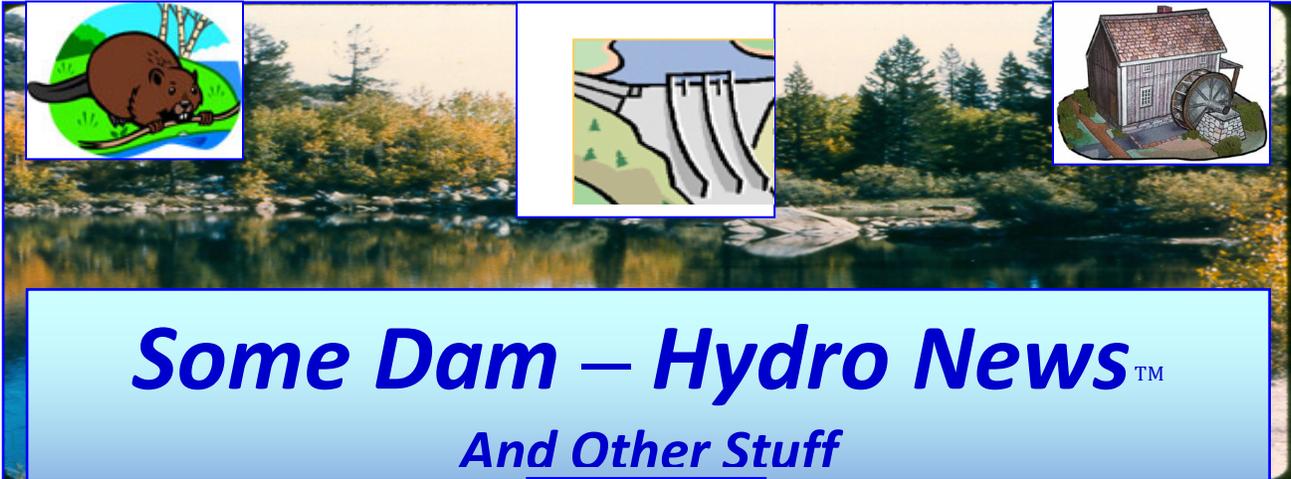


1/3/2020



Quote of Note: *“The secret to life is meaningless unless you discover it yourself.” - W. Somerset Maugham*

Dams:

(CA is a mess!)

Some Dam - Hydro News → Newsletter Archive for Current and Back Issues and Search:
 (Hold down Ctrl key when clicking on this link) <http://npdp.stanford.edu/>. After clicking on link, scroll down under Partners/Newsletters on left, click one of the links (Current issue or View Back Issues).

“Good wine is a necessity of life.” - -Thomas Jefferson
Ron’s wine pick of the week: 2017 Carol Shelton Zinfandel “Monga Zin”
“No nation was ever drunk when wine was cheap.” - - Thomas Jefferson



Amid Oroville emergency, California Legislature moves to make flood-control fixes

December 11, 2019, Staff Writer, insiderfinancial.net

As heavy winter storms continue to hammer California, the Legislature is launching a review of dam and levee safety and bracing for major investments necessary to shore up flood control throughout the state. Amid the ongoing crisis at Oroville Dam, lawmakers have taken only tentative steps so far. The first oversight hearing to review what happened in Oroville is scheduled for next week, and the Senate leader is proposing a one-time funding source for flood protection efforts. Broader solutions for California’s aging flood-control facilities will likely not emerge for months, until at least the current emergency passes. But long-standing disagreements over how best to resolve the compounding water problems facing the state are already resurfacing, pointing to the challenges ahead for a deal when tax revenue is tight and budget commitments vast.

“The state of California is excellent at reacting. We’re just not very good at being proactive,” said Sen. Anthony Cannella, R-Ceres. “At some point, we’ve got to start spending some money on these things.” An initial plan to provide \$500 million in competitive grants to local and regional

agencies for flood protection is forthcoming from Senate President Pro Tem Kevin de León. The money would be added to the plan for a \$3 billion parks and drought recovery bond that de León, D-Los Angeles, is seeking to place on the June 2018 ballot. **The total includes \$300 million for water and flood districts in the Central Valley to repair flood-control systems or build new ones.** Another \$100 million would go primarily to bolster Delta levees, with the remaining \$100 million aimed at projects to prevent damage from stormwater and mudslides. "There is a larger issue we can no longer ignore," de León said in a statement. **"Climate change is here, and it's real.** It is impacting our communities. It is costing our state billions in damage and severely affecting peoples' lives. California needs to build greater resiliency into its water and flood systems." Republicans for years have been pushing for new dams they say would have counteracted the devastation of California's recent drought. Lawmakers such as Cannella now say the surging waters that cannot be contained by existing facilities prove yet again why more storage is needed.

Assemblyman James Gallagher, a Yuba City Republican who represents the communities threatened by a possible failure at Oroville Dam, was granted special permission to discuss the situation on the Assembly floor Tuesday. **He urged his colleagues to "be laser-focused on getting infrastructure right."** The "boom and bust" cycle of floods and drought has become predictable to California, he said, necessitating "consistent commitment in our budget" to cover current maintenance and construct more "infrastructure that will help protect (us) from devastating floodwaters, while better capturing that water for use during years of drought." **"Oroville Dam is perhaps the latest catastrophe,"** he said.

Those pushing for more surface water storage, which includes some Central Valley Democrats who represent farmers frustrated by waning irrigation deliveries that have fallowed their fields, are likely to encounter resistance. Many Democrats traditionally oppose new reservoirs because of the cost and environmental impact. I'm interested in the big, grand vision. Sen. Bob Hertzberg, a Los Angeles Democrat who is leading the Senate oversight hearing next week on what caused the situation in Oroville and the state's response, said it is time for California to find a new water strategy. When it comes to storage, **he's more enthused about efforts to capture stormwater for reuse or to recharge groundwater aquifers.** "I'm interested in the big, grand vision," he said. Even commitment to restoring the state's existing flood protections – a vast network of dams, weirs, bypasses, pumping plants, channels and levees jointly managed by the federal government, California and local districts – may wither when the bill comes due. Another major deal to fix roads and highways has been repeatedly delayed over how to pay for it.

Repairs to the badly damaged spillway at Oroville Dam are estimated at more than \$100 million – and there are 33 more storage facilities in the State Water Project alone. The regional flood-management system in the Central Valley consists of nearly 1,600 miles of levees. In the coming months, the Assembly Water, Parks and Wildlife Committee plans to conduct hearings to assess what other work may need to be done on flood management systems across the state. Assemblyman Eduardo Garcia, a Coachella Democrat who chairs the committee, said he expects to push for maintenance to be a part of the state budget. "It has to be," Garcia said. Gov. Jerry Brown's Department of Finance would not say whether new flood-control funding will be part of his revised budget proposal in May. Assemblyman Marc Levine, D-Greenbrae, announced last week that he intends to introduce a bill requiring annual physical inspections of auxiliary spillways at all dams managed by the state and an update of operation manuals. **Attention is also turning to major projects that are outside of California's purview.**

Sen. Ten Gaines, R-El Dorado Hills, on Wednesday sent a letter to President Donald Trump, asking him to order an inspection of federally operated Folsom Dam, a new auxiliary spillway that is nearing completion and any levees downstream that may be affected by spillover or a dam failure. **"Sacramento is one of the most at-risk flood areas in the country,"** Gaines wrote in his letter. "A failure of the dam or its spillways would lead to grave consequences for hundreds of thousands, or possibly millions, of people." *Alexei Koseff* ,

(Building anything in CA is next to impossible.)

'A geological and natural treasure.' Would Stanislaus County dam put the area at risk?

By Ken Carlson, December 17, 2019, modbee.com

In Stanislaus County, people of different political stripes sympathize with the need for more water storage for thirsty farms. But a plan for a reservoir in Del Puerto Canyon west of Patterson was bound to touch a nerve. To many West Side residents and others familiar with the site, Del Puerto Canyon is a natural gem and one of the county's scenic wonders.



An environmental impact report released last week raises some concerns about seismic risks and impacts on wildlife. But a significant and unavoidable impact noted in the report is "substantial damage to scenic resources," "degradation of the visual character" and "adverse effect on a scenic vista." "On the West Side, we don't have many places to get out in nature," said Shivaugn Alves of Alves said the canyon, colored by blue oaks and more than 100 species of birds, is a natural respite for community members. The earthen-fill dam just west of Interstate 5 would put much of the lower canyon under water. Alves, whose family are almond growers, said she recognizes the need for water storage, and she is not "anti-dam." She is co-founder of the Patterson Progressive Alliance, which posted an online petition signed by more than 100 people, urging careful and considerate planning for the \$500 million project. The petition says, in part, that as the population grows in Patterson and development occurs in the city of 23,750 residents, there are few natural spaces for residents. A recreation area at the reservoir could provide biking and hiking trails, fishing, paddling and other activities, the petition says. A museum could also feature exhibits on the canyon's American Indian heritage.

The Del Puerto Water District, the leading proponent for the reservoir, has also received letters from nature enthusiasts from the Bay Area and the eastern side of the county. "I believe there are significant recreational impacts," John Harris of Oakdale wrote. "Del Puerto Canyon is used by people throughout central California as a site for nature observation and photography." The water district and partners in the San Joaquin River Exchange Contractors Water Authority want the reservoir to improve the reliability of deliveries from the Central Valley Project, a massive system of dams and canals that supplies water to San Joaquin Valley farmers. The politics of pumping water south from the Sacramento-San Joaquin Delta often results in severe cuts to CVP contractors. Up to 85,000 acre-feet of water pumped from the Delta-Mendota Canal would create an 800-acre lake in wet years and be released for use in dry years.

The draft environmental study by Woodard & Curran of Walnut Creek predicts the dam would experience ground shaking during its 100-year lifespan, due to earthquakes in the broader region. While the reservoir site is not in a recognized fault-rupture hazard zone under the Alquist-Priolo Act of 1972, there are two active faults within 20 miles, the study says, including the Great Valley/Orestimba Fault just east of the dam. The proponents say the California Department of Water Resources division of dam safety must approve a design and construction plan and will require a seismic hazard analysis. The design will need to ensure that the dam, grounded in bedrock, remains stable in an earthquake, that seepage is managed and that spillway capacity is adequate, the EIR says. The report also suggests the reservoir could lead to ground subsidence and landslides in the canyon.

Chris White, executive director of the San Joaquin River Water Authority, said the study identifies seismic issues that can be addressed by engineers who design the dam. "Our project designers have not indicated this is something that can't be designed," White said. The water districts are

talking with the city and county leadership about recreation opportunities. “There are some good ideas,” White said. “It is not our area of expertise, but the county and city do have that expertise in recreation. It would be a separate project taken on by the county and city with the districts’ cooperation.” The districts are responsible for realigning Del Puerto Canyon Road, part of which would be covered by the reservoir, so the public still has access to Frank Raines Park and an off-road vehicle area. The EIR’s section on aesthetic resources mainly refers to altering the view from a section of Interstate 5 that’s a scenic highway. People out for a bike or motorcycle ride on Del Puerto Canyon Road are mostly enjoying a view of private ranches at the 800-acre reservoir site. Alves said that property owners who would sell land for the reservoir said at a workshop last week that any recreation should come at public expense.

Alves said residents attending the workshop were not given answers about the flood path of a dam failure or whether they will need to buy flood insurance. The environmental study also predicts some glare and light pollution, which can be mitigated by adjusting the lights to the dam control building and facilities. Air emissions would increase during construction of the dam, and the pumping of Delta-Mendota water would indirectly put greenhouse gases in the atmosphere, the study says. An alternative reservoir site in Ingram Canyon, seven miles to the north, would produce twice the amount of greenhouse gases that contribute to climate change. The alternative site would mean less impact from construction vehicles on the I-5 and Sperry Road interchange but more traffic for the I-5 and Howard Road turnoff. Rather than inundate a scenic canyon, some suggest that groundwater banking and conservation measures by irrigation districts could increase water supplies for agriculture at far less expense.

“I was quite dismayed to hear about the (dam) proposal,” Garry Hayes, a Modesto Junior College geology professor, wrote in an email. “Del Puerto is a geological and natural treasure. ... I think the (environmental study) is understating the landslide risk.” Hayes also questioned if the study took into account a dinosaur fossil discovery on a hill just above the proposed reservoir level. As the dam proponents consider a new route for Del Puerto Canyon Road, Chris Stovall of Patterson, in a letter to the water district, suggested that transportation planners consider punching a highway through the Diablo Range to the south Bay Area.

“As I’m sure you know, the Altamont Pass is massively undersized for the amount of traffic it sees on a regular basis,” Stovall wrote. “This area needs another freeway connecting it to the Bay Area.” County Supervisor Jim DeMartini said parks and recreation staff are considering locations for bird-watching, camping and other activities, but boating is likely ruled out because the water level would fluctuate. “I think it’s a good place for storing water,” the supervisor said. “The water districts don’t have any place to store water when they get it. It would be a great benefit for them.” Comments on the EIR can be made at a public meeting from 4 p.m. to 6 p.m. Jan. 15 at the Hammon Senior Center, 1033 W. Las Palmas Ave., in Patterson. Written comments will be accepted until Jan. 27 at Del Puerto Water District, 17840 Ward Ave., Patterson 95363.

[\(Dam removal in VA.\)](#)

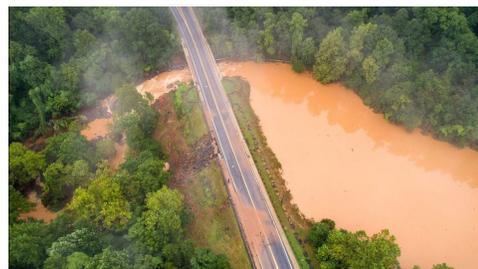
University of Lynchburg, city officials begin process to remove College Lake Dam

Heavy rain damaged dam in August 2018, placing flood threats for several neighborhoods

By Magdala Louissaint, Lynchburg Bureau Reporter, December 16, 2019, wsls.com

LYNCHBURG, Va. – The work to begin removing the College Lake dam is underway.

Soon you’ll start seeing engineers taking notes around the Lynchburg dam and also in the water. City leaders have hired a firm to help find the best way to remove the 85-year-old dam, restore the lake-bed and connect it back to Blackwater Creek again. The Water Resources department and the University of Lynchburg are working together to complete the first phase.



The removal process comes after heavy rain in August 2018 caused the lake to overtop, damaging the dam. "If you see flagging around it's really important not to mess with that. I hope that's not an invitation for it either. But it's really important to leave that flagging alone. The survey will be picked up and everything," Erin Hawkins, water quality manager, said. **Officials say it will be a few years before a bridge is built over the dam. The project will cost about \$20 million.**

(Fix it, don't remove it. Don't know what's in photo either, but that's what came with the article.)

Costs Could Top \$100,000 To Repair Dam

December 19, 2019, whmi.com

The potentially hundreds of thousands of dollars it would cost to repair an aging local dam would still be much less than the cost to replace the structure. In early November, the dam operator for Parshalville Pond and Lake Shannon in Michigan raised a gate that controls water flow to Lobdell Lake because of high water levels caused by rain. **But when he tried to lower the gate, it got stuck** causing Lobdell Lake to lose nearly two feet of water. The issue ended up being a broken gear that took several days to work around in order to get the gate closed.



However, it still needs a permanent repair and according to the Tri-County Times, the Genesee County Road Commission estimates those costs could run into the hundreds of thousands of dollars depending on how much work is ultimately decided on. **However, replacing the dam could cost as much as \$5 million.** Argentine Township Supervisor Brian Saad said the dam, which is nearing 100 years in age, **should be operational for the next year while they decide how to proceed. (JK)**

(A long tutorial on Tailings dams. The article is too long for Newsletter, here's the link or URL.)

<https://graphics.reuters.com/MINING-TAILINGS1/0100B4S72K1/index.html>

(This is non-negotiable, either remove the dams or not. Given who wants to remove the dams, those are your only choices. This is wishful thinking.)

Energy, salmon, economy: Accord on Snake River dams possible

By Martha Kongsgaard, Special to The Times, Dec. 19, 2019, seattletimes.com

Opinion:

I was born into a family of grape growers and cattle ranchers. I was taught to honor hard work and keep a strong environmental ethic. Here in the Northwest, I believe it's our responsibility to **create a future that works**

for both people and salmon. That's why Gov. Jay Inslee's Lower Snake River Dams Stakeholder Engagement Report gives me hope. The draft report is the result of interviews with more than 100 stakeholders; **more than 3,500 people have responded to an online survey.** But the most

groundbreaking component of the report hinges on four words: **"Opportunities to Increase Understanding."**

We have the opportunity, today, to think together in new ways about how we manage the Snake River — the biggest tributary to the Columbia River and vital to agriculture, salmon and the families that live in its watershed. For decades, we've looked at four dams on the lower Snake from exclusive vantages: necessary for barges and power or lethal for salmon. **While the report makes no recommendations on removing the dams, it**



highlights ways neighbors across the Northwest can come together to look at new solutions that take into account all our communities. And we do need new solutions. Dams hinder passage for endangered salmon making their way between Idaho and the Pacific, where orca feed on them.

Over the past 20 years, more than \$17 billion in funding for fish restoration in the Columbia River basin — along with five federal restoration plans courts have ruled inadequate — has failed to restore salmon and steelhead populations. In 2019, fish returns in the Columbia-Snake Basin have some of the lowest counts on record. Chinook, sockeye and steelhead returns all fell below already-poor expectations of fisheries managers. On the Snake River, sockeye returns were just 6% of the 10-year average by late August. The Washington Department of Fish & Wildlife closed parts of the Columbia to salmon and steelhead fishing because of dismal returns; Idaho closed much of its fishing as well. And, of course, the orcas that feed on these fish are dying. Only 73 remain in the Salish Sea. Meanwhile, the Bonneville Power Administration (BPA), which markets electricity generated by the dams, is facing financial challenges. Its onetime reliable customer, California, is creating its own clean power now, and wind and solar generation is driving down the cost of electricity all over. For decades, BPA has provided our region cheap, carbon-free power. Our families and businesses are counting on it to continue doing so. We believe we can problem-solve these related issues — energy, salmon and economy — together. Which brings us to the “opportunities to increase understanding” in the governor’s report.

Lower Granite Dam

Some of the questions it poses: What are our goals for salmon recovery, and what role does a free-flowing Snake play in achieving them? How do alternatives to these dams compare for providing affordable, reliable power? What are the costs — and who pays — for new water and transportation infrastructure if dams are removed? Some people are already thinking about these questions. A recent study by ECONorthwest found that breaching the dams and subsequent upgrades to transportation and irrigation systems for farmers, along with growth in tourism and recreation from a restored river and fish populations, would generate more than \$8 billion in net economic benefit. That doesn’t include additional opportunities from the build-out of new energy infrastructure to replace power from the dams, or the benefits of fish and river restoration to communities upstream in Idaho and downstream on the lower Columbia and along the coast. Sign up for Viewpoints It’s possible to imagine solving these decades-old challenges in new ways, with new partners, that take all our communities into consideration. The governor’s report is not yet final. Everyone who cares about these issues can share their thoughts in the Lower Snake River Dam online survey. Public workshops on the draft are being held in January in Clarkston, Vancouver and the Tri-Cities.

Along with these discussions, we need political leadership at the state and national levels that understands people are eager to tackle these issues creatively, inclusively and soon. In other words, we need leaders who want to help us solve each other’s problems. Commercial fishers looking out for farmers. Grain transporters looking out for tribes. All of us looking out for our common values: prosperity and growth, a love of this unique place in the country, and respect for our neighbors with whom we share it. *Martha Kongsgaard is former chair of the Puget Sound Partnership Leadership Council.*

(Will the studies ever end?)

STUDY LOOKS AT BENEFITS AND LIABILITIES OF SNAKE RIVER DAMS

By NICHOLAS K. GERANIOS, December 20, 2019 | bonnercountydailybee.com

SPOKANE, Wash. (AP) — Four federal hydroelectric dams along the Snake River in Washington state bring both benefits and liabilities to the region, and there is no clear consensus in the state on whether the giant structures should be removed or retained, a new report said. The state Legislature last spring appropriated \$750,000 to study the dams, which are blamed by many for declining salmon runs in the Columbia-Snake river system. The salmon are a key food source for killer whales, which are also endangered. The report is intended to help Washington lawmakers decide how to respond to an upcoming federal review of the dams and whether they should be

removed. That court-ordered review is expected to be released in February. The report released Friday included data from interviews with 100 people and groups. **But it did not include any recommendations and did not look at impacts outside of Washington**

"Salmon, orca, agriculture and energy are fundamental to Washington's past and future," the report said, noting **the four dams have touched on all these issues since they were constructed more than four decades ago.** The dams create winners and losers, according to the report, which was prepared as part of investigations to see if removing the dams would provide more salmon for Southern Resident orcas to eat. The report found there are significant differences among Washington residents on the impacts of breaching the dams. **Dam supporters feel the "coast" is telling eastern Washington communities what to do in a way that lacks respect, the report said.** "More information is needed to create opportunities for greater understanding," the report said. The four dams are Ice Harbor, Lower Monumental, Little Goose and Lower Granite, and they are located on the Snake River between the Tri-Cities of Washington and Lewiston, Idaho.

The four dams generate roughly enough power to supply the city of Seattle for a year, and allow navigation of barges between Lewiston and the Tri-Cities, and eventually to Pacific ports. All species of salmon in the Snake River are listed as threatened or endangered and the dams are the biggest man-made obstacles they face, the report said. **The dams block fish migration,** change river conditions and reduce the survival rate of fish, the report said. That creates losers among fishing communities and Indian tribes who depend on salmon. Supporters of breaching the dams **say it is the only method that has not been tried to increase salmon populations, the report said.** About \$17 billion has been spent on other efforts to increase salmon runs, the report said, "without reversing the downward population trend." Supporters of breaching the dams say the power they provide primarily acts as a reserve supply, and the electricity is generally not used to meet primary energy demands.

But people who support keeping the dams say losing the power would hurt the state's goal of being carbon free by 2045, especially as the population grows and coal plants are retired. Breaching the dams would also eliminate the use of barges to transport agricultural products down the river, the report said. Barges are cleaner and cheaper than truck or rail transportation, the report said. The dams provide irrigation water for about 47,000 acres of farmland, and that benefit would also be lost if the dams are breached, the report said. **Supporters of breaching the dams say it would be important to make farmers whole,** so they do not suffer economic losses, the report said. People who want to keep the dams contend the loss of barging "would have disastrous ramifications for farmers," the report said. Removing the dams would result in the loss of some recreational activities, such as swimming beaches, the report said. But it would also provide new whitewater recreation opportunities, the report said.

Those who want to breach the dams contend the cost of maintaining the giant structures will continue to increase and they will become cost-ineffective over time, the report said. "Although differences remain deep, for each issue **there also are clear opportunities to increase understanding,**" the report said. "There is both hope and despair about what comes next and the potential for progress," the report said. The environmental group American Rivers said the report is a reminder of shared values. "We want a future with clean energy, thriving agriculture and salmon runs that honor tribal treaty rights and support strong communities," Wendy McDermott of American Rivers said in a press release. **The report is "an honest look at how we've managed the Snake River and the true cost of declining salmon runs,"** said Tom France of the National Wildlife Federation.

(Wow, What a ruling. Puts the government liable for over a billion dollars.)

Judge's ruling in Harvey flooding case holds message for government

By Erica Grieder, Dec. 21, 2019, houstonchronicle.com

No one should buy a home in the greater Houston area without being familiar with its flood risk. But



many people, over the years, have done just that. It is, perhaps, advice that seems more obvious in retrospect. Southeast Texas has always been vulnerable to natural disasters, but climate change has made bouts of severe weather worse and more frequent. Tropical Storm Imelda, in September, was the fourth “500 year” flood event to hit the region in the past five years. Hurricane Harvey, in 2017, was the third — and the greatest rainfall event recorded in U.S. history. And the risk that such storms represent has been exacerbated by population growth and largely unfettered development, authorized by local officials and encouraged by those at the helm of state government. So no one should begrudge the homeowners and businesses affected by Harvey who won a major victory in federal court this week.

Still, the victory may prove to be a pyrrhic one for all of us, unless it’s understood in that context. On Tuesday, Judge Charles F. Lettow of the U.S. Court of Federal Claims ruled that the Army Corps of Engineers is liable for damages caused by its decision to retain floodwaters upstream of the Addicks and Barker reservoirs during Hurricane Harvey in 2017. The amount of those damages has yet to be determined, but attorneys for the plaintiffs estimate that it could exceed \$1 billion. Evidence on the subject will be presented at a hearing set for next month. The federal government is also facing a separate lawsuit from property owners downstream of the dams, whose properties flooded when the Corps subsequently decided to release storm water from both reservoirs, as the water levels continued to mount.

The Corps’ decision was a reasonable one, by all accounts, intended to protect downtown Houston from more catastrophic damage. But the initial move to release water into the communities near the reservoirs resulted in the flooding of 10,000 to 20,000 properties upstream of the dams. The residents and property owners who brought suit argued that this was tantamount to a “taking” for a public purpose — in this case using their properties for water storage — for which they are entitled just compensation under the Constitution’s Fifth Amendment. The government disputed that, in a 2018 motion to assess the case. “Caught between a rock and a hard place, the Corps followed procedures aimed at preserving the dams, protecting human life, and mitigating inevitable flood damages. That is not a taking,” wrote lawyers from the Department of Justice. “The Fifth Amendment has not created a constitutional flood insurance policy,” the government lawyers added.



Lettow, however, sided with the plaintiffs, in a ruling that may prove to set a consequential precedent. He concluded that although Harvey itself was unprecedented, a storm of such magnitude was “objectively foreseeable” — and that the government’s own actions over the decades prove as much. The government also passed on opportunities to buy land at the upper end of the reservoirs that they knew to be at risk of flooding. “The Corps knew that when a severe storm like Harvey came, flooding beyond the extent of government-owned land upstream would result, in light of the design of the dams and the plans of their operation,” he writes. The plaintiffs, by contrast, were caught unaware, in the judge’s assessment. They may have anticipated the risk of heavy rainfall, Lettow explains, in a region as soggy as this. But there’s no evidence that they expected the risk that the government would flood their properties — such that several of them, having been displaced during Harvey, had to return to their homes via kayak.

Lettow’s reasoning makes sense. And Alice Hill, a senior fellow for climate change policy at the Council on Foreign Relations, thinks his finding is one that will encourage future resilience. “When you have a case like this, when there’s a finding of significant liability, a lot of people will change their behavior,” she told me this week. Hill explained that she would expect the Corps to revisit its management of the Addicks and Barker reservoirs in particular, given the probability that the Houston region will face future serious rain events. In reading Lettow’s ruling, though, you might easily get the impression that the Corps is solely responsible for the losses incurred by the

plaintiffs, as a result of the decisions the government made in response to Harvey. The truth is that many decisions were made, well before Harvey made landfall, that put the plaintiffs at risk. And the developers who built within these reservoirs — and the local officials who authorized thousands of suburban homes and businesses to be built at the edge of them — have not been held liable for the predictable consequences of those actions. The courts have found that the federal government is solely responsible for intentional flooding during Harvey. The result is a ruling that one plaintiff, Alma Soto, welcomed as “a small Christmas miracle”. What would ultimately give us all more cause to celebrate would be for local leaders to be forthcoming and realistic about such risks before signing off on further floodplain development.

(More studies.)

Study looks at benefits and liabilities of Snake River dams

By Associated Press, December 21st 2019, idahonews.com

SPOKANE, Washington (AP) — A state report says four federal hydroelectric dams along the Snake River in Washington state bring both benefits and liabilities to the region, and there is no clear consensus on whether the giant structures should be removed or retained. The report released Friday says the dams are blamed by many for declining salmon runs in the Columbia-Snake river system.



The salmon are a key food source for killer whales, which are also endangered. The four dams are Ice Harbor, Lower Monumental, Little Goose and Lower Granite, and they are located on the Snake River between the Tri-Cities of Washington and Lewiston, Idaho.

(Not a big guy, but still did some damage.)

National Dam breaks in Aiken

CSRA NEWS, Dec 23, 2019 / wjbf.com

AIKEN, S.C. (WJBF) — Around two o'clock, The Aiken County Sheriff's Office received a call from a homeowner about flooding on Richardsons Lake Road. The sheriff, Eric Abdullah, says when he arrived on the scene, it was much more than flooding. “By the time I got out here, the water was still running across the roadway where the dam's retaining wall gave way,” said Abdullah.



SLED, SCDOT, The Aiken County Sheriff's Office, and the Aiken Public Safety Department are teaming up to determine what caused Aiken's national dam to break and spillover into one homeowner's property. “We were Christmas shopping, and we come back to see the road overflowed,” said William Lucas. “I was watching cars trying to go up the road, and when I looked over I said, oh God look at the house.”

Lucas describes the scene as a big mess. He says the access water got into his garage and destroyed some of his property. “We had to pull across the road, and it was just flooded up to the top of the porch,” explained Lucas. “It pushed my cars up against the trees and pushed my friend's car down to the pond. It also wrecked my pool.” Lucas says he is just thankful nobody got hurt. “We've had enough injuries and deaths throughout the past year in our family,” said Lucas. “I just hope everything goes better from here on out.”

Engineers are monitoring where the water has flowed and is flowing. Captain Abdullah says the area has been stabilized but is alerting drivers to be safe on this roadway. “As far as the sheriff's office, we want people to be vigilant,” said Abdullah. “Don't drive across low line areas that are full of water; don't take that chance with your safety.” The Aiken County Sheriff Office requested an evacuation plan for the next neighborhood, “Wood Valley.

(Lot of people are skeptical.)

Farmers skeptical about being made 'whole' if dams breached

By DON JENKINS, Capital Press, capitalpress.com, Dec 23, 2019

Eastern Washington farmers doubt that public subsidies would offset higher transportation and irrigation costs caused by breaching four Lower Snake River dams, according to a preliminary study released Dec. 20 by the governor's office. Without the dams, the river would be too shallow to barge wheat and other farm goods the roughly 100 miles between Lewiston, Idaho, and the Tri-Cities. Lake Sacajawea, a reservoir created by Ice Harbor Dam, irrigates 47,000



acres. Farmers are worried about being "at the mercy of railroads" and "skeptical" about switching to crops that use less water, according to the study. Washington Grain Commission CEO Glen Squires, one of nearly 100 people interviewed for the study, said he appreciated that the report's writers captured different views on breaching the dams. "I think they genuinely listened and began to realize this whole thing is more complicated than meets the eye," he said. "It's not as easy as giving a farmer a nickel, dime, 20 cents a bushel — case solved."

The study was recommended by a governor's task force on reviving the orca population in Puget Sound. Scientists blame a declining orca population on a lack of chinook salmon for the killer whales to eat. All Snake River salmon runs are federally threatened or endangered species. Gov. Jay Inslee and the Legislature supported the \$750,000 study to catalog different perspectives on breaching the dams as a way to increase fish runs. The preliminary study represents the views of people representing farmers, tribes, environmentalists, fishermen, shippers and government officials. The public can comment on the study through Jan. 24. The final study will incorporate the public comments and the results of an online survey. There will be public workshops and panel discussions on the study Jan. 7 in Clarkston, Jan. 9 in Vancouver and Jan. 13 in the Tri-Cities. The U.S. Army Corps of Engineers, Bureau of Reclamation and Bonneville Power Administration are expected to release in February a draft environmental impact statement on the Columbia River system. Breaching the four dams — Ice Harbor, Lower Monumental, Little Goose and Lower Granite — is one option under study.

Inslee has said the study will inform his response to what the federal government proposes.

"I encourage Washingtonians to get engaged in the public comment period over the next month and share their input on what should be done," Inslee said in a statement. The study, conducted by a private firm, does not recommend retaining or breaching the dams. It cites previous reports on the dam's uses and effect on salmon and summarizes the views of "stakeholders." The study listed the people who were interviewed, but did not attribute specific comments to individuals. Some 5 million acres of farmland, approximately one-third of the state's total, are in the eight counties surrounding the dams, according to the study.

Interviewers found Eastern Washington residents who supported keeping the dams said people on the "coast" didn't understand or respect their values. Supporters of breaching the dams said public subsidies for new irrigation systems, roads and rail lines could offset the harm to agriculture. "It is important to make agriculture 'whole,' so farmers do not suffer significant economic losses if the dams are breached," the study reported. Farm groups said the disruption to businesses, communities and families would be significant, as would the costs. U.S. Reps. Cathy McMorris Rodgers and Dan Newhouse, both Eastern Washington Republicans, issued a joint statement saying the study provided nothing new and that taxpayers should be outraged. "We had no idea a year ago when we said this study would be a wasteful use of taxpayer dollars just how accurate we'd be — imagine how far \$750,000 could have gone to directly support salmon recovery efforts," according to the statement.

(Out of sight, out of mind.)

Letter: Worn-out dams

By James Davis, Northwest side, 12/24/19, tucson.com



Re: the Dec. 19 article "US senator: More resources needed for worn-out dams." For a graphic example of the consequences of a dam failure search for "St. Francis Dam Disaster" and read about the March 1928 failure of the St. Francis dam northeast of Los Angeles. The dam catastrophically failed at

midnight and released about 12 billion gallons of water down the San Francisquito canyon, wiping out all in its path. The water eventually made it to the Pacific Ocean about 50 miles away.

Between 400 and 600 people lost their lives and whole towns were wiped out. Yes we should worry about the 1,688 high-risk dams that are poor or unsatisfactory condition. James Davis.

Tucson, AZ

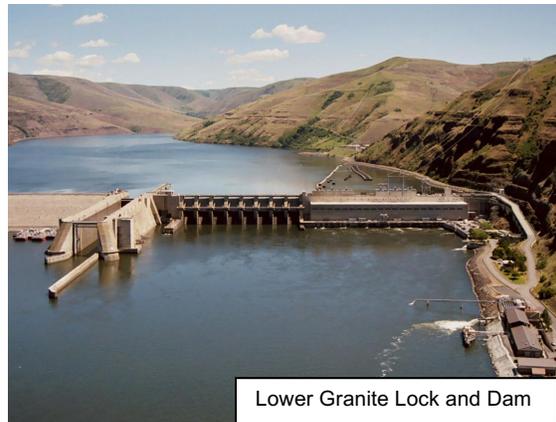
(Another court ruling against the dams.)

Snake River Dams focus of federal lawsuit ruling, draft state report

By Mallory Gruben, tdn.com, 4/26/19

A federal court ruling last week mandating a salmon protection plan related to warm river temperatures caused by dams could impact ongoing salmon recovery efforts on the Columbia-Snake River System. And on the same day as the ruling, Washington Gov. Jay Inslee released a stakeholder report summarizing comments in support and against removing four Lower Snake River dams to boost salmon populations and help feed orca.

Environmental group Columbia Riverkeeper, which historically has supported dam removal, praised the federal court ruling as "a victory," saying it forces the EPA to do its job to protect rivers — and the endangered salmon that live in them — from dangerously hot water. "The Clean Water Act bans the Columbia River temperatures over 68-degrees Fahrenheit. ... But the government agencies in charge of the Columbia and Snake river dams aren't obeying the law," Riverkeeper wrote in a Friday press release. "Today's ruling establishes that EPA is legally obligated to write a plan to bring the rivers' temperature back in line with the needs of salmon — and the requirements of the Clean Water Act."



Lower Granite Lock and Dam

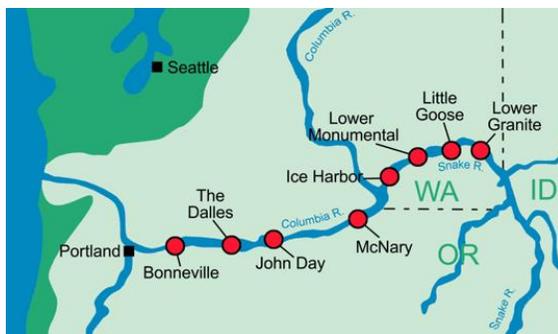
Riverkeeper and several other salmon interest groups sued the EPA in February 2017, alleging that the agency "failed to undertake its mandatory duty" to create a plan to manage temperature pollution in the river. Friday's ruling upholds a lower court's decision to require the EPA to submit a "long overdue" plan. The suit was spurred by several years of record-high river water temperatures, including a 2015 incident when 250,000 adult sockeye salmon died due to hot river temperatures, according to the Riverkeeper release. Water temperatures warmer than 68 degrees Fahrenheit is "particularly dangerous" for salmon and trout because it makes it more difficult for fish to migrate upstream to spawn and increases the chance fish will die of disease, according to court documents. Dams are a primary cause for warm river waters, according to court documents. A panel of Ninth Circuit Court judges Friday upheld a 2018 decision that the EPA was obligated to create its own management plan for water temperature on the Columbia and Snake rivers after Washington and Oregon didn't submit plans for approval, according to court documents.

"The time has come — the EPA must do so now," the panel wrote in its ruling last week. The decision moves forward a year's long effort to improve salmon recovery rates on the Columbia and Snake rivers. According to the Natural Resources Defense Council, 13 populations of

Columbia-Snake River salmon are listed under the Endangered Species Act. Many conservation groups point to dams as a reason for the salmon's decline because they create still, warm pools of water along the river that exhaust young salmon on their way to the ocean and increase their chance of dying. And recently state officials linked the dams to the declining population of Southern Resident orcas, which live part of the year in Puget Sound and primarily rely on healthy and plentiful salmon populations for food.

Decades of debate

State legislators provided \$750,000 in the 2019-2021 budget for Gov. Jay Inslee's "orca task force" to conduct a "stakeholder engagement study" about what various state river users think about proposals to remove the four Lower Snake River dams. Inslee released the first draft of that study on Friday. Although the report does not offer any recommendations on how to help salmon and orca populations, it provides insights from tribal leaders, industry officials, conservationists, farmers and other river stakeholders about what the consequences of dam removal would be. The 115-page document summarizes interviews with almost 100 agency leaders and online survey responses from more than 3,500 Washington residents. It also reviews previous reports and studies.



Many business leaders, energy officials and farmers support keeping the dams for their energy, transportation and economic benefits, according to the report. The four Lower Snake dams (Lower Granite, Little Goose, Lower Monumental and Ice Harbor) produce enough power to light the City of Seattle for a year. And they are integral parts of the 31-dam Columbia-Snake River navigation system that local ports rely on to ship grain and other commodities.

Conservationists, though, say dam breaching is the only action that hasn't been tried to help salmon and orca, according to the report. Any energy or transportation benefits lost in dam breaching could be replaced by investments into alternative options, like wind and solar power or rail lines.

Inslee will use the stakeholder study to inform his perspective on the dams and determine if and how to participate in ongoing federal environmental evaluations of the Columbia and Snake River system, according to a press release. "Debate over the dams has gone on for several decades and the issues are complex. Despite some recent improvements in collaboration, many of the participants remain wary of the cycle of study, lawsuits and court decisions," the report says. "There is both hope and despair about what comes next and the potential for progress." The Pacific Northwest Waterways Association — a regional group of ports, businesses and agencies that's long supported the dams' economic, transportation and energy benefits — criticized Inslee's study for duplicating an environmental impact statement already underway by the U.S. Army Corps of Engineers and other federal agencies.

That draft EIS is set to be released in February 2020, and it will include evaluations for how different long-term operating plans could affect the environment, flood risk, irrigation, power generation, navigation, fish and wildlife, cultural resources and recreation on the river. "(Inslee's) draft report on the Lower Snake River Dams Stakeholder Process was produced with Washington taxpayer funding, which could have gone toward activities that directly benefit salmon and orcas," PNWA Executive Director Kristin Meira said in a prepared statement Friday. "While we appreciate the diligence of the consultants leading this process in reaching out to PNWA members and other stakeholders, the product that was commissioned by the State is essentially a status report of river operations followed by a survey of opinions — not science-based salmon recovery." Inslee's draft report is available online at governor.wa.gov, and additional public comment can be submitted until Jan. 24 at lsrdstakeholderprocess.org/draft-report-comment-form. Representatives from some rivers interest groups will also present a summary of the report and their perspectives

during three public workshops this January, including a meeting from 6 p.m. to 9 p.m. on Jan. 9 at Washington State University-Vancouver



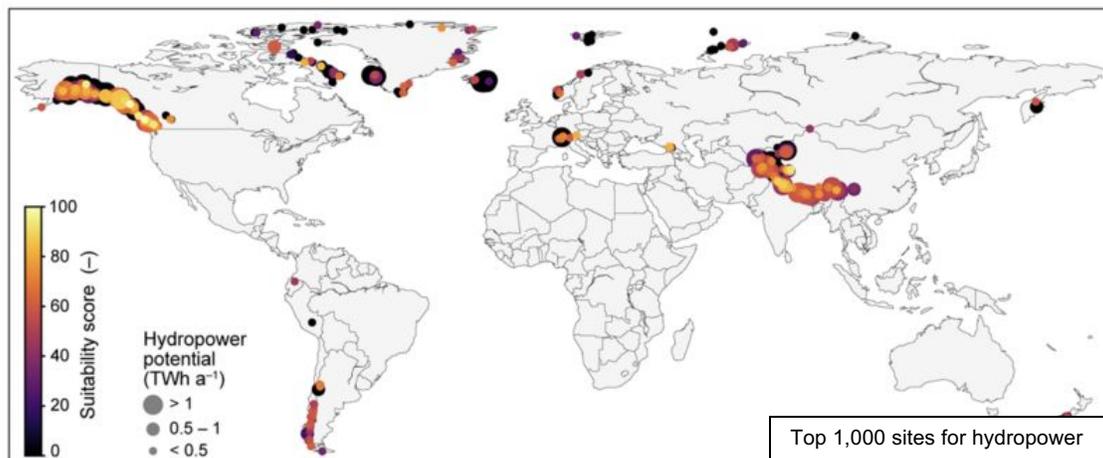
Hydro:

Global Warming Is Bad for Everyone Except Dam Builders

Scientists built 130,000 “virtual dams” and found they could generate 7% of the world’s electricity in real life.

By Eric Roston, November 13, 2019, bloomberg.com

Many look at the world’s melting ice and see glacier basins as half-empty. Swiss researchers see them as half-full of opportunities for hydropower and freshwater storage. The largely theoretical study, published Wednesday in the journal *Nature*, examined 185,000 glaciers around the world and determined where environmental, technical and economic factors would allow for the building of dams to harness both the power of glacier melt and the value of water itself. If all such sites were tapped, the amount of electricity generated would equal 7% of the world’s total electricity consumption in 2015, or 35% of the world’s output from dams. “Building a dam at every glacier location is neither realistic, nor sustainable, nor desirable,” the authors emphasize. The value in such an ambitious exercise in virtual civil engineering is worth considering given, the potentially “important contributions to national energy supplies, particularly in High Mountain Asia,” a region with so much ice it’s informally called the Third Pole. In addition to the massive amount of hydropower, the authors found the glacier basins could hold a combined 48% of the runoff from



current glaciers. That’s especially important in arid regions, where such reserves serve as a hedge against future water scarcity. Almost a third of the potential power comes from 1,000 of the 185,000 sites, and the 10 largest glacier basins that could be dammed are in the U.S., China, Canada and Nepal.

The hydropower industry is already facing long-predicted higher costs, as operators expect to struggle with both extreme weather and falling capacity in the coming years. Large hydropower projects, however, are rarely planned, financed and built without considerable debate and opposition, which is why the researchers selected sites with an eye towards minimizing environmental impact instead of maximizing potential revenue. The team generated rough cost estimates for each location that included the dam itself, power stations, operations and transmission to the nearest grid. About 60% of the theoretical maximum of plants could have production costs below 50 cents a kilowatt-hour. “The uncertainties are high,” said Upmanu Lall,

director of the Columbia Water Center who was not involved in the study, “and it is rather unlikely that, politically, new reservoir construction will be allowed in most countries.”

(Wanna buy a hydro project.)

Want to buy a Boise River dam? Ada County just put this one up for sale

BY HAYLEY HARDING, December 23, 2019, idahostatesman.com

Ada County is looking to get out of the dam business.

County commissioners voted unanimously Monday to auction off Barber Dam, which is near the Idaho Shakespeare Festival. The county will set a minimum bid and give prospective bidders a chance to inspect the dam “before significant water flows begin in spring,” according to a news release.

“The county commissioners want to sell it because they feel there are more important issues to focus on than operating a dam, which is not required by state statute,” Elizabeth Duncan, Ada County spokesperson, said in a phone call.



Other Stuff:

(I'm glad I don't use any of these.)

Ranked: The World's Top 100 Worst Passwords

By Davey Winder, Senior Contributor, .forbes.com

Opinions expressed by Forbes Contributors are their own.

During the first six months of 2019, more than 4 billion records were exposed by data breaches. That's a shocking statistic that's made even more so when you realize that passwords were included in droves. On December 4, a security researcher discovered a treasure trove of more than a billion plain-text passwords in an unsecured online database. Now researchers at NordPass, a password manager from the people who are behind the NordVPN app, have set about ranking the most used and least secure passwords. Armed with a database of some 500 million passwords leaked as a result of data breaches in 2019, NordPass researchers were able to rank them in order of usage.



Password hygiene is a top security priority

The top three most commonly used passwords, notching up 6,348,704 appearances between them, are shockingly insecure, weak, and totally predictable. However, there are also many unexpected passwords on the list and that's the worrying thing. Well, worrying if you happen to be using any of them, that is. If a password you use is on the list, then your security posture has just been weakened. Hackers can brute-force their way into accounts by throwing known common passwords, as well as dictionary words, at them. If you use the same password across multiple sites and services, then your security posture is so bad you urgently need to see a cyber-chiropractor. As I reported on December 6, Microsoft analyzed a database of 3 billion leaked credentials from security breaches and found that more than 44 million Microsoft accounts were using passwords that had already been compromised elsewhere. Password reuse is a sure-fire way to get yourself, your accounts and your data into trouble, especially if you are using one of the world's worst passwords. Improving your password hygiene is the number one thing you can do to strengthen your security. Here's how to quickly find out if any of your passwords have been compromised.

Ranked: the world's 100 worst passwords

You can find the full listing of the world's worst passwords, together with usage statistics, in the NordPass report. **Here are just the top 100 worst passwords.** If any of them look at all familiar, go and change the respective account login credentials immediately.

- | | | |
|----------------|------------------|------------------|
| 1. 12345 | 35. asdfghjkl | 69. butterfly |
| 2. 123456 | 36. 654321 | 70. dragon |
| 3. 123456789 | 37. family | 71. jennifer |
| 4. test1 | 38. michael | 72. amanda |
| 5. password | 39. 123321 | 73. justin |
| 6. 12345678 | 40. football | 74. cookie |
| 7. zinch | 41. baseball | 75. basketball |
| 8. g_czechout | 42. q1w2e3r4t5y6 | 76. shopping |
| 9. asdf | 43. nicole | 77. pepper |
| 10. qwerty | 44. jessica | 78. joshua |
| 11. 1234567890 | 45. purple | 79. hunter |
| 12. 1234567 | 46. shadow | 80. ginger |
| 13. Aa123456. | 47. hannah | 81. matthew |
| 14. iloveyou | 48. chocolate | 82. abcd1234 |
| 15. 1234 | 49. michelle | 83. taylor |
| 16. abc123 | 50. daniel | 84. samantha |
| 17. 111111 | 51. maggie | 85. whatever |
| 18. 123123 | 52. qwerty123 | 86. andrew |
| 19. dubsmash | 53. hello | 87. 1qaz2wsx3edc |
| 20. test | 54. 112233 | 88. thomas |
| 21. princess | 55. jordan | 89. jasmine |
| 22. qwertyuiop | 56. tigger | 90. animoto |
| 23. sunshine | 57. 666666 | 91. madison |
| 24. BvtTest123 | 58. 987654321 | 92. 0987654321 |
| 25. 11111 | 59. superman | 93. 54321 |
| 26. ashley | 60. 12345678910 | 94. flower |
| 27. 00000 | 61. summer | 95. Password |
| 28. 000000 | 62. 1q2w3e4r5t | 96. maria |
| 29. password1 | 63. fitness | 97. babygirl |
| 30. monkey | 64. bailey | 98. lovely |
| 31. livetest | 65. zxcvbnm | 99. sophie |
| 32. 55555 | 66. fuckyou | 100. Chegg123 |
| 33. soccer | 67. 121212 | |
| 34. charlie | 68. buster | |

(In addition to this criticism, they all forgot hydro pumped storage and wind and solar aren't cheap, they survive on subsidies.)

Lie Of The Day: Going 100% Green Will Pay For Itself In 7 Years

Authored by Mike Shedlock via MishTalk, 12/23/2019, conservativeangle.com

A Stanford University professor says the world can go totally green by spending \$73 trillion.

Totally Green

Stanford University professor Mark Z. Jacobson wants to spend \$73 trillion for the world to go totally green. Not only that, supposedly it will pay for itself in 7 years. You can download the 119 page PDF from [One Earth]([https://www.cell.com/one-earth/pdfExtended/S2590-3322\(\(19%2930225-8\)\)](https://www.cell.com/one-earth/pdfExtended/S2590-3322((19%2930225-8)))).

The report is called **Impacts of Green New Deal Energy Plans on Grid Stability, Costs, Jobs, Health, and Climate in 143 Countries.**



Stanford professor wants to spend \$73 trillion for the world to go totally green

Jacobson claims Going 100% Green Will Pay for Itself in Seven Years. It would cost \$73 trillion to revamp power grids, transportation, manufacturing and other systems to run on wind, solar and hydro power, including enough storage capacity to keep the lights on overnight, Mark Jacobson said in a study published Friday in the journal One Earth. But that would be offset by annual savings of almost \$11 trillion, the report found. "There's really no downside to making this transition," said Jacobson, who wrote the study with several other researchers. "Most people are afraid it will be too expensive. Hopefully this will allay some of those fears." The report published Friday looked at 143 countries that generate more than 99% of the world's greenhouse emissions. The savings would come from not extracting fossil fuels, using higher-efficiency systems and other benefits of shifting entirely to electricity. It follows a paper Jacobson published in 2015 laying out a state-by-state plan for the U.S. to convert to 100% renewables.

AOC's Green New Deal

The article notes that Jacobson's work "underpinned" Alexandria Ocasio-Cortez (AOC) Green New Deal. On February 25, I commented AOC's Green New Deal Pricetag of \$51 to \$93 Trillion vs. Cost of Doing Nothing.

AOC's the Boss

Socialist Rep. Alexandria Ocasio-Cortez (D-NY) on the widespread criticism of her Green New Deal: "I'm like, you try. ... Until you do it, I'm the boss! How about that?!" On March 26, Senate Majority Leader Mitch McConnell put AOC's Green New Deal to a vote. Hypocrite Democrat Senators Refuse to Back the New Deal and it failed 57-0. Doug Jones (Ala.), Joe Manchin (W.Va.), and Kyrsten Sinema (Ariz.), along with Independent senator Angus King (Maine), who caucuses with the Democrats voted against the deal. At a press conference, the Senate bill's primary sponsor Ed Markey (D., Mass.), claimed he stood behind the proposal. "It is the national-security, economic, health-care, and moral issue of our time," he said. But he did not vote for it.

PNAS Review of Jacobson's Plan

A PNAS study (Proceedings of the National Academy of Sciences of the USA) did a Review of Jacobson's Plan Jacobson et al. (11) along with additional colleagues in a companion article (12) attempt to show the feasibility of supplying all energy end uses (in the continental United States) with almost exclusively wind, water, and solar (WWS) power (no coal, natural gas, bioenergy, or nuclear power), while meeting all loads, at reasonable cost. Wind and solar are variable energy sources, and some way must be found to address the issue of how to provide energy if their immediate output cannot continuously meet instantaneous demand. The main options are to (i) curtail load (i.e., modify or fail to satisfy demand) at times when energy is not available, (ii) deploy very large amounts of energy storage, or (iii) provide supplemental energy sources that can be dispatched when needed. It is not yet clear how much it is possible to curtail loads, especially over long durations, without incurring large economic costs. There are no electric storage systems available today that can affordably and dependably store the vast amounts of energy needed over weeks to reliably satisfy demand using expanded wind and solar power generation alone.

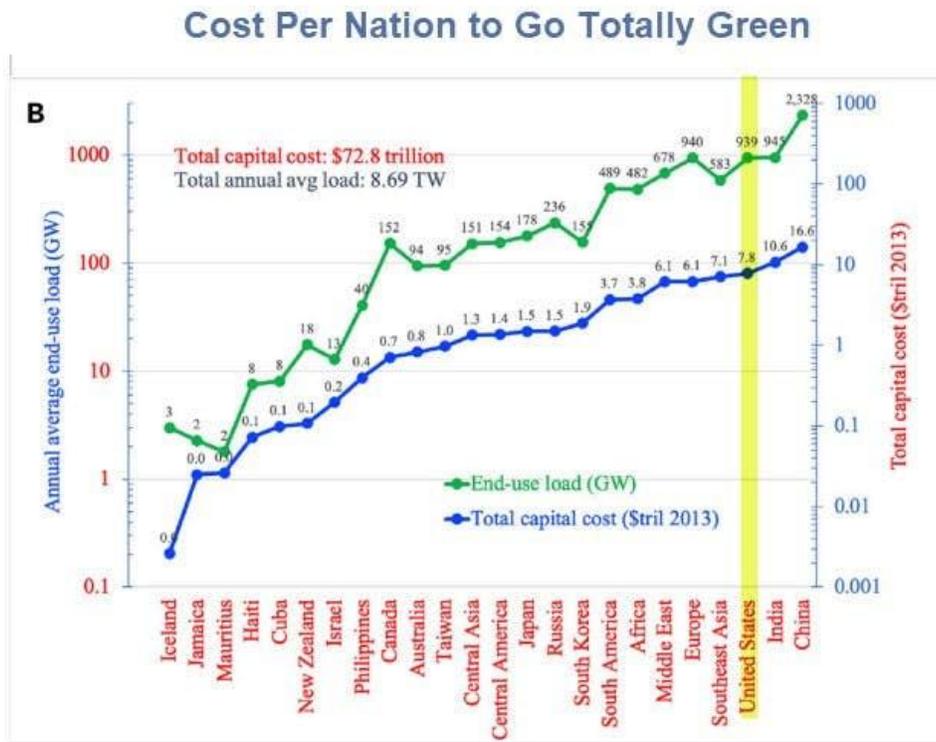
We show that refs. 11 and 12 do not meet these criteria and, accordingly, do not show the technical, practical, or economic feasibility of a 100% wind, solar, and hydroelectric energy vision. As we detail below and in SI Appendix, ref. 11 contains modeling errors; incorrect, implausible, and/or inadequately supported assumptions; and the application of methods inappropriate to the task. In short, the analysis performed in ref. 11 does not support the claim that such a system would perform at reasonable cost and provide reliable power.

Implausible Assumptions

The energy storage capacity consists almost entirely of two technologies that remain unproven at any scale. To give an idea of scale, the 100% wind, solar, and hydroelectric power system proposed in ref. 11 envisions UTES systems deployed in nearly every community for nearly every home, business, office building, hospital, school, and factory in the United States, although only a

handful exist today. Although both PCM and UTES are promising resources, neither technology has reached the level of technological maturity to be confidently used as the main underpinning technology in a study aiming to show the technical reliability and feasibility of an energy system. The relative immaturity of these technologies cannot be reconciled with the authors' assertion that the solutions proposed in ref. 11 and companion papers are ready to be implemented today at scale at low cost and that there are no technological or economic hurdles to the proposed system.

Alleged Costs to Go Totally Green



US Contribution to Greenhouse Gasses

Biggest Contributors to Global Warming

Rank	Country	Global Total (%)
1	China	27.51
2	United States	14.75
3	India	6.43
4	Russia	4.86
5	Japan	2.99
6	Brazil	2.25
7	Germany	1.98
8	Indonesia	1.64
9	Canada	1.63
10	Mexico	1.62

If the US spent \$7.8 trillion, and it worked perfectly, we would rid the world of 14.75% of the alleged US contribution to global warming. Hooray?

No Transmission Modeling

The PNAS review debunked assumptions that Jakobson made regarding capital costs, ability to ramp up hydroelectric power as required, and land constraints for wind turbines. Moreover, and as PNAS points out, the authors do not perform any modeling or analysis of transmission. As a result, their analysis ignores transmission capacity expansion, power flow, and the logistics of transmission constraints. Thus, not only would there be insufficient capacity, even if by some magic capacity was adequate, there would be no way to store that power for periods in which wind and solar were insufficient. To that I would add the environment impacts of damming waterways that harm the environment by silting up, kill fish, etc. And what about millions of dead birds that would be killed by the wind farms? Are the environmentalists suddenly not concerned about such things?

Lies, the Best Way Forward

Does Mark Z. Jacobson really believe what he says? Occam's razor suggests the simplest explanation is the one that is most likely. Thus, when "stupidity" is one of the answers, it's usually a decent bet. In this case, however, I believe Jacobson has seen PNAS and other reviews of his previous work and chooses to purposely lie as the best way forward. After all, he did get activists like AOC to latch on to the idea as her own. He also has the UN on his side. This came up yesterday in Dave Collum's Satirical, Comedic, Insulting Year in Review.

Climate Change

1. "Nobody on the planet—not one person—knows what will happen to the World's climate and ecosystem 50 years from now. We are all guessing, some more than others." Me [David Collum]
2. "Vintners in France haven't seen such a succession of hot weather and dry harvest since the 14th century, during a time called "the Black Death." Bloomberg news, inadvertently noting it was hot 600 years ago.
3. "We've got to ride the global-warming issue. Even if the theory of global warming is wrong, we will be doing the right things in terms of economic policy and environmental policy." Tim Wirth, Senator, chair of Clinton-Gore Campaign, and UN official

4. "...one has to free oneself from the illusion that international climate policy is environmental policy. Instead, climate change policy is about how we redistribute de facto the world's wealth..." Ottmar Edenhofer, IPCC official speaking in November 2010

Please pay attention to quotes 3 and 4. So, is Mark Z. Jacobson a Stupid Liar (for his faith in global warming nonsense)? Or is Jacobson Lying Stupidly (by promoting technologies he knows don't scale if they exist at all)? Any votes for both?

Global Warming Religion

This article is as likely to change global warming views as the Pope is to announce his belief in Hinduism. But can we at least stop the blatant lies? Unfortunately not. It takes fearmongering and lies to spread the Global Warming Religion.



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