

# SUBLEGALS

-WE HOOK THE NEWS THAT'S FIT TO NET-  
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There is no place for that as long as I am breathing ... They are not playing a game with someone who will not play hardball. I will not allow this to come forward without a fight.

-- Barbara Boxer, on the CA drought WRDA rider

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**21:23/01. DROUGHT BILL FIGHT HITS THE FAN; BOXER PUTTING IT ON THE LINE TO PREVENT SALMON DESTRUCTION:** The ongoing saga of federal drought “relief” legislation took a new turn this week as Congress tried for a last ditch effort to pass a bill before the close of the session. As *Sublegals* readers are aware, fishing groups have been fighting against iterations of a bad-for-salmon bill proposed by Senator Dianne Feinstein (D-CA) and an even-worse-for-salmon bill by Representative David Valadao (R-Hanford) for several years. Both bills would roll back the 2009 Biological Opinion that prevents Central Valley Project and State Water Project operators from pumping more salmon water into the San Joaquin Valley.

Things heated up when Feinstein and Representative Kevin McCarthy (R-Bakersfield) cobbled together a compromise proposal that McCarthy then tacked on to the House version of the Water Resources Development Act (WRDA) – the legislation that would provide federal funding to remediate Flint, Michigan’s lead problems and other water infrastructure projects. While many in Congress consider the addition of California drought language a “poison pill” that will doom WRDA, others see it as a must-pass bill, regardless of the 90-page rider. PCFFA and other fishing groups have come together to voice their opposition to the rider, culminating in a 7 December letter to all members of Congress. A vote is expected before Congress intends to end its session on 9 December.

In an ironic twist, it was Senator Barbara Boxer (D-CA), a consistent fish and fishermen’s champion, who negotiated the original language in the Senate WRDA bill. Boxer is now

threatening to filibuster her own bill if the drought language comes to the Senate floor, a dramatic last stand as she ends her illustrious career. What's more, the unusually public split between California's two democratic Senators came to a head when Feinstein did not attend Boxer's farewell address on the Senate floor.

**For more information,** see this [5 December San Francisco Chronicle article](#), and the [PCFFA et al. fishing industry opposition letter](#). For background on the drought "relief" bills, check out [PCFFA's Drought Fight webpage](#).

**21:23/02. PCFFA, IFR, OTHERS BRING SUIT OVER SALMON DISEASE OUTBREAK ON KLAMATH:** PCFFA, IFR, the Yurok Tribe and Klamath Riverkeeper filed suit on 29 November for violations of salmon protections that lead to the infection of 90% of Klamath River Coho salmon in 2014 and 2015. The suit charges the National Marine Fisheries Service (NMFS) and the U.S. Bureau of Reclamation (BOR) with failing to prevent the disease outbreak by not releasing enough water out of Klamath River dams to flush the parasite out system. The failure



to release water to prevent fish disease is a violation of NMFS' 2013 Biological Opinion (BiOp), which allows operation of the Klamath dams pursuant to fish protections designed to prevent putting the threatened Coho in additional jeopardy. The BiOp requires consultation between NMFS and BOR on changes to dam operations when infection rates exceed 49%. Plaintiffs are seeking a BiOp revision that would require flushing flows in the Spring that would flush the parasite out of the system.

**For more information,** see this [5 December Eureka Times-Standard article](#). 2015 Klamath fish kill photo from Fishery Nation.

**21:23/03. MOSTLY ON TIME DUNGENESS CRAB SEASON BRINGS HUGE RELIEF TO MANY, BUT NOT ALL:** After a devastating 2015-16 season which saw coastwide delays, this year's Dungeness crab season got off on the right foot for most California crabbers. The season opened as usual at 12:01 AM on 15 November below Pt. Reyes; unfortunately the area from Pt. Reyes to Salt Point was delayed until 3 December. Similarly, the area from Humboldt Bay to the Oregon border opened on time on 1 December, but the area from the Gualala River to Humboldt Bay remains closed. Recreational crabbing opened on time coast wide, albeit with an advisory from the California Department of Fish & Wildlife to not eat crab viscera. The delays are to the persistent presence of naturally occurring domoic acid, which devastated last year's season, in waters off Bodega Bay and Fort Bragg. Oregon and Washington, which normally open on 1 December, are both delayed.

The good news is November and December mean fresh California crab, which brings happiness and money to the commercial crabbing fleet. The season looks very promising as crab is expected to be larger due to last year's limited season. Unfortunately, because of the shortened three-month season in 2015, crabbing generated only about half of a normal year's revenue. Crabbers are still waiting on the U.S. Department of Commerce to determine whether the season constituted a fishery disaster. If so, Congress could appropriate disaster relief funds

to commercial crabbers. Let's cheer and keep our fingers crossed for our commercial crabbers to have a super 2016-17 season.

**For more information**, see this [1 December CDFW press release](#), this [23 November Undercurrent News article](#), or this [2 December Marin Independent Journal article](#).

**21:23/04. A NOTE ON WORLD FISHERIES DAY, 21 NOVEMBER FROM IFR PRESIDENT PIETRO PARRAVANO:** The origin of World Fisheries Day occurred on the same day that an international fishermen's organization was formed in New Dehli, India. The World Forum of Fish Harvesters & Fish Workers (WFF) was established on November 21, 1997. On that day, fishing representatives from 18 countries signed a declaration advocating for a global mandate of sustainable fishing practices and policies. The creation of WFF was founded on the common principles of sustaining the fishing communities, sustaining the fisheries, social justice, and preserving the cultural history of fish harvesters and fish workers.

Earth is covered by approximately 75% of Oceans. Their vastness offer all living species with a multitude of blessings, bounty and life. At times, we are perplexed by the ongoing goodness of this liquid that we call the Oceans. We take for granted this mystique. There are many historical references to this mystique that are documented in the Bible, cultures, society, politics and humanity.

World Fisheries Day is rooted in this mystique. It celebrates the vast assortment of connections that are defined by the Oceans. The celebration of World Fisheries Day verifies the diversity of the fishermen that bring us the bounty of the Oceans. The universal language of the fishermen is communicated to us when their harvest is brought to our tables. Their language is heard by all societies around the world. It becomes imbedded in our culinary senses. Its level of appreciation grows with each bite. Its understanding grows with each article we read or each illustration we see. It becomes a source for education, appreciation and knowledge.

The continuance of this celebration for World Fisheries Day depends upon your support and acknowledgement. Each time you see a fish, eat a fish or think like a fish, you are connecting to the oceans and their ecosystems. You are also connecting to the fisherman that brought you that fish. Each fisherman faces many challenges as they go to work on the Oceans. Their success is dependent on your support and bountiful Oceans.

World Fisheries Day is a day that raises our appreciation for the fish, the Oceans and the fishermen. It is a unique celebration.

**For more information** on World Fisheries Day, check out the [WFF website](#).

**21:23/05 THE REDDHEAD: ALARMING HEALTH ISSUES CONTINUE IN WORLD'S SALMON FARMS IN 2016:** Farmed Atlantic salmon, instead of wild salmon, may be the best source of Omega 3s in the future but severe problems continue to plague the industry costing jobs and money. Here's a breakdown of the myriad disease and environmental issues affecting the main farmed salmon producing nations:

1. **CHILE:** The world's second largest producer lost \$800 million dollars and 20% of their production in 2016 due to a serious algae bloom (Red Tide). The dreaded and deadly virus, Infectious Salmon Anemia (ISA), was also detected. "ISA may be characterized by severe anemia, ascites (accumulation of fluid in the body cavity), hemorrhage in internal organs and darkening of the liver. Fish also tend to appear lethargic with pale gills and blood spots in the eyes". Overuse of antibiotics, to treat the bacteria

(Piscirickettsiosis SRS) that causes “lesions, and hemorrhaging in infected fish, and swells their kidneys and spleens, eventually killing them,” prompted the government to investigate and propose limits on their use.

2. **SCOTLAND:** Formerly a blue ribbon supplier under the name Loch Duarte, Scotland has horrible sea lice, industrial pollutants and toxic water, due to the meal fed to the penned salmon, reported scientists on 10 October 2016 in *The U.K. Guardian*.
3. **BRITISH COLUMBIA, CANADA:** B.C. is suffering a devastating reduction in wild sockeye salmon returns due to escapes, toxic water, Infectious Salmon Anemia (ISA), and sea lice from farmed salmon net pens located in the Fraser River, a main wild salmon passage.

4. **NORWAY:** Farmed salmon from Norway recently was declared not safe for children or pregnant women because of ISA, parasites and large amount of toxins in waters around and under farming pens, according to scientist and international experts. Norway, the originator of commercial Atlantic salmon farming in the 1960s, and the



world’s leading producer, is under attack from scientists and environmentalists. The industry and government agencies defend the practices and pooh-pooh the critics.

Toxic pollutants are on and underneath the pens’ water. This is cause for great concern among environmentalists and critics. Excess food, urine and feces float and collect on the ocean bottom. Norwegian scientists claim there is as much as 15 feet of waste in some areas. These pollutants seriously affect the wild salmon that swim through the muck. “However, what has emerged as a larger issue in this commingling of species is the increase in sea lice...found on juvenile wild salmon migrating through areas near salmon farms, whose crowded conditions provide an ideal breeding ground for sea lice.”

Sea lice are tiny crustaceans naturally occurring in the oceans for millennia. When mature, they attach to adult salmon by suction, and feed off the skin, blood and mucus. However, on wild salmon, the parasite falls off during their migration in freshwater rivers to spawn. These lice were not a significant problem until the introduction of salmon farming.

Most farming pens are located in quiet fiords and inlets where the fish remain until they are harvested. The lice infect the salmon, spreading it throughout the population, causing deformation and death. In most cases the lice are removed from farmed fish with questionable chemicals. Another scenario is farming lumpfish which predate on the lice. This latter solution is only practiced by very few salmon farmers.

For these, and other misgivings, Alaska and California are the only West Coast states that do not allow marine salmon farming. More government oversight, stricter regulations, certification, and better management practices have improved the health of farmed salmon, but there are no consistent standards. Rapidly increasing numbers and expansion of farms makes universal improvements very difficult.

Next time, **The REDDHEAD** will focus on The Economics of Wild vs. Farmed Salmon.

**For more information**, see the following articles:

1. [The Fish Site, ISA, 2007](#)
2. [2 March 2016 Huffington Post piece](#) on B.C. salmon farming problems
3. [11 June 2013 News in English article](#) on Norway's salmon farms
4. [Alaska Dept. of Fish & Game, Sea Lice, 2008](#)
5. [Farmed and Dangerous, Chemical Treatments: SLICE](#)

Net pen photo courtesy of National Marine Fishery Service, public domain.

**21:23/06: BLINDING PARASITES FOUND IN 2015 EEL RIVER SALMON RUN:** Scary sounding, but non-lethal parasitic flatworms were found in 20 percent of the Eel River salmon run in 2015. Little is known about the virus, but according to Assistant Professor of medicine and epidemiology of U.C. Davis Associate, harsh environmental factors like drought-warmed water, algae, and other parasites allowed the flatworms to attack salmon.

In October 2015, volunteers found some salmon to be lethargic and others so blind they wouldn't turn away until touched. Soto Martinez found brain lesions and hemorrhaging caused by the virus. "There are a number of viruses that can affect wild fish, and with new diagnostic methods we are trying to understand their distribution and conditions in which they cause diseases," he said. "Just because a virus is present, it doesn't automatically mean they are the cause of diseases."

Mark Adkison, California Department of Fish and Wildlife Fish Health Coordinator, concluded, "It's not a virus we've seen before. I'm not sure if we'll see it again. It might cause problems in the future. So far none of the data that Dr. Soto has generated gives me too much concern at this point." The scientists agree that further study must be done to see how this rare occurrence affects salmon.

**For more information**, see this [14 November Ukiah Daily Journal article](#).

**21:23/07. REDDHEAD MOVIE REVIEW: THE BREACH:** "There is a flame in the river, an invisible flame...that creates not heat but life," wrote David James Duncan in "My Life as Told by Water." This film captures that sentiment. It is a riveting and beautiful film of one man's journey through the Pacific Northwest, from Oregon to Alaska, to discover where the wild salmon have gone and if they can return. A parallel story is told by a salmon who recounts her history as a wild fish.

Filmmaker/writer/fisherman, Mark Titus, wrote and directed the film, with photography by Andres Garreton. Titus' interviews of other fishermen, and discoveries, "unravels the trail of human hubris and historical amnesia...all conspiring to the end of the most sustainable wild food left on the planet." "THE BREACH" can be seen On Demand.

**For more information**, see [the film's website here](#).

**YOUR NEWS, COMMENTS, CORRECTIONS:** Submit your news items, comments or any corrections to Editor at: [tsloane@ifrfish.org](mailto:tsloane@ifrfish.org), or call the IFR/PCFFA office with the news and a source at either: (415) 561-FISH (Southwest Office) or (541) 689-2000 (Northwest Office). If you have any trouble subscribing or unsubscribing, contact IFR/PCFFA directly at: [tsloane@ifrfish.org](mailto:tsloane@ifrfish.org). *Sublegals* is a weekly fisheries news bulletin service of Fishlink. "Fishlink" and "Sublegals" are registered trademarks of the Institute for Fisheries Resources. All rights to the use of these trademarks are reserved to IFR. All photos are by IFR unless otherwise

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