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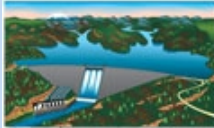
# Some Dam – Hydro News™ And Other Stuff



**Quote of Note:** *“For every action, there is an equal and opposite government program.” - - Bob Wells*

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**“Good wine is a necessity of life.” - -Thomas Jefferson**  
**Ron’s wine pick of the week: 2011 Artadi Spanish Red "Vinas de Gain"**  
**“No nation was ever drunk when wine was cheap.” - - Thomas Jefferson**



## **Dams:**

(Some title, it says it all!)

### **Enviro-crazies trying to get court to tear down the dam that supplies San Francisco’s water**

By Thomas Lifson, May 9, 2015, [americathinker.com](http://americathinker.com)

The drought (aka, the failure to build new water storage capacity while population doubled) that plagues California has not stopped the fundamentalists of the Green Religion from pursuing one of their most insane demands. They want to tear down the dam that stores the crystal clear Sierra Nevada water of the Tuolumne River and allow the Hetch Hetchy Valley to revert to its natural state, a process that would take many years, of course.

I used to see “Restore Hetch Hetchy” bumper stickers fairly often in the past, but the soaring



water bills and threats of ten thousand dollar fines for letting water runoff from your lawn onto the sidewalk have made them scarce of late. But that hasn't stopped the true believers who are suing in state court, hoping to enlist a judge in their lunatic cause and bypass democratic institutions so as to realize their spiritual aim. Alyssa Finley reports in the Wall Street Journal:

Last month, a group of environmental activists organized under the sobriquet Restore Hetch Hetchy sued in state court to raze the O'Shaughnessy Dam and drain the reservoir, which now supplies water and power to 2.6 million Bay Area residents. If successful, the lawsuit would create a severe water shortage in the Bay Area, which has been among the areas least affected by the drought in the West.

Hetch Hetchy and the other dams that supply water to the Bay Area have been an incredible blessing, supplying delicious, pure water. But the crazies who worship Gaia and want to force the rest of us to sacrifice for their spiritual goal want to destroy that blessing. And they are pretty explicit about it in their lawsuit:

According to the lawsuit, the Hetch Hetchy project violates the California constitution's prohibition of "waste or unreasonable use" of water resources, which must be put to "beneficial use thereof in the interest of the people and for the public welfare."

The environmentalists maintain that it is "unreasonable" that the reservoir obstructs their scenic views of "aquatic birds, fish and other aquatic animals, and terrestrial species, including black bears, deer, and other species." They also grouse that people "cannot fish in the river but must resort to a diminished fishing experience from the shoreline of the reservoir." Nor can people swim, but it's not as though there would be much swimming if the reservoir were removed and the natural flow of the Tuolumne River restored.

The environmentalists don't protest that wildlife is being harmed. Rather, their gripe is that people are being deprived of recreational and aesthetic enjoyment. The group estimates Hetch Hetchy Valley's so-called existence value—which captures "individuals' strong desires to be able to visit a restored Hetch Hetchy Valley in the future, to realize their ecological ethics, their altruism toward others and the environment, and the desire to benefit future generations"—at between \$44 billion and \$113 billion based on their review of other dam removals.

"Existence value" is another way of saying that their appreciation of nature should trump the ability of others to live and work here. Without the water, jobs would disappear and people would have to leave. Or else find a spare hundred billion bucks or so, and overcome endless environmental reviews on construction of replacement dams, when what's needed is more water storage. If California had continued to build dams and reservoirs to match its population growth, you would not be reading of the "drought" and people would be able to flush their toilets every time they used them. In my own view, if people think it is morally, aesthetically, or spiritually harmful to supply water to the population of California, then they should take the lead and depart from the state. Go somewhere that doesn't need dams to supply its water. But of course they expect other people to suffer so they can get their spiritual satisfaction. The dam and reservoir at Hetch Hetchy are one of the engineering triumphs of the last century, supplying water that is the envy of the world for its high quality and low cost. As a bonus, a lot of clean electric power is provided. But for some people, their aesthetic preferences trump all that good. They are narcissists. The drought (aka, the failure to build new water storage capacity while population doubled) that plagues California has not stopped the fundamentalists of the Green Religion from pursuing one of their most insane demands. They want to tear down the dam that stores the crystal clear Sierra Nevada water of the Tuolumne River and allow the Hetch Hetchy Valley to revert to its natural state, a process that would take many years, of course.

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(Good luck! Cutting costs is usually a pipe dream.)

### **Task force slims down low-water dam costs for coming proposal**

**The task force calls for 25 percent cut in initial \$316 million proposal.**

By JARREL WADE World Staff, tulsaworld.com, May 9, 2015

A week after engineers released a report that showed the total cost for Arkansas River infrastructure, officials serving on a community task force have called for the proposal to be trimmed by 25 percent. The engineering report released to the Arkansas River Infrastructure Task Force last week detailed a cost of \$316 million for three low-water dams and an overhaul of Zink Dam along the Arkansas River with public access points and parks attached to each of the projects. On Thursday, the task force discussed



slimming their approach to a \$235 million plan by having public access points and parks at Sand Springs, south Tulsa/Jenks and Bixby cut from the proposal. The funding of those parks would then be left up to the individual communities.

G.T. Bynum, task force chairman and Tulsa city councilor, said only Tulsa's Zink Dam would keep its amenities. "The reason for that is that it is unique because the Zink Dam amenities are actually part of the dam," Bynum said. "So it's not like you could build the dam and then come back five years later ... without adding exorbitant costs to modify the overall construction of the dam." Plans for the Zink Dam rehabilitation currently include a manufactured island and a white-water flume, according to engineering plans. Task force members and County Commissioner Karen Keith said she thinks all the parks should be included in whatever plan they bring to voters. "I think when you pull out the access elements of this, you have nothing left to sell," Keith said. "I really think we're selling ourselves short. I firmly believe that this package should have everything in it so that we do this right the first time." City Councilor Phil Lakin said Tulsa's dam, just like Tulsa's BOK Center, is a positive for the whole region. He added that Tulsa taxpayers would benefit from the construction of the other dams. However, he said he didn't support Tulsa taxpayers funding a Sand Springs park next to the dam that would only affect Sand Springs. "We're really early in our process," Lakin said. "We're creating a regional authority that is going to oversee and manage these dams and what happens along the waterway as we know it." The bulk of the estimates call for about \$200 million to construct three low-water dams in Sand Springs, Jenks and Bixby, and to rebuild Tulsa's Zink Dam near 31st Street and Riverside Drive. Other required costs include bank stabilization, environment preservation and permitting, which add more than \$18 million to the basic cost of adding the dams. Task force members plan to continue working on the proposal before inviting public input this summer with the goal of putting a proposal on a ballot late this year or in 2016.

(None is enough, failures that is!)

### **FEMA Encouraging Dam Safety Awareness on May 31**

**Since 1998, the number of high hazard-potential dams has increased from 9,281 to more than 14,700, according to the 2013 update of the National Inventory of Dams.**

May 11, 2015, ohsonline.com

May 31 is National Dam Safety Awareness Day, which commemorates the failure of the South Fork Dam in Johnstown, Pa., in 1889, triggering the infamous Johnstown flood that killed more than 2,200 people. It is the worst dam failure in United States history, according to FEMA. The agency noted that, since 1998, the number of high



hazard-potential dams has increased from 9,281 to more than 14,700, according to the 2013 update of the National Inventory of Dams. "Understanding the need for dam owners to proactively mitigate the risks associated with dam failures, states like Kentucky are striving to improve dam owner awareness through condition assessments on all high-hazard potential dams and to ensure that communities have a plan in place to protect their citizens in the event of a dam failure or incident through Emergency Action Plans," FEMA's online page about the day reported. "Prior to their efforts as part of Fiscal Year 13 National Dam Safety Program, 95 percent of the state-regulated hazard potential dams in the National Inventory of Dams for Kentucky did not have condition assessments and 68 percent of high-hazard potential dams in the National Inventory of Dams for Kentucky did not have Emergency Action Plans. To mitigate this, the Kentucky Dam Safety program inspected every high-hazard potential dam to make a condition assessment of the

dam. Each inspection included a report to the dam owner indicating deficiencies and providing a plan of action for the dam owners to address these deficiencies. As a result of these efforts, 166 dams were inspected in Fiscal Year 13, and Kentucky Dam Safety has now rated 100 percent of high-hazard potential dams for condition assessment. Moreover, they have either full or simplified Emergency Action Plans for 77 percent of the high-hazard potential dams in the state."

FEMA and the National Dam Safety Review Board are urging private-sector dam owners to become involved and take action to improve the nation's dam infrastructure on May 31. According to the National Dam Safety Program, dams can fail for one or a combination of the following reasons:

- Overtopping caused by floods that exceed the capacity of the dam
- Deliberate acts of sabotage
- Structural failure of materials used in dam construction
- Movement and/or failure of the foundation supporting the dam
- Settlement and cracking of concrete or embankment dams
- Piping and internal erosion of soil in embankment dams
- Inadequate maintenance and upkeep

Several dam failures during the 1970s resulted in a national focus on inspecting and regulating dams. They included the Feb. 26, 1972, failure of a tailings dam owned by the Buffalo Mining Company in Buffalo Creek, W.Va., causing a flood that killed 125 people, injured 1,100 others, and left more than 3,000 people homeless; the June 5, 1976, failure of the Teton Dam in Idaho, which caused \$1 billion in damage and killed 11 people; and the November 1977 failure of the Kelly Barnes Dam in Georgia, killing 39 people.

(Hopin' there's not a whole lot of shakin' going on!)

### **Cowlitz River Dams Built to Withstand Most Earthquakes**

**MINIMAL DAMAGE: Safety Engineers Say the Worst Predictable Earthquake Might Create Some Cracks; Failure Would Result in a 'World of Hurt'**

Jesse Smith / For The Chronicle, May 12, 2015, [chronline.com](http://chronline.com)

Editor's Note: The following story is Part Two of a two-part series looking at the potential effects of an earthquake in Lewis County. Part One remains available at [www.chronline.com](http://www.chronline.com) and [www.lewiscountywatch.com](http://www.lewiscountywatch.com).

With 51 dams, Lewis County is ranked No. 7 out of 39 counties for the most water retention structures in the state of Washington. Three dams on the Cowlitz River in Lewis County all pose hazards to downstream residents if they were to fail. The Cowlitz Falls dam, owned by Lewis County Public Utilities District, is rated 1C, meaning seven to 30 lives are at risk if it fails. The Tacoma Power-owned Mossyrock and Mayfield dams are both rated 1A with more than 300 lives at risk, according to the state Department of Ecology's Inventory of Dams with data through October 2014. "They monitor this really, really closely because they realize the responsibility that they have to maintain structural integrity under all types of conditions," Lewis County Emergency Management Director Steve Mansfield said. A failure at Mossyrock and Mayfield dams would cause widespread flooding in southern Lewis County and into Cowlitz County, Mansfield said. But there are plans in place if failures were to happen.

Steve Grega, at Cowlitz Falls, and Toby Brewer, of Tacoma Power, both hold the title of chief dam safety engineer with one of their primary focuses being structural integrity for different hazards, including earthquakes. Officials at the dams looked at the maximum ground acceleration for different "maximum credible" earthquakes in the region. Brewer said the models test for three different local earthquakes — a 6.5 magnitude quake close to the ground surface with an epicenter near Mossyrock, a 7.5 magnitude from the Juan de Fuca plate and a 9.0 magnitude earthquake originating from the offshore Cascadia fault. Brewer said the earthquake near Mossyrock would cause the highest peak ground acceleration at 0.55g, or 55 percent of the

weight of gravity. All three dams would withstand the scenarios and maybe receive a few cracks and other slight damage. "As far as a whole dam washing out, it's highly unlikely," Grega said. If something did happen causing the dam, which was built in 1993, to break, Grega said less than 1 foot of water would fill Mossyrock. But if Mossyrock or Mayfield broke, which is also highly unlikely, Brewer said it would be damaging. "If Mossyrock were to go out it would scour the river bed from there to Longview and Toledo and some of the local towns downstream would be in a world of hurt," Brewer said. The dams keep and test detailed emergency plans in case something were to happen. Both of Tacoma Power's dams were built in the 1960s and were designed to withstand ground acceleration at 0.15g; however, Brewer said the models and tests have proven that they can handle more than that. The dams regularly run scenario drills for different hazards, including earthquakes, floods, volcanic eruptions and sabotage events as required by the Federal Energy Regulatory Commission. Operators also make daily, weekly and monthly rounds checking the structure and dam measurements. Every five years, independent consultants review all safety issues for the dams. If changes to expected seismicity are discovered, the dams have to factor those into their plans. But for now, experts aren't predicting any regional earthquakes powerful enough to cause any of the three dams on the Cowlitz River to fail, Brewer said, noting that he spoke to consultants just last week.

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(Down with the old, up with the new! Sometimes when they remove them, they replace them.)

### **New Champlin dam to replace 79-year-old structure**

**The decades-old Elm Creek Dam is coming down. Its replacement could reduce flood plains by 60 acres.**

By Karen Zamora, Star Tribune, MAY 12, 2015 — [startribune.com](http://startribune.com)

Construction crews in Champlin, MN have started removing a historic 79-year-old dam near the Mill Pond that was originally built to power a flour mill. Built in 1936, the Elm Creek Dam needed repairs and had outlived its effectiveness, said Todd Tuominen, assistant city engineer and project manager. The opening in the dam, or spillway, was too small to let enough water flow through during downpours, said Jason Boyle, dam safety engineer for the state Department of Natural Resources. The new dam, expected to be completed by May 2016, will have a large spillway and other waterways to control heavy rains and severe flooding. Design plans show that, with the new structure, flood plains adjacent to the Mill Pond could be reduced by as much as 60 acres, saving residents a total of about \$100,000 in flood insurance. Improving safety was also part of the \$5.65 million project. Every spring, city crews have had to manually adjust wooden boards used for water flow near the top of the dam. It has been dangerous work, Tuominen said.

The new design now has automatic adjustments, among other advancements. The design includes a stair-step design spillway and other characteristics of the 1930s. Many of the details were intended to recall the historic status of the original Elm Creek Dam.

#### **Other improvements**

Residents will also see a face-lift of the area used for recreational activities. Tuominen said the Elm Creek Dam is a popular fishing area, but there is currently no place to walk. Erosion was so bad that officials had to close the trail near the dam two years ago. There will be areas for people to fish, walkways around the dam, a live roof and viewing platforms. The dam will also be compliant with the Americans with Disabilities Act. The Elm Creek Dam is just one of about 100 Minnesota dams built in the same era that need improvements, Boyle said. There are about 1,000 dams in the state, he added. Currently, the Mill Pond is empty to treat weeds and address other issues as crews work on the dam. The project is part of an overall goal to bring the pond back to its prime. The Mill Pond has been the city's focal point for many years. It has also been one of the top environmental concerns in the city, recent community surveys have shown. The pond, located behind the Elm Creek Dam and surrounded by a park, has been drained several times to help manage a weed explosion increased by sediment-laden soil that has eroded into the creek upstream. Feedback from residents about the project has been positive, Tuominen said. "They know it's a necessary improvement," he said.

(Lotta dams, lotta flood control.)

## Millions in damages prevented by dams, conservation practices during historic May rainfall

May 13, 2015, ardmoreite.com

OKLAHOMA CITY - Oklahoma's network of 2,107 flood control dams and voluntary conservation practices prevented an estimated \$22.57 million in flood damages from the May 1-9 storms according to the USDA Natural Resources Conservation Service Water Resource Office. "The flood control network was designed to protect farmland, roads, bridges, homes and lives, and that's exactly what we've seen over the last week of rainfall," said Trey Lam, Oklahoma Conservation Commission (OCC) executive director. "Like any form of infrastructure, operation and maintenance of these dams is critical if we hope to continue reaping the benefits they provide."

According to Oklahoma Mesonet, May 2015 is so far the wettest since 1921. Some of the hardest working dam clusters over the last 10 days include:

- Fourche Maline Creek watershed, Latimer County, 14 dams, 9.97 inches of rain, \$819,272 in damage prevented
- Upper Clear Boggy Creek watershed, Coal, Johnston, and Pontotoc Counties, 49 dams, 10.1 inches of rain, \$1,029,641 in damage prevented
- Sandy Creek watershed, Garvin and Pontotoc Counties, 29 dams, 8.11 inches of rain, \$764,362 in damage prevented
- Okfuskee Tributaries, Okfuskee and Okmulgee Counties, 29 dams, 7.89 inches of rain, \$693,985 in damage prevented

### Rainfall averages from National Oceanic and Atmospheric Administration.

"Local conservation districts and the private landowners they work with also deserve credit for this success," said Gary O'Neill, NRCS state conservationist. "It's important we not lose sight of the other side of the coin—soil health. Healthy soils achieved through voluntary conservation practices are crucial to halting the extensive flood and wind related erosion witnessed in this state during the 1930s and '50s." Practices such as no-till farming and stream bank fencing mean stabilizing ground cover is in place when floodwaters rise. Due to higher levels of organic matter above and within the soil, healthy soil withstands flooding, erosion and drought better than bare or plowed soil. "High residue, no-till and cover crops build soil that is more resilient to climate extremes—both flood and drought." said Greg Scott, OCC soil scientist. "Organic matter, earthworms and roots hold soil in place and provide pathways through the soil for water to infiltrate. Bare soil seals off, crusts over and can be almost as ineffective as concrete at absorbing water, especially in flood events."



### Hydro:

(TVA is baaaaaack.)

## TVA's McCormick To Head National Hydropower Association

chattanooga.com, May 8, 2015

John McCormick, vice president of Safety, River Management and Environment at the Tennessee Valley Authority, has been named president of the National Hydropower Association.

Mr. McCormick was recently introduced along with the NHA's officers and board members at the association's annual conference in Washington, D.C.

"I am honored and very proud to be chosen to lead the National Hydropower Association," Mr. McCormick said. "I look forward to working with the NHA board, leadership and members to promote the growth of clean, affordable, U. S. hydropower, and to secure the energy, environmental, and economic benefits of hydropower resources for all Americans." Under Mr. McCormick's executive leadership at TVA, he directs the forecasting and scheduling of the entire Tennessee River System across TVA's seven state service area, dam safety for all of TVA's hydroelectric dams, non-power dams, 14 navigation locks and Raccoon Mountain Pumped Storage Plant. Mr. McCormick holds a bachelor's degree in engineering from Widener University in Pennsylvania and makes his home in Chattanooga. *The National Hydropower Association, the hydropower industry's largest advocacy group, is a nonprofit association dedicated exclusively to promoting the growth of clean, affordable hydropower as America's leading renewable resource. Mr. McCormick replaces NHA outgoing president, Marc Gerken of American Municipal Power, based in Columbus, Oh.*

(This is no hockey game, this is big bucks!)

## Rockingham, state face off with TransCanada

By Susan Smallheer, Staff Writer | May 12, 2015, rutlandherald.com

NEWFANE, VT — The two sides are millions of dollars apart — \$41 million to be exact. The fight over how much TransCanada Hydro Northeast Inc.'s hydroelectric facility in Bellows Falls is worth — and thus how much it pays in taxes to the state's education fund, as well as to the town of Rockingham and the village of Bellows Falls — started Monday in Windham County civil court. The



international energy giant is appealing its \$108 million assessment set by the town of Rockingham in 2012, after years of negotiations between the town and the Canadian-based energy giant failed. The company believes the dam and generating facility is worth \$67 million. At stake is millions of dollars for both sides: Rockingham and Bellows Falls receive a hefty portion of their annual town and village budgets from the most valuable property in the town, and by extension, the state of Vermont's education fund also benefits substantially.

On Monday, its expert witness, Dan Peaco of La Capra Associates of Boston, said the Pennsylvania shale gas boom had driven down energy prices all over New England, and as a result, the value of the Bellows Falls dam was lower. Peaco said in 2012 there was a 5,000 megawatt glut of power in New England, further affecting the hydro facility's value. The Marcellus shale had produced "a substantial change in market fundamentals," said Peaco, who has been an expert witness for many New England utilities, he said. Earlier in the day, Shawn Keniston, TransCanada Hydro Northeast's director of hydro relicensing and external affairs, testified that he had recommended significant capital investment in the hydro facility in the coming years because it was a valuable hydro asset. The Bellows Falls dam, which started generating electricity in 1928, has three turbines and generators, and is considered such a strong producer that TransCanada is willing to pay for a major overhaul of those turbines and generators in the next 10 to 15 years, Keniston said. The dam generates between \$11 million and \$13 million a year in revenue, and Keniston said he recommended a \$6.7 million rebuilding of Turbine No. 2, with rebuilding of the



other turbines to follow in other years. But he said the Turbine No. 2 project would pay for itself in five years, because of increased power generation and other efficiencies. Keniston, an engineer, testified he had worked for the three different companies that have owned the Connecticut hydro network during his 26-year career — first New England Power, then Pacific Gas and Electric, and then TransCanada, which bought the system in 2005.

The Bellows Falls dam, he said, “is very economically viable,” a phrase Vermont Assistant Attorney General William Griffin returned to again and again. Peaco and the town and state’s expert witnesses are expected to testify about the complex financial formulas it uses to come up with the facility’s value. It has little to do with concrete and wires, and everything to do with the price of electricity on the New England market. TransCanada, in filings with the court late last week, said that the value of the portion of the facility in Rockingham is \$67 million, with an additional \$17 million in New Hampshire. One thing that makes the Bellows Falls dispute unique is that most of the valuable and taxable property, the power generation machinery, is actually in Vermont — not New Hampshire, which owns the river, and much of the dam structure. Camilla Roberts, chairwoman of the Rockingham Board of Listers, said that TransCanada’s hydro station represents 23 percent of Rockingham’s grand list of taxable property, in the village of Bellows Falls, the percentage is even higher — 41 percent. It is not the first time the two sides have faced off in the historic Newfane courthouse in front of Judge John Wesley, who heard the two sides in a 2004 dispute, which Wesley decided in favor of Rockingham. But unlike 2004, the state of Vermont is playing a more prominent role in the appeal this time. At issue is an appraisal done by Sansoucy Associates, which was hired by the state of Vermont to do an appraisal of all the hydroelectric dams on the Connecticut River that are owned by TransCanada. Joining Rockingham’s longtime hydro attorney Richard Saudek of Montpelier at the defendant’s table were two assistant attorneys general — William Griffin, a deputy attorney general, and Mary Bachman from the Department of Taxes. TransCanada owns six hydroelectric dams on the Connecticut River, and another seven dams on the Deerfield River in southern Vermont and western Massachusetts.

(Hydro ‘a plenty!)

### **Sabine River Authority’s cup runneth over**

therecordlive.com. 5/12/15

It shouldn’t be surprising to many that the largest problem the Sabine River Authority has been dealing with the past several months is copious amounts of rainfall, according to Ann Galassi, Asst. General Manager – Administration for the SRA. “The biggest thing has been the rain. Lake Tawakoni (in North Central Texas) was 12 feet low. Now it’s three feet low,” she said. “It’s either feast or famine for us.” She added being in the middle is good for water levels, but if they have to choose between drought or a deluge, it’s always better to run more. “We’ve been running the hydroelectric generators at Toledo Bend which provides electricity for Texas and Louisiana residents. More water in Toledo Bend Reservoir also provides a greater water supply resource while creating opportunities for recreation,” Galassi said. “But we’re at the mercy of the weather.”



Created by the Legislature in 1949 as an official agency of the State of Texas, the Sabine River Authority of Texas is a conservation and reclamation district with responsibilities to control, store,

preserve, and distribute the waters of the Sabine River and its tributary system for useful purposes. The Sabine River Basin (Basin) covers 21 counties with a population exceeding 600,000 people. The upper limits of the Basin begins just east of Dallas in Northeast Texas and extends more than 500 river miles along the Sabine River to Orange County.

### **Orange County**

SRA's Authority General Office (AGO), located in Orange County, is where SRA manages oversight of its projects including Lake Tawakoni and Lake Fork in the Upper Sabine Basin, and Toledo Bend Reservoir and the Gulf Coast Pump Station and Canal System in the Lower Sabine Basin. SRA's responsibilities include managing the long-term water supply needs of the Sabine River Basin and play a major role in state and regional water planning issues. In Orange County SRA provides raw water for industrial, municipal and agricultural customers through the 75 mile Gulf Coast Canal System running throughout the County. Industrial customers include DuPont, Honeywell, Entergy, Firestone, Chevron, Lanxess, Gerdau Ameristeel, NRG and International Paper. SRA also provides raw water to the City of Rose City. SRA's Environmental Services Division provides field and laboratory water quality monitoring and analysis for the Sabine River Basin. The laboratory located in Orange County is accredited by Texas Commission on Environmental Quality and provides testing and analysis for many communities and industries in Orange County.

### **Toledo Bend Reservoir**

Toledo Bend Reservoir forms a portion of the boundary between Texas and Louisiana on the Sabine River. It was primarily built for the purposes of water supply and hydroelectric generation. SRA Board of Directors recently accepted a new fifty-year Federal Energy Regulatory Commission license for the Toledo Bend Project. The Toledo Bend Project is jointly owned and operated by SRA and the Sabine River Authority, State of Louisiana. The new FERC license permits continued operation and maintenance of the hydroelectric project which was originally licensed in 1963. East Texas has received an abundance of rain this spring. For the first time since 2009, the spillway gates located at Toledo Bend Reservoir were opened to pass the heavy rains received and prevent overtopping. Toledo Bend lake level is currently near full pool elevation of 172 feet and will be drawn down over the summer months to elevation 168 feet generating electricity for consumption during the hot summer months. Nine of the spillway gates were recently refurbished with two more gates scheduled to be refurbished next year. The SRA also provides water quality testing for different facilities. In addition to testing other entities' water, the SRA's lab will also test individual residents' water upon request by calling 409-746-2192. They also work with water supply contracts with other municipalities and entities, though they are not a regulatory agency. "Some reservoirs in other parts of Texas that are usually drier than our area are filling up now. Some are still in drought conditions," she said. "Any water sales from our area will be done through water supply contracts after an extensive process that includes an inter-basin transfer permit that involves public input. Before any water sales are considered, SRA will make sure the water needs of our Basin are met first."



### **Water:**

(Some people have too much, others don't have enough. What's a tenth of an inch look like?)

### **Storm bring flooding, imminent dam breach**

By Kim Morava, May 8, 2015, news-star.com

Voluntary evacuations were occurring in a Shawnee neighborhood late Friday night as a dam was close to a breach following heavy rains that flooded many local roadways in Pottawatomie County, OK.

Storms passing through dumped torrential rains in already saturated areas, causing flooding from a few inches to a few feet to collect on countless roadways, some of which turned into rivers for a time.

Don Lynch, Shawnee/Pottawatomie County emergency management director, said late Friday night that the Granada Lake Dam in the neighborhood south of MacArthur and east of Bryan Street, was close to a breach.



“We are at an imminent breach state,” he said, as water was one just one-tenth of an inch from breaching that dam, which would impact the entire Windmill Ridge neighborhood.

“We’re implementing precautions,” he said, by letting residents know and creating a voluntary evacuation plan. “We cannot make it mandatory,” Lynch said about the evacuations, but added that a breach of the dam would affect “the whole neighborhood, and the creek all the way to the river. Lynch, who said this is a first for Pottawatomie County, said, “I don’t know that we’ve ever had a dam breach before.” Because of all of the flooding, the Red Cross established an evacuation site Friday night for anyone seeking refuge from flooding at the First Baptist Church, 227 N. Union. About 10:30 p.m., just a handful of people were on site, but those numbers were expected to possibly increase overnight. While the dam was being monitored, Lynch said flooding was affecting many areas as roadways remained flooded late Friday night and others had high water. Many roadways were barricaded until water can recede. At 45th and Harrison, motorists attempted to drive through several feet of water, with many getting stalled along the way. Some of the high water areas wreaking havoc Friday night included Bethel Road and Hardesty Road, SH 102, Airport Drive and MacArthur, areas of Econtuchka Road, Westech Road, Independence and Harrison Streets and numerous others. With the threat for more rain today, Lynch said there’s a greater risk of more flooding, from city streets to rural areas. Lynch, who encouraged motorists to stay off the flooded roadways, said people should never drive into areas of water.

“Turn around, don’t drown,” he said, adding there may not be a roadway below. Pottawatomie County Sheriff Mike Booth echoed that thought. Booth, who was out with his deputies patrolling many areas after the storm, said not only were there areas with high water, but there was lots of debris. “There’s debris floating with the water,” he said, and many of those items were getting stuck and creating more road hazards. He advised motorists to avoid flooded areas, adding they won’t know if the road is even going to be there. Many sinkholes were being reported Friday night. Downed power lines also were reported in many areas, Booth said, And with more storms and a saturated ground already, today is expected to cause more issues with flooding. “There’s nowhere for the water to go,” Booth added.

(Guess that tenth of an inch was pretty big! And, this is nowhere near a PMF!)

### **Storms continue to drop rain across Oklahoma**

**The National Weather Service in Norman reported a tornado passed near Kingston in Marshall County about 7 p.m. accompanied by quarter-sized hail. Baseball-sized hail fell in Comanche in Stephens County, the National Weather Service reported**

FROM STAFF REPORTS • May 9, 2015, newsok.com

At least one tornado touched down Saturday night in southern Oklahoma, rounding out a week of storms that caused severe flooding and damage across the state. The National Weather Service

in Norman reported a tornado passed near Kingston in Marshall County about 7 p.m., accompanied by quarter-sized hail. Baseball-size hail fell in Comanche in Stephens County, the National Weather Service reported. A State of Emergency issued by Gov. Mary Fallin on Wednesday remained in effect Saturday in 12 counties throughout the state.

A preliminary damage assessment of Oklahoma City showed more than 800 buildings were damaged in Wednesday's storms that also destroyed numerous homes throughout Grady County. More than 3,000 people were still without power throughout the state on Saturday, down from more than 10,000 on Saturday, Cain reported. Several roads in Oklahoma City and Norman remained closed Saturday as the flood threat remained and heavy rain fell throughout the metro. About half an inch of rain fell in Oklahoma City on Saturday, and an already-flooded Shawnee saw another 2.2 inches, according to Mesonet rainfall totals. Shawnee residents evacuated from their houses Friday as the result of a potential dam failure were allowed to return home Saturday, Cain said. The American Red Cross opened three shelters in Oklahoma City, Henryetta and Shawnee, where more than 50 people spent the night, state Emergency Management spokeswoman Keli Cain said. The Oklahoma Voluntary Organizations Active in Disaster will open two resource centers for people affected by this week's storms, according to a news release. Anyone affected by the storms can go to the Church of Jesus Christ of Latter-day Saints, 2440 SW 55, in Oklahoma City, or the Bridge Creek Upper Elementary School, 2209 E Sooner Road, in Blanchard, to meet with representatives to see what assistance is available to them. The center will be open Sunday from 1 p.m. to 7 p.m. and Monday through Friday 11 a.m. to 7 p.m.



(Fish or farms, who should get the water?)

### **Almost-extinct fish keeping water off limits amid Calif. drought, farmers weigh challenge**

By William La Jeunesse, April 30, 2015, FoxNews.com

At three inches long, the delta smelt is one of the smallest fish in California -- but ounce for ounce, no species statewide carries more weight. Endangered since 1993, the plankton-eating silver minnow is blamed by farmers, lawmakers and water officials up and down the Golden State for locking down billions of gallons of water that otherwise would go to them. That's because, since the smelt's listing as a protected species, biologists have tried saving the fish, in part, by withholding fresh river runoff annually to maintain smelt-friendly temperature and salinity levels. Farmers and downstate cities -- already suffering the effects of the drought -- claim that water was allocated to them, and withholding it for a fish with no commercial purpose is bad policy. "California fruits and vegetables are sent all over the world," said Republican state Assemblyman Travis Allen. "When we are diverting our water to save a few pinky-size fish and leaving hundreds of thousands of acres fallow -- there is something wrong with our priorities."

But major farm organizations are exploring a new option in the increasingly contentious fight, as the fish population continues to plummet despite conservation efforts: Declare the species extinct, and delist it as an endangered species, thus allowing regulators to turn on the pumps that appear lethal to the tiny minnows. The numbers suggest the delta smelt, indeed, could be wiped out soon anyway. In a March 2012 trawl survey, wildlife officials found 296 fish. An identical sampling a month later found 143. But in April 2015, officials found a single fish, not enough to propagate the species. Dr. Peter Moyle, an expert at UC Davis, predicts the smelt will likely be gone for good in about two years. But those considering a push to delist could be in for a fight. Moyle and other

fish biologists say the U.S. has a moral obligation to save the species, and making it the poster child for California's drought is unfair. "Trying to blame fish for a shortage of water just isn't right and isn't true," Moyle said. "The delta smelt is in decline because the delta is in decline." The Sacramento-San Joaquin Delta is the largest estuary of its kind between Alaska and Argentina – a giant intersection of snowmelt and ocean that supplies water to 25 million Californians. Once the most plentiful fish in the delta, the smelt has been in decline for decades, the victim of predators, urbanization and changing conditions.

"It is a very delicate fish," Moyle said. "But it's just the first fish on the chopping block if we don't manage the delta properly." But Allen said that when pitting the "bait fish" against California families, "I think that is a pretty easy decision to make." Figuring out a way forward won't be easy. The delta is the most contentious body of water in California, pulled in all directions by powerful interests. But the smelt, steelhead and salmon have a trump card in their pocket – the Endangered Species Act, which says the federal government must do everything it can to stop the species from going extinct. That's why some are considering a push to delist the fish. The mandate, meanwhile, underpins the UC Davis Fish Conservation and Cultural Laboratory, a ramshackle outpost of trailers on the southern shore of the delta outside Sacramento. There, biologists successfully raise the smelt in dozens of temperature-controlled tanks. Beginning with 160 fish in 2006, the labs produce 250 pairs a year using artificial insemination, squeezing eggs from each female into a bowl, then fertilizing them with male sperm. Two months later, the tiny larvae emerge from beakers full of eggs. Problem is the fish, which live no longer than a year, have nowhere to go. Unable to survive in the delta, most are handed over to researchers trying to figure out how to save the species. "Is farming more important than fisheries? Is fisheries more important than farming? Personally, I think fisheries has gotten the short end of stick for years," Moyle said. Environmental groups claim more than just smelt depend on a healthy delta and adequate downstream flows, from salmon to sturgeon. "We have 80 fish species in California, like the delta smelt, that are in trouble," Moyle said. "There are other species deserving of protection." In the meantime, farmers, cities and conservationists will fight over water they claim is rightfully theirs as California heads into a fourth summer of severe drought.

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(Some people just think water will always be there. The problem is it never rains where or when you want it!)

### **River Advocates Warn Lawmakers That Dams Aren't The Answer To California's Drought**

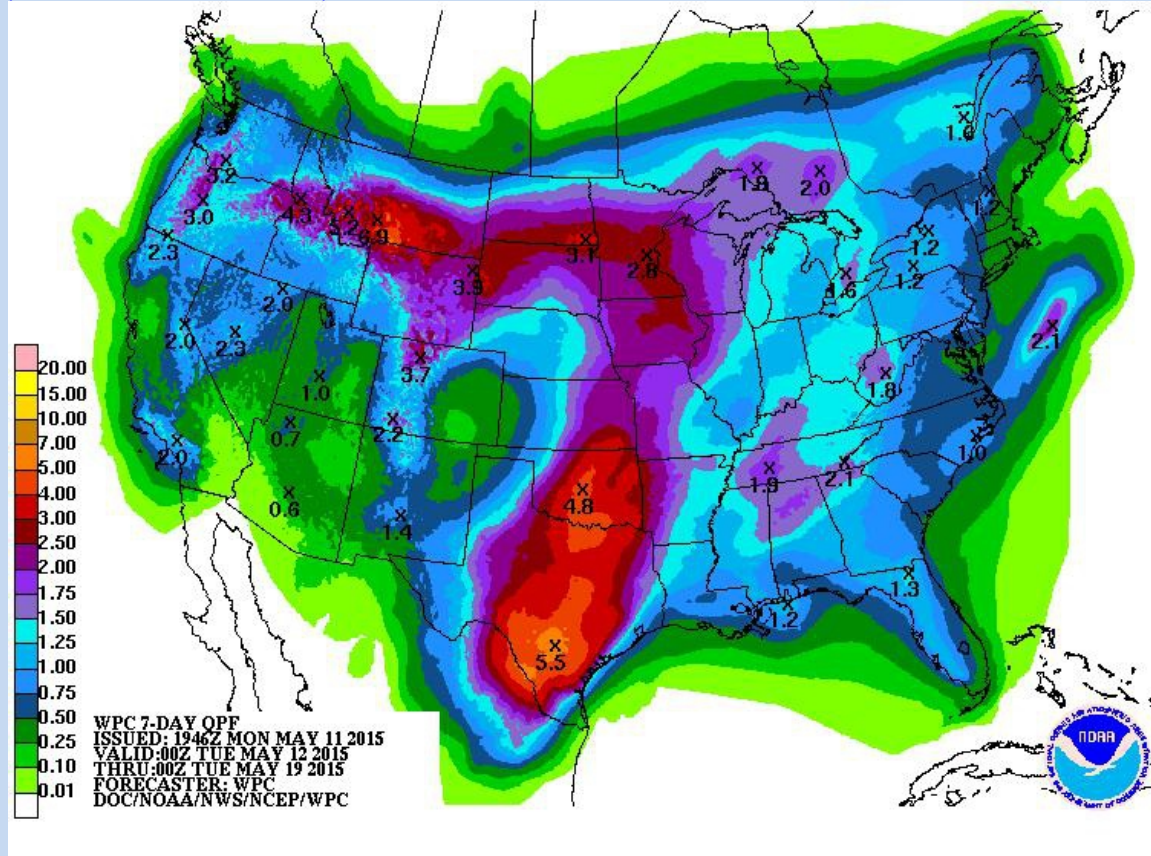
By Ron Jones, May 11, 2015, [sacramento.cbslocal.com](http://sacramento.cbslocal.com)

SACRAMENTO (CBS13) — River advocates hoped to get the attention of California lawmakers on Monday by paddling down the Sacramento River with a message about the drought. Friends of the River say they want to send a message to lawmakers that building dams isn't the solution. "Today we want to get the word about conservation out," said Brian Kallen. The group fought strong winds and currents on the Sacramento River, but they also expect stiff resistance from lawmakers who support the construction of new dams. "Dams don't actually create more water," Kallen. There's a big push for dams but the problem is lack of water not lack of dams. We have lots of dams."

They believe in the long run, new dam construction will endanger the fish, animals and fowl that call rivers home by reducing the water levels. "The rivers themselves are really valuable," he said. They also say lawmakers are placing too much attention on the survival of the farming and agriculture industry. "We seem to focus on crops and businesses that seem to make a lot of money but we depend on more than just that," Paul Martzen said. The nonprofit group hopes the conservation conversation resonates with lawmakers for generations to come.

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(Here's where the water is.)





**Other Stuff:**

(Don't want to be on the highway with this thing! The ultimate outdoor theater. Except, you have to park in a boat!)

**Movie Projected On Hoover Dam Breaks World Record**

By Associated Press, May 06, 2015, kjzz.org

HOOVER DAM, Nev.-Ariz. Border — Daimler Trucks North America LLC said that in addition to debuting the company's self-driving semi-truck on the Hoover Dam Tuesday night, the vehicle maker also broke Guinness World Records when it projected the



(Photo courtesy of Daimler AG) Vehicle maker Daimler Trucks North America LLC said it broke Guinness World Records when it projected the highest light output ever, turning the Hoover Dam into a massive movie screen.

highest light output ever turning the dam into a massive movie screen. The company said 60 projectors used 1.17 million lumens — equal to about 1,400 household lightbulbs — to stretch videos, images, animation and an American flag onto the surface of the modern construction marvel finished in 1935 on Nevada and Arizona's border. The program included live footage and recorded video. Daimler said the video projection was equal in size to nine football fields or more than 87 average-sized IMAX screens. Company officials said the Hoover Dam show took six months to plan.



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