He rose and turned toward the lights of town. The tidepools bright as smelterpots among the dark rocks where the phosphorescent seacrab clambered back. Passing through the salt grass he looked back. The horse had not moved. A ship’s light winked in the swells. The colt stood against the horse with its head down and the horse was watching, out there past men’s knowing, where the stars are drowning and whales ferry their vast souls through the black and seamless sea.

-- Cormac McCarthy

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September issued an important draft of a proposed update to the Bay Delta Water Quality Control Plan with the goal of ensuring “adequate water conditions” for fisheries. Although the 2010 preferred base water flow is 60 percent, The Bay Area Water Quality Plan recommends a 30-50 percent unimpaired flow on the Stanislaus, Tuolumne and Merced Rivers. Unimpaired flow is the amount of water that would flow in a river in the absence of existing dams or diversions.

Environmental and fisheries conservation groups criticize the plan as being “…too low to restore and sustain salmon, steelhead trout and smelt fisheries, and have suggested that the 60 percent of unimpaired flow standard set forth in the 2010 public trust flow criteria report is more in line with the supporting science.” An additional concern is the possibility of emergency waivers being issued thereby reducing the flow to 30 percent or below.

For more information, see this 7 October San Francisco Chronicle article on the need for flows in the SF Bay Delta Estuary and the impact of the Board’s proposal, or this undated California Water Law Journal article that provides a detailed context of the State Board’s proposal. Or check out PCFFA’s webpage on the San Joaquin Flow proposal. San Joaquin River photo courtesy of Barbara Emley.

To get involved, consider attending one of the State Board’s workshops on the proposal and providing public comment. Details are available at the State Board’s website, or you may contact PCFFA.

21:22/02. DUNGENESS CRAB TO OPEN ON TIME IN CALIFORNIA: With one week to go, California’s commercial Dungeness crab season is set to get underway on time, but not without a bump in the road. State health officials concerned about domoic acid, the presence of which shut down the fishery for over half of the 2015-16 season, have resumed testing for the substance off the California Coast. Mercifully, most of the state’s crab grounds have tested clean and will open on time. Recreational crabbing opened 5 November. Only a handful of testing sites have come in above the conservative safety threshold. For those areas that are over the level, the California Department of Public Health (CDPH) and California Department of Fish & Wildlife (CDFW) are recommending precautionary measures, which could include temporarily closing those areas to commercial fishing.

Dungeness crab is managed in California in two main geographical areas: District 10, which runs from the Gualala River south, and the Northerly Districts, which run from the Gualala River to the North. In a normal season, District 10 opens on 15 November, and the Northerly Districts open on 1 December. Because the first few days of the crab season in a given area are by far the most productive, it is beneficial to fish on as many opening days as possible. However, the practice of moving between areas to take advantage of multiple openers creates management problems and disadvantages smaller vessels less able to travel far from their home ports.

To prevent that effort shift, California legislatively imposed “fair start” provisions that essentially prevent a vessel that took advantage
of the opener in District 10 from fishing on opening day, or a few weeks thereafter, in the Northerly Districts. However, these provisions apply only to vessels wishing to fish in multiple Districts – and not in multiple areas within the same District that open at different times. Fishermen from areas that are facing a delayed start are therefore concerned about the possibility that crabs in front of their harbor will be swept up when those areas open. Unfortunately, CDFW has no authority to prevent this from occurring, as it is unable to close fishing grounds during the season unless there is a public health concern. This issue will be the focus of legislation moving forward.

For more information, see this 5 November San Francisco Chronicle article.

21:22/03. DROUGHT BILLS COULD BE ADDRESSED IN LAME DUCK SESSION:
Two federal drought relief bills for California could be the subject of post-election negotiations, prompting a need for opponents to rally as the legislative session comes to an end. S. 2533 (Feinstein) and H.R. 2898 (Valadao) have come under fire for rolling back salmon protections during the drought to enable more pumping from the Central Valley’s already depleted salmon streams for the benefit of industrial irrigators in the San Joaquin Valley. Observers are concerned that the language of these bills could be added to must-pass legislation, such as a government funding bill or an energy infrastructure bill. Such shenanigans are common during post-election “lame duck” sessions when some legislators have little political capital to lose. Fishing groups, including PCFFA and Golden Gate Salmon Association, are rallying with a petition signed by over 25,000 individuals, and letters to West Coast senators opposing harmful provisions in the bills.

For more information, see PCFFA’s drought “relief” webpage, or sign PCFFA’s petition on change.org.

21:22/04. REDHEAD BOOK REVIEW: WATER: MORE OR LESS by Rita Schmidt Sudman and artist, Stephanie Taylor. This a beautifully illustrated and written softbound book about California’s interminable water problems and ideas on what government and citizens can do. Included is a dedication to author Joan Didion, an interview with Lester Snow of the Water Foundation, and 20 personal essays from water policy decision-makers. Tim Sloane, executive director of PCFFA and IFR, contributed Salmon and Fishermen: California’s Endangered Species. He wrote: “the state’s massive engineering project, that enables delivery of Northern California water to Southern California’s irrigators and cities, is the main impediment to strong salmon runs." In Winners or Losers in the San Joaquin Valley, Tom Birmingham, general manager of Westlands Water District, writes, “[t]he conversion of millions of acre feet of water from predominantly agricultural uses to environmental uses, begs the question of what do the people of the state want the state to look like?” In Chasing an Elusive Fix, Ms. Sudman, defines the myriad issues surrounding the health of the San Francisco Bay Delta estuary, “...a world in miniature-of all California water issues.” Water is California’s most fragile resource. This important book is a paean of thoughtful stories, art and policy.

Water: More or Less, can be ordered through the Water Education Foundation, or by calling 916-444-6240. It is also available at amazon.com.
21:22/05. STATE MISREPRESENTED TUNNEL ECONOMICS TO JUSTIFY PROJECT: A Public Records Act Request submitted on behalf of the San Francisco Bay-Delta Estuary conservation group Restore the Delta has revealed that the State of California sat on its own economic feasibility report that upended the State’s guarantees that the controversial Delta Tunnels project would be funded entirely by its water user beneficiaries in the San Joaquin Valley. The report, which was prepared for the State by a UC Berkeley economist, says that federal taxpayers would have to foot about $4 billion of the $16 billion project in order for the project benefits to pencil out for intended beneficiaries. Moreover, the report assumes that the Tunnels would deliver four times as much water as Tunnel supporters outlined in their permit application to the State Water Resources Control Board, calling into question whether the Tunnels will ever make economic sense.

For more information, see this 14 September Associated Press story, or this 4 October Water Deeply article.

21:22/06. AQUALLIANCE TO HOST 2016 WATER FOR SEVEN GENERATIONS CONFERENCE: Aqualliance, a northern California water sustainability advocate and PCFFA/IFR ally, is set to host its second annual water conference. This year’s theme is “Water for Seven Generations: Will California Squander or Protect It?” The program will feature a range of speakers on water sustainability issues in California, including salmon protection and restoration, groundwater management, Cal Water Fix, and a panel on the proposed Sites Reservoir. Organizers hope to “provide information about California water that is typically missing from public presentations by water districts, state political leaders, consultants, and water agencies.” The conference will be held on 17 & 18 November in Chico, CA.

For more information or to register, visit the Aqualliance website.

21:22/07. AUGUST 2016 CONTINUED 16 MONTHS OF RECORD SETTING HEAT: A recent study released by the National Oceanic and Atmospheric Administration (NOAA) found earth’s warm temperature is “unprecedented in 137 years” of temperature observation. Africa and Asia’s sweltering August heat is the highest since 1910.

This year broke the record set last August. Phoenix, AZ., the hottest city in the US, recorded 169 days over 99 degrees, with a record of 117 degrees.

El Nino occurs when the “heat from the tropical Pacific Ocean is released to the atmosphere.” Although the weather pattern has decreased, quirky temperatures remain. The highest monthly temperatures occurred since February 2015. High ambient air temperatures can prove fatal for incubating salmon as they heat up rivers and reservoirs.

For more information, see this 20 September Washington Post article, or this list of the hottest cities in the U.S.
21:22/08. THE REDHEAD: FRESH FARmed ATLANTIC SALMON NOW SERVED AT A RESTAURANT NEAR YOU: Farmed salmon? What a bizarre concept. The once bountiful wild Pacific salmon, highly prized on restaurant menus, is frequently being replaced by farmed Atlantic salmon - although no one tells you unless you ask. A famous San Francisco restaurant falsely represented on its menu that they serve only “Pacific King Salmon.” When questioned, a manager admitted it is a “mistake” because they serve Scottish farmed salmon “...and it is delicious.” A national seafood chain offers Atlantic Salmon but does not disclose that it is farmed in Chile. These are serious public deceptions. Why? Because farmed salmon are raised in net pens in ocean inlets and fed a scientifically developed diet of fish- or plant-based meal. The taste is milder and texture is less dense making it significantly different from wild-caught salmon. Sadly, as demand increases many new or uneducated salmon consumers don’t know the difference.

How did this happen? The problems go back to the late 19th century. Overfishing of the vast Columbia Basin wild salmon severely depleted the stocks. “Investments in programs to prevent depletion and maintain the supply of salmon...began as early as the 1870s...belief in the efficacy of technological solutions to ecological problems [brought the Pacific salmon] to the brink of extinction.” But with the well-meaning hatchery system came the prospect of industrial scale fish-farming. Norway experimented with farming Atlantic Salmon in the 1960s. A decade later, when scientists determined salmon was the best source of Omega 3 and should be consumed twice weekly, the demand worldwide created an enormous international industry of genetically mixed finfish.

Norway’s experiment became big business the 1980s due to its deep cold water in sheltered fjords. However, serious issues with the practice led that country to strengthen its environmental regulations. Some Norwegian fish farmers wanted less regulation and saw British Columbia and Alaska as perfect locations. The strong and influential Alaskan commercial fishing industry immediately banned all salmon farming. California was the second state to follow Alaska in 2003. British Columbia, with less regulation and oversight, was chosen. [ Unfortunately, “we got their bad apples,” said Lyn Hunter of the David Suzuki Foundation, a leading Canadian environmental group.

As Alaska wild salmon thrives, British Columbia’s fishing industry is barely surviving because of disease and ecological concerns. In the 1990s, when environmentalists fought to contain the farming growth in British Columbia, the farms expanded to Chile. Labor was cheap and there were few, if any, regulations. Serious questions quickly arose over disease, parasites and antibiotic. Chile’s farming is repeatedly beset with these and other ecological problems and is currently on the brink of collapse, again. Finally the Chilean government issued proposals for limited use of antibiotics.

And so it is: with fish farming comes a steady supply of fish at a relatively steady cost – but at what price to the environment and to the last major source of wild-caught protein in our
modernizing society? I’ll explore that topic in the next installment: The Problems, Diseases and Controversy over Farmed Salmon.

For more information and references in this article, see this 1999 Journal of Marine Sciences article entitled Depletion and Extinction of Pacific Salmon: A Different Perspective; this 14 March Alternet article on the fate of Atlantic salmon; and this Brief History of Salmon Farming.

YOUR NEWS, COMMENTS, CORRECTIONS: Submit your news items, comments or any corrections to Editor at: 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. 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 accredited. This publication, however, may be freely reproduced and circulated without copyright restriction. Articles taken from Fishlink Sublegals may be freely reposted or reprinted with attribution to “Fishlink Sublegals.” If you are receiving this as a subscriber, please feel free to pass it on to your colleagues.

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