BOARD OF SUPERVISORS
COUNTY OF HUMBOLDT
825 5th Street, Suite 111, Eureka, CA 95501-1153
Telephone (707) 476-2390 Fax (707) 445-7299

Testimony of

MARK LOVELACE
HUMBOLDT COUNTY SUPERVISOR

on behalf of the

COUNTY OF HUMBOLDT

for the hearing on

WATER RESOURCES ISSUES
IN THE KLAMATH BASIN

before the

COMMITTEE ON ENERGY AND NATURAL RESOURCES

of the

UNITED STATES SENATE

June 20, 2013

The County of Humboldt appreciates the opportunity to provide this statement for the record on water resources issues in the Klamath Basin. Our County is a signatory party to both the Klamath Hydropower Settlement Agreement (KHSA) and the Klamath Basin Restoration Agreement (KBRA). Federal implementation of these agreements would result in removal of the four lower-most dams on the Klamath River by 2020 and would create a comprehensive framework and mechanisms to achieve major watershed restoration through improved river flow regimes, habitat rehabilitation, improved water quality, and fisheries reintroduction. The County of Humboldt strongly supports the Klamath settlement agreements, as they provide an unprecedented opportunity to resolve longstanding disputes involving dams, water diversions, and salmon runs in the Klamath Basin.

Humboldt County

Humboldt County lies on the rugged coast of far-northern California, some 270 miles north of San Francisco. Humboldt is isolated from the rest of the State by mountainous terrain carved with steep river canyons, accessed only across twisting and temperamental mountain roads. Our isolation earns our region its nickname, "the Lost Coast", and endows us with a strong sense of self-reliance. Our economy has long been dependent upon our natural wealth, the hard work of our multi-generational timber, farming and ranching families, and our prosperous coastal fisheries.

More than half of the County's 135,000 residents live in unincorporated rural areas, with the remainder dispersed across seven small cities, including the seaport city of Eureka (population 27,191) and the tiny fishing village of Trinidad (population 367), the fifth smallest city in California.

The Klamath Basin spreads across 15,751 square-miles of southern Oregon and northern California; an area larger than nine states. Virtually the entire basin drains through Humboldt County for the last 50 miles of its 254 mile journey from its Oregon headwaters to the Pacific Ocean. Whatever happens to the Klamath River in the upper basin impacts our downstream coastal communities.

Klamath Fisheries History

The mighty Klamath River has historically been the third-most-productive salmon fishery in the U.S, outside of Alaska, surpassed only by the Columbia River in Oregon and the Sacramento-San Joaquin Rivers in California. The Klamath's location provides an important mid-point linkage between the aforementioned West Coast river systems. This powerful economic engine drove the coastal economies of northern California and southern Oregon, blessing us with abundant salmon that supported our commercial, recreational and tribal fisheries.

Beginning in 1918 and continuing through 1962, the Klamath Hydroelectric Project constructed a series of dams on the Klamath River, none of which included any provision for fish passage, effectively cutting off hundreds of miles of Fall and Spring Chinook and steelhead spawning habitat in the Upper Basin.

In the reservoirs behind the dams, the cold, swift-running waters of the Klamath are brought to a standstill, allowing the water temperature to warm well above tolerable levels for cold-water salmon. The still, warm waters also serve to concentrate nutrients and to encourage the explosive growth of toxic blue-green algae blooms and other fish pathogens, which are now endemic in the Klamath Basin. These pathogens were implicated in the September 2002 fish kill in which as many as 64,000 Chinook salmon were killed in the lower Klamath. This preventable disaster was the largest fish kill in the history of the Northwest.

Today, however, over 90 percent of the river's salmon habitat has been destroyed or blocked by these aging and obsolete dams. More than 420 miles of historic stream habitat is now completely inaccessible to returning salmon. Over the past 60 years, once-abundant Klamath Chinook salmon have declined sharply, from a historic average of nearly 900,000 to as few as 35,000 or less in some years. Coho salmon are listed as endangered under the Endangered Species Act (ESA), and other species - such as green sturgeon and Pacific lamprey - are declining as well.

In the late 1970's, commercial troll ocean fisheries in the Klamath Management Zone landed an average of over 3.6 million pounds of salmon. For the period from 2005 through 2009, that number had plummeted to an average of just 124,000 pounds, representing a decline of 92 percent for the Port of Brookings, and 98 percent for the ports of Eureka and Crescent City (see Table 1).

This precipitous decline has brought the shuttering of commercial processing facilities, the loss of on-shore jobs, an ever-dwindling fishing fleet, and pain and suffering among the families in our fishing communities. Each fishing boat lost represents an independent, family-owned small business that is now gone. Coastal communities in Northern California and Southern Oregon have had to deal with the environmental and economic impact of these dams for many decades, yet these communities did not have the benefit of environmental impact studies, economic analyses, and Senate hearings before their natural wealth, in the form of water, was taken from them.

The impact of the decline in Klamath salmon is felt far beyond the ports of Eureka, Crescent City and Brookings. As previously stated, the Klamath River creates a 'bridge' between salmon populations from the Columbia and Sacramento-San Joaquin River systems. Additionally, Klamath salmon inter-mingle in the ocean with other salmon stocks from as far away as Monterey, CA to central Washington. In this way, declines in Klamath Chinook salmon stocks can affect fisheries across the entire West Coast, triggering ocean salmon season closures over most of the northern California and Oregon coastline and other restrictions as far away as southern Washington.

The PacifiCorp Dams

The lower four dams on the Klamath River (Iron Gate, Copco 1, Copco 2, and JC Boyle) are not a Federal project. Rather, these dams are owned by PacifiCorp, a privately-owned utility company. These low-power hydroelectric dams do not provide any irrigation water, nor do they provide flood control. They are neither large nor particularly powerful, generating a combined annual average of just 78 megawatts (MW) for some 70,000 customers in northern California and southern Oregon, and representing less than two percent of PacifiCorp's electricity portfolio. By comparison, a single, more-modern facility could be expected to generate 1,000 MW or more.

As noted previously, these dams were all built without any provision for fish passage, which would make them illegal by any modern standards. The license to operate these dams expired in 2006 and, as a part of the Federal Energy Regulatory Commission's (FERC's) relicensing process, PacifiCorp would be required to retrofit all four dams with fish passage and make other upgrades, at a cost of at least $350 million. Fish passage would also further limit the dams' energy production capacity, as it would reduce the amount of water available for energy generation.

The cost of full dam removal is estimated to be $291 million, making it a far-better proposition for PacifiCorp's ratepayers. PacifiCorp continues to operate these dams under a year-to-year license, pending Congressional approval and implementation of the Klamath Agreements. Under the agreements, PacifiCorp and its ratepayers would bear full responsibility for the costs of dam removal, up to $200 million. PacifiCorp has already begun collecting a surcharge from its ratepayers to cover this anticipated cost. Any costs beyond that amount would be borne by the State of California. No Federal money would be used for dam removal.

History of Conflict

As with many waterways in the western United States, water rights in the Klamath basin have been oversubscribed. In most years, there is not enough water to meet the demands of all users and still provide for the needs of salmon and downstream communities. This essential truth has led to many decades of fighting in the Klamath basin, but all of that conflict has failed to yield more water.

Klamath water conflicts have been the focus of regulatory proceedings and litigation in various venues, without resolution. These conflicts intensified in the late 1980s and early 2000s with listings of threatened and endangered fish species, abrupt water shut-offs to irrigators, blooms of toxic algae, water disease outbreaks, devastating fish kills, and commercial fishing closures.

In the midst of the 2001 drought, the Bureau of Reclamation (BoR) terminated irrigation contracts to some 1,400 upper basin farmers to protect the endangered coho on the basis of biological opinions issued under the ESA. The farmers and their supporters staged street protests in Klamath Falls, Oregon, and some took control of the head gates on the project's canals. When local police refused to arrest them, federal agents had to patrol the canals to prevent further water seizures.

A year later, the Bush administration issued a controversial new biological opinion in which it determined that water diversions were "not likely to adversely affect" coho salmon for a below-average water year. BoR subsequently reduced the amount of water it would release downriver by half, diverting the balance to farmers through the project's canals.

By September of 2002, the low flows, warm water temperatures, and an exploding population of parasites killed as many as 64,000 fish in the lower Klamath. It was the largest fish kill in the history of the Northwest.

Responding to these recurrent crises, the Federal government has spent at least $181.4 million since 2001 on emergency drought relief and disaster assistance. This amounts to an average of over $18 million per year:

- 2001 - $46 million on Klamath disaster relief and other government outlays
- 2002-2004 - $62 million – Special allocation through the Farm Bill and BOR to support water conservation infrastructure and water banking
- 2006 - $61.4 million in State of Oregon disaster relief and Commercial Fishery Disaster Assistance
- 2010 - $12 million on drought relief and conservation

The Klamath Basin has suffered through decades of conflict, chaos and crisis, with no stability for either the farmers or the downstream fisheries. The Federal government has historically had to pick up the tab, spending hundreds of millions of dollars on drought relief, disaster assistance, and lawsuits just to manage an ongoing crisis that leaves everyone unhappy.

Left unchecked, the Federal government could reasonably be expected to spend far more over time than is proposed by these agreements without fixing the underlying problems, and have nothing to show for it.

The Klamath Negotiations

Following the disasters of 2001-2002, President George W. Bush convened a Cabinet-level Workgroup to focus on Klamath issues. In 2003, Interior Secretary Gale Norton highlighted the Klamath Basin as the poster child for water conflicts in the west and advocated for the development of a locally driven solution to be implemented by Federal and State agencies. Informal meetings and conferences were convened between tribal leaders, irrigators, conservationists, commercial fishermen, elected officials and concerned residents throughout the Basin, with the support of the Department of the Interior, BoR, National Oceanic and Atmospheric Administration, and the US. Fish and Wildlife Service.

In 2004, with the support of President Bush, Oregon Governor Ted Kulongoski and California Governor Arnold Schwarzenegger, Klamath stakeholders began a five-year process of negotiation that resulted in "the Klamath Agreements," a cooperative approach to managing the Basin's resources and permanently fixing unresolved problems. Humboldt County, along with other local governments, State and Federal agencies, tribes, irrigators, fishermen, conservation groups, and a private utility, was among the nearly 30 parties that actively participated in the negotiation process leading to the development of the agreements. Through compromise, planning, transparency, and fairness, these resource-sharing agreements are designed to end the persistent cycle of crisis, conflict, and financial waste.

These voluntary agreements offer balanced solutions for realizing better water certainty and water sharing, restoring imperiled fish and wildlife, and sustaining a strong natural resource-based economy in the region. The agreements are supported by the majority of basin interests who depend upon surface water, and who were able to put aside their own ideology and vision of the perfect outcome, to embrace a collaborative path that they believe is in the best interest of the entire basin.

Benefits of the Klamath Agreements

As previously noted, the cost of continued inaction in the Klamath watershed has been very high, with the Federal government, alone, spending over $181 million dollars since 2001 managing an ongoing crisis, with no endpoint in sight. If the Klamath agreements are not implemented, there is no reason to believe that this pattern of sporadic, uncoordinated emergency relief will not continue or even increase indefinitely into the future.

The Klamath Agreements propose to end this repeated cycle of throwing federal money at an ongoing crisis and to instead invest in long-term solutions that actually prevent future economic disasters. Implementation of the Klamath Agreements will:

- Re-program and more efficiently use $17 million per year that is already and routinely being spent on federal programs in the Basin by linking these currently disconnected programs together as part of an overall restoration plan;

- For a fifteen year period, re-direct $36 million per year of federal resources to establish long-term solutions, instead of continuing ad-hoc and emergency measures that have totaled over $180 million since 2001; and,

- Leverage significant state and private (PacifiCorp & ratepayer) funding for habitat restoration and dam removal—capping ratepayer expenses as compared to the unknown costs of relicensing the dams.

The Klamath Agreements bring certainty and predictability to a region that has not previously known what to expect from one year to the next. These agreements protect, stabilize and grow essential jobs and businesses in the region's core natural resources industries of agriculture and fishing. The economic impact of these agreements in the basin is significant, creating both near-term and long-term jobs throughout the basin. Studies prepared as part of the economic impacts documentation demonstrate that the agreements will:

- Protect or create 4,600 additional temporary or permanent jobs in restoration, agriculture and recreation, and increase regional economic activity by at least $445 million;

- Create over 1,600 short-term jobs and nearly $200 million in economic output based on dam removal and associated mitigation activity;

- Provide a permanent average annual increase of more than 450 new jobs in commercial fishing between California and Oregon; and,

- Support significant increases in jobs, from 70 to 700 depending on the year, in Upper Basin agriculture.

Additionally, watershed restoration and improved water supply are expected to create millions of dollars and new local jobs from increased recreational fishing, hunting and bird-watching on National Wildlife Refuges and private lands.

Investment in the Klamath is a small price to help protect a $750 million per year farming and fishing industry, sustain or grow over 4,500 jobs, restore the third largest and most valuable salmon run in the lower 48 states, and spark the revitalization of communities facing some of the highest unemployment and poverty in the region.

Conclusion

Humboldt County strongly supports the Klamath agreements because they provide an unprecedented opportunity to bring long-needed stability to the basin, resolve long-standing disputes, and provide assurances of water, for the first time ever, for both the fish and the farmers. Beyond removal of the four lower-most dams, these agreements create a comprehensive framework to achieve major watershed restoration through improved flow regimes, habitat rehabilitation, improved water quality, and fisheries reintroduction.

These agreements are the very model of a well-crafted compromise; neither side gets everything they want, but the broad majority gets something they can live with. And the entire basin gets stability.

Humboldt County respectfully requests the Committee's assistance in enacting these agreements through enabling legislation. Our county is committed to supporting the Klamath settlement agreements, maintaining the strong, underlying partnerships we've built throughout the basin, and assisting with implementation of these agreements over the next 50 years. We look forward to working with the Energy and Natural Resources Committee on this issue, and we thank Chairman Wyden, Ranking Member Murkowski, and the entire Committee for the opportunity to provide these comments for the record.

(Table 1)

DECLINES IN KMZ PORT SALMON LANDINGS BETWEEN 1976-2009

Pounds Of Salmon Landed By The Commercial Troll Ocean Fishery For Major Klamath Management Zone (KMZ) Port Areas[1]

Year or Average of years	Eureka (CA)	Crescent City (CA)	Brookings (OR)
	Salmon Landings (nearest thousands of dressed pounds)[2]		
Av. of 1976-1980	1,794	753	1,057
1995	26	5	55
1996	92	3	142
1997	14	*	73
1998	22	1	52
1999	27	3	80
2000	20	3	114
2001	61	3	152
2002	108	54	218
2003	7	38	142
2004	65	308	267
2005	77	25	239
2006	0	0	45
2007	81	34	101
2008	0	0	8
2009[3]	0	0	5
Av. of 2005-2009	32	12	80

* = Fewer than 500 pounds

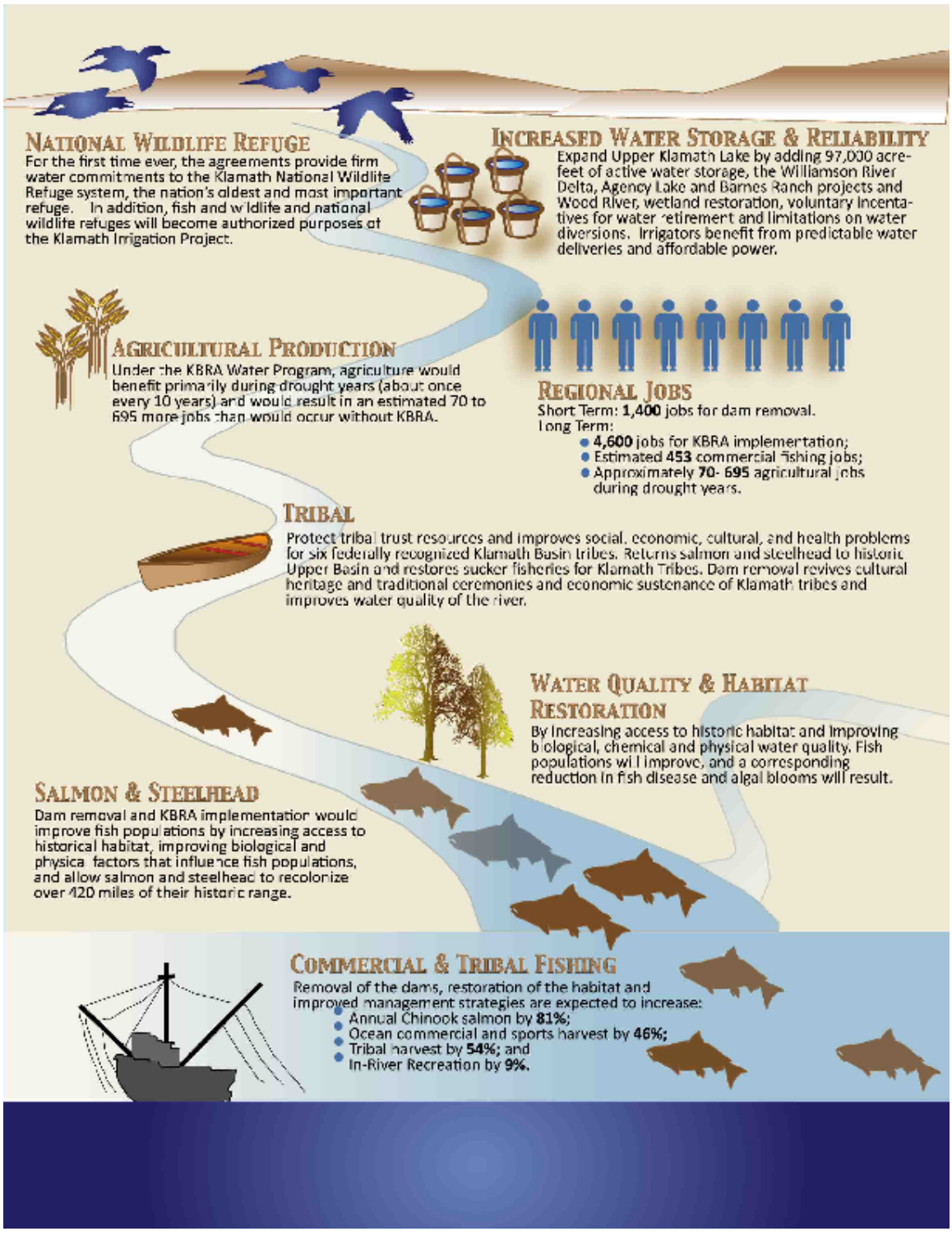
SALMON FISHERY LOSSES BY PORT AREA
(Average of Years 1976-1980 as compared to Average of 2005-2009 landings)

Port Area		**Decline (%) of Fishery**
Eureka (CA)	=	**98% LOSS**
Crescent City (CA)	=	**98% LOSS**
Brookings (OR)	=	**92% LOSS**

[1] The port areas listed include landings in the following ports: Brookings also includes Port Orford and Gold Beach; Crescent City includes only Crescent City; Eureka also includes Trinidad and Humboldt Bay locations. Brookings is at the far northern end of the Klamath Management Zone, and thus would have received some landings from just north of the KMZ.

[2] Data from Pacific Fishery Management Council (PFMC), *Review of 2009 Ocean Salmon Fisheries (2/10),* Tables IV-6 & 7. The KMZ coho fishery was closed completely in 1992, so years after 1992 reflect only chinook landings except for a very small Oregon coho fishery contribution in Brookings in 2007 (~3,000 lbs).

[3] Preliminary 2009 numbers as of publication (2/10) may be slightly adjusted based on final figures.


National Wildlife Refuge
For the first time ever, the agreements provide firm water commitments to the Klamath National Wildlife Refuge system, the nation's oldest and most important refuge. In addition, fish and wildlife and national wildlife refuges will become authorized purposes of the Klamath Irrigation Project.
Increased Water Storage & Reliability
Expand Upper Klamath Lake by adding 97,000 acre-feet of active water storage, the Williamson River Delta, Agency Lake and Barnes Ranch projects and Wood River, wetland restoration, voluntary incentatives for water retirement and limitations on water diversions. Irrigators benefit from predictable water deliveries and affordable power.
Agricultural Production
Under the KBRA Water Program, agriculture would benefit primarily during drought years (about once every 10 years) and would result in an estimated 70 to 695 more jobs than would occur without KBRA.
Regional Jobs
Short Term: 1,400 jobs for dam removal.
Long Term:
4,600 jobs for KBRA implementation;
Estimated 453 commercial fishing jobs;
Approximately 70- 695 agricultural jobs during drought years.
Tribal
Protect tribal trust resources and improves social, economic, cultural, and health problems for six federally recognized Klamath Basin tribes. Returns salmon and steelhead to historic Upper Basin and restores sucker fisheries for Klamath Tribes. Dam removal revives cultural heritage and traditional ceremonies and economic sustenance of Klamath tribes and improves water quality of the river.
Water Quality & Habitat Restoration
By increasing access to historic habitat and improving biological, chemical and physical water quality. Fish populations will improve, and a corresponding reduction in fish disease and algal blooms will result.
Salmon & Steelhead
Dam removal and KBRA implementation would improve fish populations by increasing access to historical habitat, improving biological and physical factors that influence fish populations, and allow salmon and steelhead to recolonize over 420 miles of their historic range.
Commercial & Tribal Fishing
Removal of the dams, restoration of the habitat and improved management strategies are expected to increase:
Annual Chinook salmon by 81%;
Ocean commercial and sports harvest by 46%;
Tribal harvest by 54%; and
In-River Recreation by 9%.