RAIN COLLECTION SYSTEM: Image: Roger Mommaerts/ Flickr.com, https://www.flickr.com/photos/rmommaerts/3619535165

"It only makes sense to me."

However, exemptions for rain collection might not make sense in Clark County.

"You have places like Las Vegas where they get return-flow credits," King explained. "So whatever amount of water they return to Lake Mead, they get to take that much out yet again, so it really isn't appropriate down in Las Vegas because they're already getting (that water). It doesn't necessarily make any sense to recover their own reuse because they're sending it back to Lake Mead."

Washoe County has a completely different water system. Truckee River water is claimed by existing water right holders, such as the Pyramid Lake Pauite Tribe, who are entitled to their water.

Nevertheless, the issue of rain catchment could be taken up during the next legislative session, and King said that as the driest state in the nation, he supports water capture and reuse where it makes sense.

In the meantime, the State Engineer's office does not enforce the use of rain barrels, but clarifying their use in law, King added, could encourage more water conservation around the state.

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Ohio agency seeks criminal probe into water plant problems

January 25, 2016 15:36 GMT

By MARK GILLISPIE Associated Press

CLEVELAND (AP) -- The head of Ohio's environmental agency is calling for a criminal investigation after the operator of a water treatment plant in northeast Ohio failed to tell the public that high levels of lead and copper had been detected in some homes last summer.

Ohio Environmental Protection Agency Director Craig Butler said in a statement Sunday that officials are "taking steps" to revoke the operating license of the plant operator in Sebring.

The statement says the EPA has "reason to suspect" that the operator falsified reports.

The water system serves about 8,100 customers in Sebring, about 60 miles southeast of Cleveland.

Sebring schools canceled classes Friday and Monday.

The city manager said last week that seven of 20 homes where the water is routinely tested showed the high levels of the contaminants.

Ask Joe: What is big drilling project near Cold Springs?

By Joe Hart Monday, January 25th 2016

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RENO, Nev. (MyNews4.com & KRNV) — From the Ask Joe file, a question about a construction project generating a lot of curiosity up north of Reno.

Rita Weishaar mentioned that she noticed a huge drilling rig up by White Lake near Cold Springs recently. It definitely caught her attention, and she wants to know what they are working on there.

Here's what I found out:

We took a drive up to White Lake to find out. We got about halfway around the lake and noticed the project Rita was referring to.

We found out they're in the process of testing a new well.

I spoke with Tom Gallagher at Nevada Water Solutions up at the site. He says crews just drilled a new well for a private utility known as Utilities Inc.

The well is 430 feet deep and will pump a thousand gallons of water per minute once the testing is finished. That will be enough water to supply several thousand homes -- homes that are part of the private utility district and new homes that will be built in the future in the Cold Springs area.

So that's what they're working on. They've been at it since early December when they started drilling, and they'll be testing the well for another couple of days.

By the way, the water you see shooting out of the well ends up in White Lake again, so it is not being wasted.

TMWA weighs in on Flint water crisis

Updated:

1

RENO, Nev. -- The Flint water crisis has been called a national disgrace as evidence indicates lead was poisoning the city's water system for more than a year. There is also evidence of major mistakes and cover-ups at multiple levels, including regulatory agencies as well as elected officials.

Unfortunately, this has happened before in other American cities, including Washington D. C. It is even now happening in Sebring, Ohio, with some saying the city could be the next Flint.

Fox 11's Terri Hendry asked Truckee Meadows Water Authority Operations Supervisor, Will Raymond if something similar could happen here.

He said, "The situation in Flint really would not be likely to happen here because our infrastructure is much newer. We do not have lead pipe, and we really do have a consistent water source, the Truckee River."

A change in water source, lead pipes and the wrong mix of chemicals are said to have created the problem in Flint.

When asked about his thoughts on the situation there, Raymond responded, "There seems to be multiple failures at different levels."

He said he cannot understand why Flint officials did not act when residents started showing them dirty, discolored water. He said, "You know warning bells should have been going off for everybody that something is not right there."

While Raymond said our water facility has a very similar regulatory and oversight structure, there is one big difference: local ownership. Raymond said, "We pride ourselves on having that local ownership, which was established in 2001. I'm not ashamed to say I drink the water right out of the tap and so do most of the employees that I know."

Raymond said in addition to the required regulatory testing, TMWA performs routine sampling over and above what is required. CLICK HERE to see TMWA's annual Water Quality reports

UAS collaboration aims at increasing snowpack in Nevada mountains

By Patrick C. Miller | January 28, 2016

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Drone America's team is shown with its Savant UAS which will be used for a cloud seeding research project led by the Desert Research Institute.
PHOTO: DRONE AMERICA

Using unmanned aerial systems (UAS) to increase snowpack in the Lake Tahoe region of Nevada will be part of a weather modification research project led by the Desert Research Institute (DRI).

The project—supported by Nevada's Knowledge Fund—combines more than 30 years of DRI weather modification research and expertise with Reno-based Drone America's experience in aerospace manufacturing and flight operations. In addition, AviSight of Las Vegas will provide unmanned aerial data services.

"This project is a key part of helping Nevada address the ongoing drought and explore innovative solutions for natural-resource challenges such as augmenting our regional water supply," said Adam Watts, lead scientist and a DRI assistant research professor who has expertise in UAS applications for ecological and natural-resources applications.

The project will develop and test Drone America's latest UAS technologies for cloud seeding operations across the Lake Tahoe Basin and Truckee River watershed where DRI has conducted ground-based winter cloud seeding operations for more than 30 years.

According to DRI, on average, its cloud seeding program adds approximately 14,000 acre-feet—4.5 billion gallons—of water to the Truckee River watershed's snowpack each winter season.

Frank McDonough, lead forecaster and manager of the DRI Weather Modification Program, said that with local support from the Truckee Meadows Water Authority (TMWA) and the Western Regional Water Commission (WRWC), DRI currently conducts cloud seeding using ground-based generators to increase the drought resilience of municipalities and agricultural operations.

DRI has not used manned aircraft for cloud seeding operations for the past two decades because of the high costs and associated risks.

"When used correctly, airborne cloud seeding platforms offer great potential to increase the number of storms that can be seeded, thus helping to increase the local snowpack and resulting river flows," Watts said.

He added that UAS could be deployed faster and more frequently to increase the effectiveness and decrease the costs and risks associated with manned airborne cloud seeding.

The project will use two Drone America UAS platforms—the DAx8 multi-rotor aircraft and the Savant fixed-wing aircraft. The DAx8 can carry payloads, sensors and cameras while the Savant—which weights less than 55 pounds—is designed for commercial applications.

Drone America will also provide experienced flight operations teams, consisting of air vehicle operators, payload operators, and technicians. The team has more than 21,000 of combined flight hours ranging from small UAS to commercial airliners.

"We have been working with the DRI since 2013 on ways to utilize our UAS platforms to make aerial cloud seeding operations safer and more effective," said Mike Richards, Drone America president and CEO.

AviSight will coordinate and manage the project's airspace access with the U.S. Federal Aviation Administration and lead business development efforts to expand test and deployments in Nevada and surrounding states.

For more on the UAS Industry, follow us on Twitter @UASMagazine

Storms brought snowpack to 125% of normal

By Colin Lygren |
Posted: Mon 6:22 PM, Feb 01, 2016 |
Updated: Tue 8:37 AM, Feb 02, 2016

The weekend storm made a significant impact on our snowpack. February 1, 2016, hydrologists measured the amount of water content in the snow atop the Mount Rose summit.

They found the snowpack is at 125% or normal. That number is up from 110% of normal, which was measured around the first of the year.

“It was a great storm for our water supply," said Jeff Anderson, hydrologist with the Natural Resources Conservation Service. "If you melt it down, it would be almost 30 inches of liquid water sitting on the ground."

Not all the water, but a good amount came from the weekend storm. The equivalent of four inches of water fell between Friday and Sunday.

"The crest typically picks up much more water than we do on the east side of the lake, so the fact that Mount Rose actually got 4 inches of precipitation over the weekend, four inches of water over the weekend, it is really good news," said Anderson.

"This was a great storm for the region and we need about a half dozen more of these to put us in pretty good shape going into the spring," said Bill Hauck, senior hydrologist with the Truckee Meadows Water Authority.

Hauck says the recent storm is an encouraging sign.

"The latest projections show the Truckee River flowing normally through August," said Hauck.

Those projections are preliminary and don't mean we're out of the drought, but we are at least doing better.

"You know, all of the reservoirs in the system are still seriously depleted at this point, and so we need a very good snowpack year to see some recovery in those reservoirs and this is an encouraging sign," said Hauck.

Just for the month of January our snow accumulation was 150 percent of normal January, a huge improvement over January 2015, which was one of the driest on record.

Sierra Snowpack Continues Strong Start

Posted: Feb 01, 2016 5:36 PM PST Monday, February 1, 2016 8:36 PM EST*Updated: Feb 01, 2016 5:52 PM PST* Monday, February 1, 2016 8:52 PM EST
By Paul Nelson
Email
Connect
producers@ktvn.com

The second snow survey of 2016 is in the books, with the snowpack up to 125% of average. The January storms paid off, dropping 50 inches of snow to boost the snow depth to 104 inches at the Mt. Rose SNOTEL site.

"I think everybody from skiers to farmers are really happy with how the water has come so far, and hopefully, it just continues just as strong as it has been going," Jeff Anderson, Natural Resources Conservation Service Hydrologist said.

The amount of snowfall equals 28.8 inches of water, that will eventually contribute to our water supply.

"Picture that spread across all the mountains that are around our region and it adds up to a lot of water and that's what we need to fill up our reservoirs," Anderson said.

While the news is good, there are still two months of winter left. Experts say the storms need to continue, just to have an average winter. After our wettest month of January, the snowpack is still 78% of average for an entire winter.

"We're still only about two-thirds of the way through the snowpack-building season and we have the other third to go, and we're hopeful the snow will continue to fall," Bill Hauck, Truckee Meadows Water Authority Senior Hydrologist said.

Hauck says the mountains have had this kind of start before, only to fall behind in the later months of the winter.

"It's supposed to be doing this, this time of year," Hauck said. "I think people have forgotten, based on the last four years. These storms are expected."

27 inches of light, fluffy snow fell over the weekend. That does not usually have a high water content, but the high amount of snow made up for it, contributing four inches of water. Rain fell before the snow, which is also good for the snowpack.

"A day or two of rain is not what skiers want to see but the snowpack's cold at this time of year and it just absorbs that water like a sponge," Anderson said.

While the eastern Sierra is above average, the snowpack is even better in other parts of the state.

"For most of the state, once you get outside of the Sierra, is 150% of normal, which is fantastic news for the ranchers and farmers and everybody that lives in central Nevada," Anderson said.

That includes the Ruby Mountains and the Humboldt Basin, where agriculture has been devastated during the drought. Farmers and ranchers have received little to no water allocations for the last few years.

"We'll take what we can get, and this year is certainly much better than last year at this time," Anderson said.

Despite the high snowpack, four dry winters have left northern Nevada with a huge hole to dig out of. Experts say will likely take more than one wet winter to make up the difference.

"Lake Tahoe's still a foot below its natural outlet. So, we've got quite a deficit still to overcome, but this is certainly encouraging," Hauck said.

"This is great to see all this snow but a four-year drought, you're not going to just come out of it with a few good storms," Anderson said. "It's going to take some really good winters to do that."

Hauck says Lake Tahoe's water levels could rise a couple of feet, this summer. Some, but not all of our reservoirs could also fill up.

"It appears that we're set up for a recovery year but how much we're going to recover remains to be seen," Hauck said.

February averages the third-highest amount of precipitation for the year. Experts are hopeful that the weather patterns continue as they have for the last three months.

The Latest: California misses water conservation target

Posted: Feb 02, 2016 10:16 AM PST Tuesday, February 2, 2016 1:16 PM EST*Updated: Feb 02, 2016 10:16 AM PST* Tuesday, February 2, 2016 1:16 PM EST

FRESNO, Calif. (AP) - The Latest on the California drought (all times local):

10 a.m.

State officials say residents of drought-stricken California used 18 percent less water in December than the same period in 2013 and fell short of the 25 percent conservation mandate set by Gov. Jerry Brown.

However, the State Water Resources Control Board reported Tuesday at a meeting in Sacramento that California remains on course to beat its long-term conservation goal.

The agency says California has saved a combined 25.5 percent since the mandate was issued in June.

Water Board Chair Felicia Marcus says the combined results shows residents are using less water.

Brown ordered the statewide cutback during the state's fourth year of drought. The emergency conservation order expires this month and the state water board was expected to decide Tuesday whether to extend it through October.

El Nino storms have drenched California this winter; water regulators, however, say reservoirs remain critically low.

2 a.m.

Following a welcomed parade of El Nino storms drenching drought-stricken California, state officials on Tuesday will decide whether to extend emergency conservation orders, and reveal how much water Californians saved in December.

The figures are expected to show that for a third straight month, Californians missed a mandate to use 25 percent less water. State regulators, however, say they are confident residents will meet the long-term goal that requires the savings over a nine-month period ending in February, a more important target.

Gov. Jerry Brown last year ordered Californians statewide use 25 percent less water.

The state water board will vote whether to extend the emergency drought orders through October.

Recent El Nino storms have drenched the state following its driest four-year period on record.

Officials say storms brought the snowpack to its highest level in five years; but the state's major reservoirs remain critically low.

Hydrologists share excitement about N. Nevada snowfall

By Emily Pacillo Monday, February 1st 2016

mount rose.JPG

RENO, Nev. (MyNews4.com & KRNV) — With all the snow fall this winter, Hydrologists are excited about the water content it's producing. Although we are seeing significantly higher levels than previous years, we still need to see several more years with these same conditions to end the drought.

"I think in 2013, we had similar snow pack conditions at this site, in particular Mount Rose, and then we got a warm February and March and we ended up with below average snow pack conditions. So, we need it to continue to snow and we need the snow to melt at the right time to fill the reservoirs," said Bill Hauck, the Senior Hydrologist for Truckee Meadows Water Authority.

So far, we are about two-thirds of the way through an ideal winter. February is critical to the final snow pack, and march is the icing on top.

"The snow pack peaks in the beginning of April, and so we're about 78% of the way for that normal peak amount for April 1st. So, we're almost 80% of the way to where we want to be to have at least an average year," said Jeff Anderson, Hydrologist with Natural Resources Conservation Service.

Hydrologists use a SNOTEL, which stands for Snow pack Telemetry. It collects data needed to measure the annual precipitation.

"What we measured today was 28.8 inches of water content and that came in the form of 104 inches of snow depth and so, that's 124% of our median value of our normal amount for this time of year," said Anderson.

This past weekend's storm created a 9% increase in snow pack for the Sierra. Officials say it's the second best snow pack in the last decade.

However, it will take multiple winters, like this one, in order to fill Lake Tahoe to its maximum capacity. It is still a foot below its rim.

"There's still another six feet on top of that that it can fill up so, we're looking at seven feet at deficit, really, to get the lake back to where it's full," said Anderson.

The SNOTEL tracks water content and snow pack all winter long, and provides updates every day. To see those updates, CLICK HERE.

Study, Providing Tools for Water Managers in California and Nevada to Help Meet Future Water Demands

PRWeb Follow
February 02, 2016 3:43pm Comments

The Truckee Basin Study provides water managers with information to better understand the basin's water supply and demand from now until 2099, and also identifies potential options to help them meet future demands. Reclamation developed the study in partnership with the Truckee Meadows Water Authority, Tahoe Regional Planning Agency, Truckee River Flood Management Authority and Placer County Water Agency.

Washington, D.C. (PRWEB) February 02, 2016

The Bureau of Reclamation has released its study of the Truckee Basin in California and Nevada, projecting that climate change may impact water supplies in the 21st century. Now available online, this study provides water managers with information to better understand the basin's water supply and demand from now until 2099, and also identifies potential options to help them meet future demands.

"The Truckee Basin is an important source of water for eastern California and western Nevada and includes the iconic Lake Tahoe," Reclamation Commissioner Estevan López said. "Reclamation and its partners now have the necessary information to develop options to ensure a sustainable water supply into the future."

Reclamation developed the study in partnership with the Truckee Meadows Water Authority, Tahoe Regional Planning Agency, Truckee River Flood Management Authority and Placer County Water Agency.

The Truckee Basin headwaters begin around Lake Tahoe. The basin includes the Truckee and Carson rivers and Pyramid Lake and encompasses the cities of Carson City, Reno and Sparks, as well as Reclamation's Newlands Project, all in Nevada.

According to the basin study, the Truckee Basin is heavily dependent on the Sierra Nevada's snowpack and available supply is dependent on the availability to capture, store and manage water. Precipitation within the basin can vary greatly from the high elevations in the Sierra Nevada to the desert regions around Pyramid Lake. Year-to-year precipitation can also vary greatly, with several years of below- average precipitation being common.

The mean average annual temperature in the basin is anticipated to increase by up to five degrees Fahrenheit by the end of the twenty-first century, while annual precipitation within the basin may decrease slightly. The increase in temperature will change the timing and intensity of runoff, with more precipitation falling as rain instead of snow. Runoff will begin earlier, thus impacting the amount of water that can be stored in Truckee reservoirs because of current flood management requirements.

Also, limited storage within the basin will impact water supplies. For example, because of the earlier runoff, the ability to meet full storage after April will be reduced. Due to warming, basin reservoirs are also projected to have higher rates of evaporation, and will be less resilient during future droughts. Lake Tahoe's surface is projected to drop below its natural rim more frequently, causing flows into the Truckee River at Tahoe Dam to cease; making Truckee supplies dependent on smaller reservoirs with limited capacity.

The study also found that the frequency and magnitude of flood events may increase within the basin. The likelihood of the basin experiencing more floods like the one in 1997 that heavily impacted downtown Reno and Sparks, as well as floods of lesser intensity, will increase 10 to 20 percent by 2050 and 30 to 50 percent by 2099.

Finally, the basin study identified structural and non-structural options to balance water supply benefits with flood risks, including working with the U.S. Army Corps of Engineers to allow flexibility in managing reservoir flood space, among other options.

The Truckee Basin Study is a part of WaterSMART. The report is available online at http://www.usbr.gov/watersmart/bsp.

WaterSMART is the Department of the Interior's sustainable water initiative that uses the best available science to improve water conservation and help water resource managers identify strategies to narrow the gap between supply and demand. For more information on the WaterSMART program, visit http://www.usbr.gov/WaterSMART.

For the original version on PRWeb visit:
http://www.prweb.com/releases/2016/02/prweb13195622.htm

Read more: http://www.benzinga.com/pressreleases/16/02/p6202260/bureau-of-reclamation-releases-truckee-basin-study-providing-tools-for-#ixzz3z396uoRP

Thanks, El Niño! Nevada snowpack ahead of schedule

Benjamin Spillman, bspillman@rgj.com 7:19 a.m. PST February 2, 2016

Jeff Anderson of the Nevada Natural Resources Conservation Service handling instruments he uses to measure snowfall and water totals at the Snotel site on Slide Mountain near Reno on Feb. 1, 2016.(Photo: Benjamin Spillman)

Weekend storms in the Sierra Nevada bolstered a snowpack that was already ahead of schedule for the season thanks to El Niño weather patterns.

On Monday new readings from the Snotel site on Slide Mountain showed 104 inches of snow depth and nearly 29 inches of snow water equivalent.

The snow water volume is 124 percent of what's typical for January and 78 percent of the average amount for an entire season. The Truckee River Basin, in which the Snotel site on Slide Mountain is located, is at 114 percent of normal for Feb. 1 and at 71 percent of the normal peak level.

"In recent history this is one of our best winters," said Jeff Anderson of the Nevada Natural Resources Conservation Service.

Buy Photo

Snowpack for the winter of 2015-16 was running ahead of schedule for the Reno-Tahoe region. (Photo: Benjamin Spillman/RGJ)

The totals got a boost from the stormy weather that rolled in during the weekend. Since Friday the snow depth increased 27 inches and snow water increased four inches. Anderson said the storm pushed Lake Tahoe three inches higher.

"That is a tremendous amount of water in just a few days," he said.

Overall snow water equivalent throughout Nevada's river basins ranges from a high of 161 percent in the northeastern part of the state to about 114 to 135 percent in the regions around Reno, Carson City and Lake Tahoe.

That's the highest statewide "percent of normal" average among a group of western states that includes Nevada, Oregon, Washington, Idaho, Wyoming, Utah, Colorado and parts of Montana, Arizona and New Mexico.

Despite the strong start for the winter of 2015-16 snowpack Anderson and Bill Hauck, senior hydrologist for the Truckee Meadows Water Authority, said winter of 2012-13 had a similar beginning but tailed off drastically beginning in February and finished around 60 percent of normal.

"It is good news, encouraging, but we still have the month of February, month of March to go," Hauck said. "We need it to keep snowing."

The story is similar in neighboring basins.

The Lake Tahoe Basin is at 135 percent of normal for Feb. 1 and at 89 percent of normal peak. The Carson River Basin is at 126 percent of normal for the date and 82 percent of normal peak

Group aims to bust NV Energy monopoly

 Anjeanette Damon, adamon@rgj.com 5:57 a.m. PST February 4, 2016

NV Energy power lines(Photo: RGJ file)

188 CONNECTTWEET 7 LINKEDIN 1 COMMENTEMAILMORE

A new coalition has filed an initiative petition to deregulate Nevada's energy market, a move that would essentially break NV Energy's monopoly on electricity service.

The petition would amend the state constitution to allow Nevada customers "the right to choose their service provider from an open retail market based upon price, reliability, and other important factors." Customers could also produce their own power, or join with others to produce power.

If the Nevadans for Affordable Clean Energy are successful in qualifying for the ballot, voters would have to approve the petition in two separate elections. The initiative also gives the Legislature until 2023 to open the energy market to new utilities.

"We are a broad coalition of Nevadans from all walks who want lower costs and more choices in energy sources, including renewable energy that will spur innovation and create thousands of good new jobs here in Nevada," said Matt Griffin, a lawyer for the coalition. "We aim to open

Nevada's energy markets so consumers have the freedom to choose new, more affordable energy and cleaner options for a healthier environment. This campaign is about empowering a brighter, cleaner future for Nevada's economy and great outdoors."

The initiative was prompted in part by the attempt of three Las Vegas Strip casinos to leave NV Energy to generate their own power or buy it elsewhere on the open market. In December, the Public Utilities Commission ruled the casinos-- the Las Vegas Sands, MGM and the Wynn Las Vegas-- would have to pay a total of $126 million in exit fees, plus substantial ongoing fees to protect other ratepayers from bearing the burden of their departure.

The coalition is being funded by such large energy customers.

NV Energy's president Paul Caudill said the initiative petition isn't surprising "in light of the dramatic changes in the western energy markets, including lower natural gas and power prices, and the availability of energy."

But he said NV Energy is "well-positioned to provide leadership and support to customers and stakeholders as we work through this complex issue and how it may affect jobs and investments in critical power and energy infrastructure."

Caudill did not take an outright position for or against the initiative petition in his statement.

"Our willingness to work in a constructive fashion is consistent with our core principles and the commitment I made in October 2015 in testimony filed with the Public Utilities Commission of Nevada," he said.

El Nino helps boost Lake Tahoe by 28 billion gallons

 Benjamin Spillman, bspillman@rgj.com 4:23 p.m. PST February 4, 2016

Enough water to supply 85,000 households for a year has flowed into the lake since Dec. 9

Lake Tahoe has seen about 28 billion gallons of rain and snow inflow from Dec. 9, 2015 through Feb. 3, 2016.(Photo: Contributed photo)

570 CONNECTTWEETLINKEDINCOMMENTEMAILMORE

The Sierra Nevada is finally having a better-than-average winter thanks in part to an El Nino weather pattern that formed in the Pacific Ocean.

But what's that mean for Lake Tahoe?

It means that since Dec. 9 about 28 billion gallons of water have flowed into the lake.

RENO GAZETTE JOURNAL
January was deadliest avalanche month since 2008

That's according to the latest figures from the Nevada Natural Resource Conservation Service which issued a water forecast Thursday and the federal water master in Reno.

The numbers show Lake Tahoe gained about 8 inches of elevation compared the December low point.

That equates to about 27.6 billion gallons, or enough water to serve about 85,000 households for a year.

That being said the lake got so low it remains about 11 inches below the natural rim which means that, for now, all that new water can't flow down the Truckee River to houses and farms in Nevada.

“Until it gets above the rim … none of it is really useful at least in terms of our water supply and irrigation,” said Jeff Anderson, the NRCS water supply specialist who helps prepare the forecast.

RENO GAZETTE JOURNAL

Science says Reno-Tahoe may get real winter

Another 1.7 feet of elevation gain is expected between March 1 and summer when it typically reaches the annual high point.

That, along with whatever flows in during the remainder of February, would put the lake at about 10 inches above it’s natural rim, according to Chad Blanchard, federal water master for the Truckee and Carson rivers.

The natural flow of the Truckee River at Farad is expected to be at about 104 percent of normal, according to the forecast.

“After the last few years that is going to seem like a lot,” he said.

That’s assuming the rest of winter plays out as the forecast suggests.

“We could still end up 70 percent or we could end up 200 percent,” Blanchard said. “There is a lot of winter left.”

KNPR

KNPR's State of Nevada

Is Our Tap Water Safe?

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4916575242_bf30ba8b83_b.jpg

William Warby/Flickr

Is the water that comes out of our taps safe?

- Add to PlaylistListenDownload

Feb 09, 2016

by:

Fred Wasser

Flint, Michigan has become synonyms with dangerous water. The city is now using bottled water because it's water supply is contaminated with lead.

In November, the city's mayor declared a state of emergency over the crisis, but it is all tied to the decision in 2014 to switch the city's water supply to the Flint River.

And while there is blame to spread around in Michigan, other cities and states are starting to re-examine their water supplies to just how safe they are.

Las Vegas gets its water primarily from Lake Mead, which is filled with water from the Colorado River.

Eric Marchand is an associate professor of Civil and Environmental Engineering at the University of Nevada Reno.

He told KNPR's State of Nevada because the water flows down through the Colorado River Basin it fills with minerals that many people in Southern Nevada don't like. However, he says those minerals are not harmful.

"It picks up a lot of mineral content," he said, "It basically dissolves rock, for lack of a better term, and those minerals end up accumulating in Lake Mead and that gives it its mineral quality."

Support comes from

He said when treating water the first priorities are removing bacteria or chemicals that are harmful. The second is stopping the water from being contaminated during treatment.

"Taste and odor issues are considered secondary in the regulatory arena," Marchand said. "They're definitely important from a water purveyor perspective but we really want to make sure that public health is maintained as the number one priority."

Pat Mulroy ran the Southern Nevada Water Authority for more than 20 years. She called the water situation in Flint "incomprehensible."

However, she believes the water in Southern Nevada is fine.

Mulroy pointed to the extensive testing done on the water quality as one reason she is confident in the water supply.

"The water authority has been more than diligent in its testing and transparency in terms of water quality," she said, "Where the normal utility around the world does about 400 water quality tests, in Southern Nevada we do 9,000."

Mulroy said the SNWA invested in sophisticated testing of water and uses one of the largest ozonation plant in the country to keep it clean.

She also said "there is not a lead pipe problem in Las Vegas," which is part of the problem in Michigan and other areas of the country.

In the 90s, concerns grew about water quality in Southern Nevada after it was discovered that perchlorate, a chemical found in rocket fuel that interferes with normal thyroid function, was leaching into Lake Mead through groundwater.

It was coming from the site of a former chemical manufacturing plant in Henderson. Mulroy said the groundwater is being cleaned up through an agreement with Kerr McGee, which owned the plant at the time.

"That's being removed before removed before it reaches Lake Mead now," she said, "Our perchlorate levels are extremely low."

Guests:

Pat Mulroy, Senior Fellow at the Boyd School of Law at the University of Nevada/Las Vegas and from 1993-2014 the general manager of the Southern Nevada Water Authority (SNWA); **Eric Marchand**, associate professor of Civil and Environmental Engineering at the University of Nevada/Reno