Oregon Water Coalition
Member Newsletter

Inside this Issue:

- Electricity and climate change
- Water, "there's an app for that"
- FDA vows to ease water regs

August, 2013 **oregonwatercoalition.org** **Volume 20, Issue 8**

First six months of 2013: West facing below-normal precipitation, drought

For the first six months of 2013, the contiguous United States has been nearly split in half by temperature and precipitation differences.

Much of the East has been dealing with below- or near-normal temperatures, above-normal precipitation, and flooding while much of the West has been dealing with above-normal temperatures, below-normal precipitation, and drought.

As a whole, though, the country has seen above-average temperatures and above-average precipitation for the first six months of the year.

According to the latest statistics from the National Climatic Data Center, the January-June national average temperature of 48.1 degrees Fahrenheit was half a degree above the 20th-century average. And the overall January-June precipitation total of 15.71 inches was nearly an inch above average. Temperatures weren't the only thing vastly different for the two halves of the nation between January and June. Below-normal precipitation and drought continued to remain entrenched throughout much of the West and into the Central and Southern Plains. Oregon, Nevada, Idaho, and New Mexico each had January-June precipitation totals ranking among their 10 lowest. California had its driest first six months of the year ever recorded at 9.80 inches below average, beating the previous record by over 1.5 inches.

The eastern half of the country was a totally different ball game, however, with 12 states having one of their 10 wettest year-to-date periods. Illinois, Iowa, Michigan, and Wisconsin each had January-June precipitation totals that were their wettest on record. By the end of June, all locations east of the Mississippi River were drought free for the first time since May 2*005.*

Columbia Basin Bulletin

Columbia Riverkeeper files lawsuit citing oil pollution from dams

A lawsuit filed this week in federal court by Columbia Riverkeeper accuses the U.S. government, and the U.S. Army Corps of Engineers in particular, of allowing chronic oil pollution into the Columbia River system that negatively affects salmon and steelhead, humans and other species.

According to the nonprofit organization, the Corps, which operates mainstem Columbia and Snake River hydro projects, has a history of both acute spills and regular leaks of oil and other pollution from dams including Bonneville, The Dalles, John Day on the Columbia, and Ice Harbor on the lower Snake River. The Snake River drains much of central and southern Idaho and feeds into the Columbia in southeast Washington.

"The Columbia River is a treasure and we need to stop dirty oil pollution from the dams," said Brett Vanden-Heuvel, Columbia Riverkeeper's executive director. "For years and years, the Corps has allowed oil pollution to flow into the Columbia River. There is no excuse for a federal agency to ignore clean water laws that protect people and wildlife from dirty oil and other pollution." The complaint filed Wednesday in Oregon's U.S. District Court asks for a legal judgment that the Corps has violated and continues to violate the federal Clean Water Act by discharging pollutants from dams it operates and asks for a legal injunction requiring that the alleged pollution be halted.

The complaint also asked that the court require that the Coprs to take specific actions to evaluate and remediate the environmental harm caused by the alleged violations of the CWA. Riverkeeper's lawsuit alleges dozens of oil spills and chronic oil leaks at the dams.

"For example, in 2011 and 2012 the Corps reported discharging over 1,500 gallons of PCB-laden transformer oil at the Ice Harbor Dam on the Snake River, according to a Riverkeeper press release.

The conservation groups says that the U.S. Environmental Protection Agency has determined that PCBs cause cancer, as well as a variety of other adverse health effects

on the immune system, reproductive system, nervous system, and endocrine system.

Oil spilled from Ice Harbor contained PCBs at levels 14,000,000 percent greater than state and federal chronic water quality standards, the complaint says.

"PCBs are highly toxic and don't go away," said Vanden-Heuvel. "While the government banned the manufacture of PCBs decades ago, the PCBs are still showing up in oil coming from the Corps' dams. We are very concerned about the impacts of toxic oil pollution on salmon and the families that rely on the Columbia and Snake Rivers for sustenance."

"We are calling on the Corps to come clean," said Lauren Goldberg, staff attorney for Riverkeeper. "The dams are part of a larger pollution problem on the Columbia River, and everyone -- including the Corps -- needs to do their part to make our rivers safe for swimming and fishing."

Riverkeeper's lawsuit alleges that the Corps has violated the CWA over the past seven years by discharging oil without a permit.

"Because the Corps has skirted the law, the Corps fails to monitor and report pollution in a manner that enables the public to fully understand the extent and severity of the problem," said Goldberg.

Columbia Riverkeeper's goal is to protect and restore the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean.

Columbia Basin Bulletin

Report details electricity infrastructure vulnerabilities from climate change

The U.S. Department of Energy released a new report which assesses how America's critical energy and electricity infrastructure is vulnerable to the impacts of climate change.

Historically high temperatures in recent years have been accompanied by droughts and extreme heat waves, more wildfires than usual, and several intense storms that caused power and fuel disruptions for millions of people. These trends are expected to continue, which could further impact energy systems critical to the nation's economy.

The U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather report notes that annual temperatures across the United States have increased by about 1.5 degrees F over the last century.

In fact, 2012 was both the warmest year on record in the contiguous United States and saw the hottest month since the country started keeping records in 1895. The implications for America's energy infrastructure include the following:

- Increased risk of temporary partial or full shutdowns at thermoelectric (coal, natural gas, and nuclear) power plants because of decreased water availability for cooling and higher ambient and air water temperatures. Thermoelectric power plants require water cooling in order to operate. A study of coal plants, for example, found that roughly 60 percent of the current fleet is located in areas of water stress.
- Reduced power generation from hydroelectric power plants in some regions and seasons due to drought and declining snowpack. For example, earlier spring snowmelts could decrease summer water availability leading to potential hydropower shortages when energy demand for cooling is greatest.
- Risks to energy infrastructure located along the coast from sea level rise, increasing intensity of storms, and higher storm surge and flooding -- potentially disrupting oil and gas production, refining, and distribution, as well as electricity generation and distribution.
- Increasing risks of physical damage to power lines, transformers and electricity distribution systems from hurricanes, storms and wildfires that are growing more intense and more frequent.
- Increased risks of disruption and delay to fuel transport by rail and barge during more frequent periods of drought and flooding that affect water levels in rivers and ports.
- Higher air conditioning costs and risks of blackouts and brownouts in some regions if the capacity of existing power plants does not keep pace with the growth in peak electricity demand due to increasing temperatures and heat waves. An Argonne National Laboratory study found that higher peak electricity demand as a result of climate change related temperature increases will require an additional 34 GW of new power generation capacity in the western United States alone

by 2050, costing consumers $45 billion. This is roughly equivalent to more than 100 new power plants, and doesn't include new power plants that will be needed to accommodate growth in population or other factors.

In addition to identifying critical areas at risk from climate change and extreme weather, the report also identifies activities already underway to address these challenges, and discusses potential opportunities to make the energy sector more resilient.

Potential future opportunities for federal, state, and local governments could include innovative policies that broaden the suite of available climate-resilient energy technologies and encourage their deployment, improved data collection and models to better inform researchers and lawmakers of energy sector vulnerabilities and response opportunities, and enhanced stakeholder engagement.

These activities, says the DOE, "will increase the resilience of our energy infrastructure by 'hardening' existing facilities and structures to better withstand severe droughts, floods, storms or wildfires and by contributing to smarter development of new f*acilities."*

Columbia Basin Bulletin

New 'app' to help growers test their own impact on water quality

Tree crop growers have been given a new tool to help them assess the impacts their practices may have on water quality.

The University of California Cooperative Extension has developed an iPad application called "Know Your H2O," which provides growers with best-practices advice based on how they answer a series of questions about their operation.

Although there are many sources of water pollution, runoff from farms may contain contaminant levels that exceed water quality standards, the UC's Agricultural Water Quality Research and Education Program explains in a news release. The app tells growers how to prevent runoff, which carries such pollutants as fertilizers, salts, pesticides and sediments.

Tim Hearden, Capital Press

Analysis: State's water supply development fund a product of compromise

In the legislative session that ended July 8, Oregon lawmakers created the state's first water supply development fund, an accomplishment some herald as "landmark."

Senate Bill 839 was roundly supported by both parties in both chambers. It passed the Senate 29-1 on July 6, and one day later it passed the House 60-0.

The bill, along with a companion bill, provides $10 million in lottery-backed bonds that water users can tap to study alternatives for getting water to farms, add infrastructure, repair storage structures or start work on building new water storage.

From all outward appearances, the bill was a lock from the moment it was first heard in the Senate Environment and Natural Resources Committee on April 10 to when the Senate president and House speaker signed it July 15.

But, according to some, as recent as one month before the session closed, SB839 was doomed.

In that final month lawmakers not only preserved Oregon's opportunity to create the water supply development fund, they also codified the importance of water storage for economic development. And, according to many involved in behind-the-scenes negotiations on SB839, Oregon has Rep. Cliff Bentz, R-Ontario, to thank.

"Bentz did it," said Roger Beyer, a natural resource industries lobbyist and former state senator. "Without him, we would have gotten nowhere.

The bill likely would have died in the Senate, because the votes weren't there to pass it as it was, because it was an environmentalist bill. It was all about in-stream water rights."

Bentz, a former member of the Oregon Water Resources Commission and a lawyer who has litigated water cases, said the bill as originally crafted posed more of a threat to out-of-stream uses such as irrigation than a potential benefit.

"The bill, before I had an opportunity to work on it, was definitely more beneficial for in-stream interests," Bentz said. "So every time I would make a change, it was to move the bill toward a balanced, in-stream/out-of-

stream approach." In all, Bentz said, the bill underwent 47 changes in the final month, almost all of which were aimed at protecting out-of-stream interests.

"The most important thing for all of us in this part of the state was to make sure we weren't creating a fund that would provide in-stream interests with the opportunity to harm out-of-stream interests," Bentz said.

"The very first thing was to make sure that we were designing a system that had balance. And throughout the discussion, we kept coming back to, 'How do we make sure that this bill provides for in-stream and out-of-stream use of the funds,'" he said.

The first issue that piqued Bentz's interest was a phrase stipulating that to qualify for the water-supply-development fund, entities must protect "seasonally varying flows."

The phrase reminded Bentz of a similar phrase from a 2009 bill that essentially rendered a water-supply-development fund obsolete.

The phrase in House Bill 3369 required anyone applying for water-supply-development money to ensure projects protected "peak and ecological flows" and to keep in stream 33 percent of the water created through new storage.

First off, Bentz said, no one could afford to build a water-supply project knowing that 33 percent of the water could not be sold for out-of-stream uses. Plus no one knew what it meant to protect "peak and ecological flows."

When Bentz first read SB839, the language defining "seasonally varying flows" was so broad "that you could have used almost all of the winter flow to protect in-stream interests," he said.

One of his first actions was to create a task force to define "seasonally varying flows." The task force will present its findings by July 1, 2014.

A second task force, also with a July 1 deadline, will be formed to determine what the water supply development fund can be used for and to determine criteria for evaluating projects.

To qualify for the fund, projects have to provide economic, environmental and social, or community benefits, according to the bill.

Here again, the qualifying criteria present a challenge that agriculture will need to overcome to access the fund, according to Beyer.

"To build a project that uses any of this money," Beyer said, "automatically two-thirds of it has to be for uses other than agriculture. I don't know how you can ever afford to do that."

Jeff Stone, executive director of the Oregon Association of Nurseries, said creating jobs through building water storage for agricultural purposes can meet the "social, or community, benefit" requirement.

"People can look at it that two-thirds (of the qualifying criteria) are not for agriculture," Stone said, "and some people can look at it that two-thirds are not for the environment. It all depends on what lens you use."

How the bill is interpreted in the rule-making process will go a long way toward resolving the issue, Stone said.

Bentz said the bill is crafted in a way that protects and potentially enhances in-stream and out-of-stream uses of Oregon's water resources. And, he said, it took a team effort to bring balance to the bill.

"No change was made unilaterally," he said. "It was a group effort, and I mean an effort.

"I think everyone realized that at the end of the day, if we don't figure out a way of storing water, everybody is going to be hurt, and that includes the fish," he said.

Bentz said he believes SB839 will be used.

"I think almost immediately you're going to have people applying for those funds and going through this process," Bentz said. "I don't think there is any doubt there will be applications filed."

Beyer is less optimistic SB839 will provide an opportunity for agriculture to increase irrigation water supplies.

"Will 839 be the impetus to actually build any new storage projects for agriculture? I really don't think so," Beyer said. "I think it is weighted too heavily to the other potential uses of water.

"It may take another session or two for the work to be done, and you may have to tweak those (qualifying criteria) formulas or do something else after these studies are done to actually get any projects started," Beyer said.

"But at least it is a first step. "And for the first time in my recollection of being involved in the process over the past 15 or 16 years, this bill actually mentions the importance of storage of water for all uses, including agriculture. "I think that was one of the key provisions to get into this bill -- that the Legislature finally recognizes the importance of storage of water for something other than fish," Beyer said.

Mitch Lies, Capital Press

FDA officials visit northwest farmers, vow to ease water regulations

Food and Drug Administration officials visited farms, packing sheds and irrigation systems in Idaho, Oregon and Washington this week to get a first-hand look at how their proposed produce safety rule could impact farmers.

They left vowing to change the rule but didn't offer specifics on what the changes would be.

Many farmers, particularly onion growers, say that the FDA's proposed standards governing the quality of agricultural water cannot be met and are impractical.

They believe they made that case during the FDA tour, which began Aug. 11 in Idaho, zigzagged through that state and Oregon through Aug. 13 and wrapped up Aug. 15 in Washington following tours of tree fruit farms and packing houses in that state.

The tour included a two-hour listening session Aug. 12 in Ontario, Ore., where 170 farmers and other industry representatives explained how the rule could impact farming.

The rule, which will help implement the Food Safety Modernization Act, applies to any produce that could be consumed raw and affects any agricultural water that could come into contact with that produce.

Idaho Water Users Association Executive Director Norm Semanko, who is leading an effort by various agricultural groups to submit official comments on FDA's proposal, said agency officials appeared to understand the message.

"After attending the listening session ... it's pretty apparent FDA realizes that the standard they proposed is not going to work, so the burden is on us in our comments to give them an alternative standard that they can put into their rule that will actually work," he said.

The FDA's proposed produce rule includes a provision that would govern how much bacteria could be detected in agricultural water.

The Ontario listening session included some strong comments from growers and industry leaders. "What we have here is a dog-and-pony show," said Oregon farmer Robert Powell, who encouraged farmers to file an injunction to stop the rule."The problem is government is driving the issue down and the citizens aren't driving it up."

Most people applauded the FDA officials for visiting the region but they had a difficult time disguising their dislike for the proposed rule.

"There appears to be no common sense in what (you're) proposing here," said Craig Froerer, who manages Owyhee Produce's farming operations in Nyssa, Ore.

Oregon farmer Pat Phillips' comment was simply one of exasperation: "I'm really stumped at how we're going to do this."

Semanko said most Idaho waterways couldn't meet the proposed standard.

"We sure as hell don't have any way to meet it in our irrigation systems," he said. "We will not apologize for the quality of water we deliver, which is adequate for producing crops."

Semanko pointed out the proposed standard is the same one the Environmental Protection Agency uses for recreational water.

"It is a standard that makes sense for swimming but it is not a standard that makes sense for irrigation," he said.

Michael Taylor, the top FDA official on the tour, said the final rule will be different from what the agency has proposed but he didn't speculate on what the changes would be.

"We've heard some very substantive, important comments that will absolutely help shape the final rule," Taylor, the agency's deputy commissioner for foods, said after the listening session.

"We've gotten a lot of comments on a lot of issues...so we're (going to do) a lot of hard thinking about how to

consider those comments and shape a final rule that addresses those concerns," he added.

"There will certainly be changes, but I don't want to stand here and say I know specifically what they are."

Taylor and other FDA officials emphasized a provision in the rule that allows farmers to establish alternative standards or practices than those proposed if they can provide adequate scientific data or other information that shows they provide the same level of public health protection.

States can also apply for variances from some or all of the requirements of the produce safety rule, a more formal process that would require a formal petition to FDA.

"We built in the alternative (option) to allow for flexibility," said Samir Assar, director of FDA's produce safety staff.

Like many other farmers and industry leaders, Kay Riley, manager of an onion packing shed in Nyssa, Ore., said he appreciated the FDA visiting the region. "But I would suggest they should have done the tour before they wrote this rule," he added.

Riley said he believes FDA will rethink the rule. "However, I find highly unlikely they'll back away from it."

The FDA's proposed rule on agricultural water would require generic E. coli levels in irrigation water to be under 235 colony forming units per 100 milliliters for any single sample.

It would also require five consecutive samples to have a rolling geometric mean of under 126 units.

Growers who irrigate with surface water would be required to test weekly during the irrigation season at a cost of about $40 per test. If they fail a test, they have to immediately stop using the water.

Clint Shock, director of Oregon State University's research station near Ontario, said that scenario is unthinkable for onion growers in the region.

Onions are extremely sensitive to the interruption of irrigation and will lose value within one or two days of irrigation being delayed, he said. "Interruption of irrigation is absolutely not an option for growers."

Shock told Taylor that virtually none of the surface irrigation water used by farmers in eastern Oregon could come close to meeting the proposed standard.

He also said it would cost hundreds of millions of dollars to rebuild water delivery systems to provide growers in the region with more pristine water.

Human disease organisms have not been found inside of Treasure Valley onions, he said, and he questioned whether there is a cost-effective way to filter bacteria out of irrigation water without having overriding negative side-effects on soil quality, plant health and aquatic systems.

"To what extent is lifting heaven and earth actually going to make a change?" he said.

Riley said farmers in the region have irrigated with the same water for over 100 years without a single illness associated with dry bulb onions.

"The water is safe to use," he said.

Sen. Mike Crapo, R-Idaho, said the proposed standards could literally shut off irrigation water from Idaho farmers and he is trying to introduce legislation that would defund FDA's proposed produce rule.

"It could be very damaging to Idaho agriculture with very little benefit in terms of food safety," he told a small crowd of industry leaders Aug. 13 in an onion field in Meridian, Idaho.

Rep. Greg Walden, R-Ore., who set up a meeting in Washington, D.C., with FDA officials that helped spur their visit to the Pacific Northwest, said he will follow up with the agency to try to ensure it addresses growers' concerns.

The proposed rule represents "a costly burden that could dramatically affect our farmers, with no justification," he said. "We need to use every tool we have to fix this problem."

Taylor said the goal of the proposed produce rule includes the success of agriculture and he urged farmers to work with the agency to help it adopt a workable rule.

"The success of agriculture and food safety go hand-in-hand," he said. "The question is how do we work together to get there? That's the spirit of why we are here."

Sean Ellis, Capital Press

Water fee hikes go into effect without panel's approval

Lawmakers advanced Oregon's new Integrated Water Resources Strategy by creating new programs and extending existing ones during the recently completed 2013 legislative session, according to an Oregon Water Resources Department official.

In a report to the Oregon Water Resources Commission Aug. 9, Brenda Bateman, public information officer for the department, characterized the session as "extremely busy for water, both on the policy and budget sides."

Lawmakers added resources to the department, Bateman said, extended sunsets on programs due to expire, created a water supply development fund and increased water transaction fees in the session that ended July 8.

Bateman said that a late-session amendment to House Bill 2259, which authorized the department to increase fees, gave the department authority to enact the fee increases retroactive to July 1.

The new fee schedule includes a one-time 13 percent average increase over the most recent schedule for several dozen fees, including water right certificate fees, water use permits and water right transfers. The amendment also put a July 1, 2017, sunset on the new fees.

At that time, without further legislative action, fees would revert back to the most recent schedule.

The late-session amendment removed a provision of the bill that authorized the department to increase fees 2 percent annually or at the rate of inflation, Bateman said.

In general, Bateman said the department fared well in the first session since the state adopted its long-term strategy for dealing with water.

"Recommendations coming out of the Integrated Water Resources Strategy fared very well this session, not only for our agency, but for our sister agencies as well," Bateman said.

The Oregon Water Resources Commission met Aug. 8-9 in Baker City.

Mitch Lies, Capital Press

'Find It All' at Farwest Show, theme touts diverse products and activities

Next week nursery industry professionals will be able to "Find It All" at the 41st annual Farwest Trade Show.

Organizers said this year's theme, "Find It All," reflects the diverse products, plant material and activities that can be found at on- and off-site trade show events from Tuesday, Aug. 20, to Saturday, Aug. 24.

The Farwest is one of the largest events held at the Portland Convention Center and attendees hail from at least 19 countries and 42 states. The showroom floor will be open from noon to 6 p.m. Thursday and Friday, Aug. 22-23 and noon to 4 p.m. Saturday, Aug. 24. During the event, attendees will have an opportunity to view new varieties and products and network with other industry professionals.

"Farwest is a great opportunity because it's about making connections. It's about looking at a grower or a supplier and saying, 'We can do business together,'" said Jeff Stone, Oregon Association of Nurseries executive director. "The main thing is to make a business-to-business connection." On Tuesday and Wednesday, the two days before the show officially opens, three Oregon nursery tours will be offered. The first tour, "Heart of the Valley," will highlight edibles; the second, "Innovation and Tradition," will introduce tour-goers to new and different approaches to the nursery business. The third tour, "New & Unusual -- Plants and Places to Inspire," is aimed at connecting people with interesting and exotic plants from around the world.

"What is great about this show is that attendees can go straight to a nursery to see plant materials -- not just see them on the show floor," said Ann Murphy, OAN director of marketing.

Shalem Patton, OAN event and program coordinator, said another benefit of attending the show is locating plants that have been hard to find in recent years. When housing development slowed as a result of the economic downturn, she said, the nursery industry also contracted. Although business is now rebounding, some species such as Alberta spruce, juniper and spirea are still difficult to come by.

Lacey Jarrell, Capital Press

Oregon Water Coalition
P.O. Box 1276
Hermiston, Oregon 97838

PRSRT STD
U.S. Postage Paid
Hermiston, OR
Permit No. 30

Return Service Requested

The Oregon Water Coalition—Promoting the Wise Use of Oregon's Water Resources!

Oregon Water Coalition

www.oregonwatercoalition.org · owc@eotnet.net

Inside August 2013 Newsletter

1. West hit hard by below-normal precipitation, drought
2. Columbia Riverkeeper lawsuit cites oil pollution from dams
3. Report details electricity vulnerabilities from climate change
4. New 'app' to help growers test their impact on water quality
5. Analysis: Compromise shapes new water supply fund