

Exhibit H

**Public Correspondence received as of
July 23, 2015**

gFrom: David Kirkpatrick [mailto:dckirkpatrick21@gmail.com]

Sent: Monday, June 22, 2015 12:10 PM

To: Audrey.C.Hatch@state.or.us

Subject: Oregon Fish Conservation

Hello,

I noticed on the ODFW web page that the conservation plans for native fish were now open for public comment and this was the email it said to direct comments to.

I have a specific comment about the Wood iver in Klamath county. The ODFW has recently made it legal to keep brown trout in the Wood river, (two fish per day 1 over 20 inches) in what is I'm sure an effort to reduce or eliminate the brown trout altogether. I know the goal of this is to extirpate the non-native brown trout, so that the native redband can flourish, but this is unwise for two reasons.

1) Brown trout primarily dwell in the upper river and are not migratory like the redband are. Although some redband make it to the upper river on their migration from Klamath\Agency lakes, the population that does is smaller and there is plenty of food sources to sustain both species. This is especially the case because the redband are not present all year, so little actual competition between the brown trout and redband occurs and what little does occur is nowhere near enough to threaten the redband population in any way.

2) The Brown trout population in the Wood River is already sparse and by being allowed to catch and kill the best fish in the river, the population will steeply decline. The Wood river is the only spring creek in Southern Oregon where a fly fisherman can experience angling for brown trout and redbands like one would in Montana. If the Brown trout population is reduced or eliminated, there would be less reason to fish the river.

Please return the Wood river to a catch and release fishery entirely.

Sincerely,

David Kirkpatrick

From: [Shannon Davis](#)
To: "[Greg Krutzikowsky](#)"
Subject: draft nearshore strategy update
Date: Tuesday, June 23, 2015 3:52:57 PM

Greg:

I just read through all of the posted chapters. Nice concise writing. Much less accusatory and depressing than the California draft document. It left me with the impression there is conservation hope when we understand environmental relationships and get to work on overcoming the adverse impacts. I also learned a lot about future ODFW plans for ecosystem management approaches like development of forage fish FMP.

Anyway – good job to you and your team.

Shannon

From: kirsten.potter
To: Greg.Krutzikowsky@state.or.us
Subject: Nearshore Strategy
Date: Wednesday, June 24, 2015 2:14:05 PM

Sir,

I am a retired biologist but not a fisheries biologist. I live in Klamath Falls so will not be attending one of the two meetings.

I do not have time or interest in plowing through the, no doubt, voluminous stacks of paperwork various agencies generate on this issue. Indeed, my view is that while agencies produce more and more paperwork, various animal and fish species continue to slip away. Sad.

My wife, Kirsten, and I were very pleased when Oregon finally adopted coastal fish sanctuaries as a means of enhancing fish populations. They have proven beneficial in other states and we are confident they will improve Oregon's fisheries.

We write to urge full support for establishing more fish refuges along the coast and increasing the size of the ones we have.

Dave Potter
Klamath Falls, OR

From: [Kelsey L. Adkisson](#)
To: [Greg Krutzikowsky](#)
Subject: NSS feedback via Twitter
Date: Wednesday, June 24, 2015 2:30:32 PM

Hey Greg,

Not sure if Twitter counts as feedback on the NSS, buuuut the Healthy Ocean Coalition (aka "Nat'l Ocean Policy") liked the marine planning recommendation. Just FYI.

Kelsey



Nat'l Ocean Policy [@NatlOceanPolicy](#) · 11m

Nice to see #MarinePlanning called out as a recommendation given OR's leadership in planning for renewable energy.



Kelsey adkisson [@KelseyAdkisson](#)

Just released by @ODFW for healthy oceans and thriving habitats! tinyurl.com/o598hkb #nearshore #conservation

8:47 AM · 22 Jun 2015 · Details

★ : . . .



Reply to [@NatlOceanPolicy](#)



EDF Oceans [@EDFOceans](#) · 12m

Redefining sustainability as triple win for environment, food security, people
[@AVLeland](#) [@Huffpostgreen](#) #OceanSummit ow.ly/OxzBW

[View summary](#)

From: Alan Bunce [mailto:umpquatruth@goducks.com]
Sent: Thursday, June 25, 2015 5:40 PM
To: Audrey.C.Hatch@state.or.us
Subject: Oregon Conservation Strategy

Hello Audrey,

I'd like to make comments about the Oregon Conservation Strategy.

I don't see any mention of the smallmouth bass predation in the Umpqua Region. They have a profound effect on many of the Strategy Species, including, but not limited to– Lamprey, Umpqua Chub, Winter Steelhead, Summer Steelhead, Spring Chinook, Fall Chinook, Cutthroat Trout. The bass predation should definitely be listed as a Limiting Factors and also in the Conservation Actions.

Failure to continue to ignore the smallmouth problem will result in a lawsuit against ODFW

Alan Bunce
Umpqua, OR
umpquatruth@goducks.com
541-580-4208

Friday 6/26/15

Phone call from Phil St. Clair, Upper South Fork John Day Watershed Council, Grant County

Email: "Kristy St. Clair" <rizzdollie@gmail.com>

- Concerned about grant funding via Wildlife Heritage Foundation, other organizations that include Conservation Opportunity Areas in funding criteria
- Concerned about 2005 COA, Upper South Fork of John Day: Species of concern include native redband/resident redband
- Worked with Ryan Torland and with Jeff Neal
- Would like to learn more about new COAs. Amy Stiner (WSC coordinator) will call/email and likely attend upcoming Regional Conservation meeting where there is some discussion about OCS via the Network of Oregon Watershed Councils
- If possible, Phil would appreciate a hard copy map of the new COAs for Ryan Torland's district. His mailing address:
Phil St Clair
45408 Izee-Paulina
Canyon City OR 97820

From: Amy Stiner [mailto:usfjdw@outlook.com]
Sent: Tuesday, June 30, 2015 11:27 AM
To: audrey.c.hatch@state.or.us
Subject: Upper South Fork John Day Watershed Council

Hey Audrey,

Thanks for visiting, and adding some clarification. I will browse through the Strategy some more, and attend the Burns meeting, and if I have anymore questions/comments I will get back in touch.

I'd appreciate being added to your information distribution list, and look forward to seeing the updated COA map.

Best,
Amy Stiner
Upper South Fork
John Day River Watershed
Council Coordinator
P.O. Box 522
Mt. Vernon, OR 97865
541-792-0435
www.usfjdw.com

From: rodney [rdieckhoff@hotmail.com]

Sent: Tuesday, June 30, 2015 10:13 AM

To: :

Subject: one hunters thoughts

To Whom it may concern,

My name is Rodney Dieckhoff an Oregonian that would love not have to pay for my Pioneer License someday because the fish and game took this and many other emails like this seriously. I have hunted and fished in Oregon all my life, actually got hunter safety card at the age of 7 but could not get it until I was 9 (my father Roger Dieckhoff was one of very few instructors in the mid 70's that really cared about the next hunting generation) My 1st bird hunting trip was to summer lake,(I killed 5 ducks and 1 snow goose that was taken by another hunter that watched me shoot it and waited for it to cripple up 10yds from him and then shot at the bird MISSED then still claimed it) there has never been one like it since. My first deer hunting experience was on the west side just west of Junction City, I did kill a doe that year(it use to be the last week of Blacktail season was either sex), but they don't do that anymore. My Senior year of High School I Worked volunteer for the Fish and Wildlife I did everything from building blinds at Fernridge wildlife refuge to tracking elk with radio collars to spot lighting big game and identifying them as to sex and how many points they had and the best thing I was involved in was the game check stations. Brian Ferry the big game biologist said check stations were by far the best way to collect big game info, nowadays people call the information in or submit it on line and you have to wonder how many people are being honest. I feel that check stations are by far more informative, other states seem to have success doing it why did we get away from doing it.

Over the years I have hunted and fished I have seen the rules and regulations change drastically. I guess it is time speak out, it only took me 5 or 6 years, I am tired of watching our game populations decrease along with our hunting opportunities. To start I feel that when they banned the use of dogs to hunt bear and cougar in Oregon the game commission should have stood up and explained the problems this would cause not to many years in the future, the biologists had to know tragic outcome. Now we have a huge decline in the deer and elk populations, let me add that we have now added the wolf to the mathematical equation. There are resolutions to the issues mentioned above they just need to be implemented in a fashion so that people understand that this is the way to control the population of a predatory animal.

I like many other people have different opinions as to how we think things should be changed and I do understand that there are many people ,groups, and organizations that you have to find common ground with and that's the tough part. So here are some of my thoughts and I will start with big game; The deer population as a whole has declined drastically over the years across the board, although I can say that the deer ratios in the central portion of the state look to be on a rise. I am impressed by the size and number of trophy class bucks I have witnessed on winter ranges over the past 5 or 6 years and I might add the doe population looks to be increasing as well. As for units further east like northside, Beulah, murderers creek, north malheur and even sumpter unit the deer population is almost none existent. 15 years ago you could drive 100 miles and loose track as to how many deer you've counted and how many nice bucks you had seen, and now you could drive 100 miles and count on one hand how many deer you had seen. I think that predation plays a large roll in this decline but something else I've noticed in these units is the lack of vegetation due to maybe not over grazing but the grazing cycle or timing. As for the west side of the state I feel that the lack of logging and the fact that the timber companies have locked up so much ground, I don't think we can get an accurate number for the deer population. Here are some of my thoughts for potentially increasing deer numbers, in the units to the east that I had mentioned I think the grazing cycles should be reevaluated and the predation issues also need addressed. In the central portion of the state the biologists seem to be doing something right but there again predation plays a roll. Something else I feel might help the deer population is a change in the regulations at least for units east of the cascades: #1 is 3 point or better across the board(if you apply for a draw hunt this is what you should expect) . This would take some pressure off of the smaller bucks, on the other side of this coin I would like to see more oppourtunities for women and youth hunters so possibly a one deer bag limit in some units. You could

do this by offering a certain number of existing tags that are given for each unit now. I feel you would see an increase hunter participation as a whole.

Here are some thoughts for our elk populations which seem to be on the decline at least east of the cascades. Here again I think we need to look at our bag limits and our seasons. Don't get me wrong I think it is awesome that there has been youth hunts implemented, but I think that the youth elk hunts should coincide with deer rifle season and ALL deer and elk seasons should be done by December 31. By doing this you would take a lot of stress off of the does and cows which are bred and increase the calving percentages. Was there any thought as to how many animals would miscarry or abort? Or is this a way to indirectly keep herd numbers down. These elk herds need more than 4 months with out hunting pressure in order to start growing. Our bag limits should also be looked at for elk, here again it should be 3 point or better across the board and women and youth should be one elk(If we can't get more youth and women involved our hunting future is looking bleak). Even the second season general bull tag that is spike only should be changed. We need to give the younger animals a chance.

One other thought is to make us as hunters choose our weapons. What I mean by this is you choose either rifle or primitive arms(archery / muzzleloader). As crazy as this might sound this idea may indirectly help boost our big game populations in it self without having to decrease tag numbers, you might actually see an increase draw applications success rates. Has ODFW looked at how other states are successfully managing there deer and elk herds? I know that these ideas maybe drastic but something needs to be done because what we have in place now doesn't seem to be working. I would like to see more public notifications for up and coming meetings that ODFW have you know at the top of the web page in bold letters. Maybe they would get more input that would be helpful. The other issue I don't understand is why such a small percentage of our tags and fees goes back to help big game management and such a large percentage goes to non game management. Is this a payoff to keep the other side from making waves? And why does all of this money go into the general fund ? I would think it should be ran as a separate entity.

In closing I hope you have enjoyed my letter. I think that there are a lot of hunters with a lot of good ideas and I would hope that one day they will sit down and put there thoughts into words so you can hear what we have to say.

Concerned Hunter
Sincerely,
Rodney Dieckhoff

From: Bob Rees [executivedirector@anws.org]
Sent: Thursday, July 02, 2015 2:53 PM
To: Audrey.C.Hatch@state.or.us
Cc: Norm Ritchie; Bill Kremers
Subject: Nearshore Strategy comments

Dear Ms. Hatch,

Please accept these comments for the Nearshore Strategy on behalf of our Association and President Bill Kremers.

Thank you for the opportunity to comment.

Bob Rees, Executive Director
Association of Northwest Steelheaders
(503) 812-9036

SEE PDF DOCUMENT ATTACHED



Association of Northwest Steelheaders

6641 SE Lake Rd. • Milwaukie OR 97222

503-653-4176 • 503-653-8769 (fax)

office@anws.org • www.nwsteelheaders.org • Established 1960

Bill Kremers
President

July 2, 2015

Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, OR 97302

Dear Ms. Hatch,

The Association of Northwest Steelheaders with 1,600 members appreciates the effort and thought that went into the Nearshore Strategy revisions. We particularly want to commend the actions of including estuaries within the redefined boundaries and the inclusion of salmon in the list of species.

Bringing the eastward boundary into estuaries and up to high water lines is important to habitats that are critical to various species representing forage and cover for juvenile salmon. Adult salmon also need other forage species that are dependent on bays and estuaries for at least part of their life histories.

The Association of Northwest Steelheaders has supported and provided input into the Oregon Conservation Strategy for many years. We also understand that with the new upper estuary boundary there is continuity with the main Conservation Strategy as the new outer boundary definition eliminates any ambiguity or gaps between the nearshore strategy and the Oregon/Federal waters boundary.

The Northwest Steelheaders approves and supports the Nearshore Strategy as presented for public comment.

Sincerely,

Bill Kremers,
President

From: G. Wright [sealionboomer@hotmail.com]
Sent: Monday, July 06, 2015 11:28 AM
To: Audrey.C.Hatch@state.or.us
Subject: Comment on Conservation Strategy by ODF&W

Audrey C. Hatch and the ODF&W

Thank you for allowing comment on the new strategy for conservation in Oregon, especially concerning the beautiful and diverse ecosystem on the Oregon Coast. Visitors come from all over the world to view and experience our amazing and spectacular vistas, abundant marine life, beautiful green and lush plants and trees, and warm friendly people - a winning combination. In addition, they spend lavishly at local restaurants, motels/hotels, gas stations, department stores, parks, attractions and retail businesses thus positively effecting the economy of the coast and Oregon in general. It is imperative the we protect this ecological and economic asset for future generations.

I am General Manager of Sea Lion Caves, a privately owned wildlife preserve and bird sanctuary and home of; the Steller sea lion, California sea lion, Brandt and Pelagic Cormorants, Pigeon Guillemots, Rhinoceros Auklets, Black Oyster Catchers, Western Sea Gulls, Brown Pelicans, Eagles, Common Murres, Marbled Murrelets, Peregrine Falcons, Red-tailed Hawks, and a myriad of other nesting birds. We are also visited by; Gray Whales, Orcas, Humpback Whales, and Dolphins on a regular basis during the summer months. Elk and deer visit us occasionally along with many other local animals. Sea Lion Caves is nothing short of wild!

To the local economy we generate 11 full time positions with up to around 15 part-time positions during the summer seasonal months. The local economy benefits from several million dollars in revenue generated by Sea Lion Caves, on a yearly basis. We at Sea Lion Caves support your conservations efforts on the behalf or our local marine life, plants, animals, and local economy.

Marine wildlife, as you know, are extremely vulnerable to changes in the ecosystem, both natural and human-caused. Major threats include, but not limited to: Habitat loss and destruction, disturbance, pollution, discarded fishing hooks - monofilament line - metal flashers - and old nets, plastic, toxic contaminants including oil spills, pesticides, and non-point source pollution, and global climate change. Over the last several years it has become very evident there are negative influences affecting sea lion, bird, and marine animal behavior here at the Caves. The following are examples of this change in behavior.

Steller sea lions who once remained year-round at Sea Lion Caves, now leave the Cave completely in August and may not return until December. Puffins, who were frequent residents, now no longer are seen at Sea Lion Caves. California sea lions are now moving into the area in large numbers during the fall and spring. Pelicans are becoming more frequent visitors. The number of gray whale visits are increasing along with the their numbers. Visits from Orcas are become more frequent. Sharks are now considered much more of a sea lion predictor than previously understood, and waters along the California and Oregon coasts are becoming warmer thus effecting forage fish and salmon runs who need colder water. We do not have a choice but to embrace the climate change issue, construct a strategy to protect and enhance our marine environment, and reasonably manage the economic inpact on families and business in Oregon.

Saying this will not be an easy endeavor, is putting it mildly. With so many factors and players involved, coming to consensus will be problematic. However, when all public comment is completed, when all factors are considered, when the hard decisions are finally decided, there can be no more important issue than protecting our marine environment for future generations - whatever that takes. I pray we have not waited to long to put in place protections that will echo into the future Oregonians commitment and responsibility to preserving and protecting our diverse and amazing environment.

We are nothing short of wild!

Boomer Wright
General Manager
Sea Lion Caves
Florence, OR 97439
541-547-3111
fax 541-547-3545
sealioncaves.com

"Our mission is to exceed our guests' expectations by consistently demonstrating exemplary customer service and to protect, preserve, support the local and extended community, and enhance this exceptional natural resource for future generations."

From: Emilie Blevins [emilie.blevins@xerces.org]
Sent: Tuesday, July 07, 2015 2:48 PM
To: Audrey.C.Hatch@state.or.us
Cc: Sarina Jepsen
Subject: draft 2015 Oregon Conservation Strategy comments

Hello,

I'm writing to submit comments on the draft 2015 Oregon Conservation Strategy, to recommend *Gonidea angulata*, the Western Ridged Mussel, for inclusion as a Strategy Species. Our recent analysis of this species' current and historic distribution suggests it has been lost from 33% of its historic western U.S. range (by watershed area). In Oregon alone, it appears to have been lost from approximately 24% of its historic range, including from watersheds in the Klamath, Coast, West Cascades, Blue Mountains, and Northern Basin and Range ecoregions, making it the most imperiled freshwater mussel in Oregon. This species, the only extant member of the genus *Gonidea*, may live as long as 20 to 30 years. Non-reproducing populations consisting of only older individuals have been reported elsewhere, and thus decline in Oregon may be higher than currently understood based on our simple presence-absence data. If you have further questions, please feel free to contact me by email or phone.

Best,

Emilie

--

Emilie Blevins
Conservation Biologist
Endangered Species Program

The Xerces Society for Invertebrate Conservation
628 NE Broadway, Suite 200, Portland, OR, 97232 USA
Tel: (503) 232-6639 ext. 125

xerces.org [Facebook](#) [E-newsletter](#) [Twitter](#)

The Xerces Society is an international nonprofit organization that protects wildlife through the conservation of invertebrates and their habitat.

From: Fran Recht [franrecht@centurytel.net]
Sent: Wednesday, July 08, 2015 3:45 PM
To: Audrey C Hatch
Subject: comment on fish passage section of OR Conservation Strategy

regarding **Key Conservation Issue: Barriers to Fish and Wildlife Movement**

On p. 40 the Action regarding working with partners to inventory and prioritize, there is a new publication and methodology out that might be noted from the USGS.

see below. Also I'll forward a message re a NPLCC webinar on the same.

From: Fran Recht [franrecht@centurytel.net]
Sent: Monday, July 13, 2015 11:59 AM
To: Audrey C Hatch
Subject: some more comments on OR Conservation Strategy

Hi Audrey-- I am heading out of town for a vacation, so don't know if I'll have more time to comment, so here is what I have so far.
Hope this is useful.

Fran

On pages 8 and 9 of the document I think you are missing a significant topic: **Habitat and Species results of the 2005 strategy.**

This should go before the Scope of the 2015 update. I feel it is a significant oversight to not reflect on the status of the species and habitats listed in the 2005 plan before you discuss the scope of the new plan. This is consistent with the USFWS Required Elements to:

Propose ways to monitor the effectiveness of these conservation actions and ways to adapt actions as information or conditions change

That is, has the old plan been effective on the ground? How has that success been measured? What species continue to be listed or sensitive, which habitats have improved by how much and which habitats and species have declined and by how much. Reasons for these declines or advances should also be summarized. How will the 2015 plan overcome barriers that impeded progress of the 2005 plan, etc.

Instead, you go from a description of

Role of Oregon Conservation Strategy since 2005 In the 10 years since the Oregon Conservation Strategy (Strategy) was first completed, the Strategy has continued to bring together diverse partners to identify common conservation priorities, encourage partnerships, and achieve conservation success, all without the need for regulation....

to the :

Use of the Strategy since 2005 to focus investments and be an information source.

and then talk about the **Scope of the 2015 update.**

I think the Habitat and Species Results of the 2005 Strategy effort, should go before this "Scope of the 2015 update".

Climate Change p. 8

In the Section:

Climate change: Goals and Actions

I believe that the first Goal should be:

Goal: Reduce energy and water use.

Actions: Aggressively enact and measure conservation measures.

State agencies and partners can set an example by committing to a reduction in their own energy and water use and promote and incentivize carpooling and use of mass transit in their own companies. Progress to goals should be measured and reported.

Action: Develop and distribute uniform and effective public educational measures about conservation (water, energy) and carbon footprint reduction. Work to measure effectiveness of efforts.

On p. 14 Looking Ahead for Oregon's Land Use Planning system

I suggest adding the word "scenic" after natural in the title as follows:

Goal for Land Use Planning: Manage land use changes to conserve farm, forest and range lands, open spaces, natural or scenic recreation areas, and fish and wildlife habitats

same for the wording on page 16.

Looking ahead: Oregon's renewable energy planning challenge

Oregonians value our native fish, wildlife and habitats as well as scenic resources, clean energy, reduced greenhouse gas emissions and a thriving economic sector.

and in the last paragraph

As we look ahead to the future, policies to guide new clean energy development should outline a collaborative vision to siting success, recognize the immediate but dispersed value of clean energy across Northwest landscapes, and incorporate fish, wildlife and habitat and other public values.

On page 50 re **ODF Water Quality Programs** the document fails to update the public on a significant issue regarding disapproval of Oregon's coastal non-point pollution program by EPA and NOAA due to problems with logging rules that fail to protect water quality and fish and wildlife. The 24 page decision can be read [here](http://coast.noaa.gov/czm/pollutioncontrol/media/ORCZARAddecision013015.pdf) <http://coast.noaa.gov/czm/pollutioncontrol/media/ORCZARAddecision013015.pdf>

A section should be added maybe to the effect:

In early January 2015, Oregon's coastal nonpoint pollution program was disapproved by EPA and NOAA based on the state's logging practices which fail to protect water quality and fish and wildlife. The federal agencies' primary concern is that Oregon's logging practices fail to protect small and medium-sized streams, fail to control pollution from some logging roads, and fail to protect streams from landslides and fish from pesticides applied for logging. ODF is working to revise its practices in response.

Hope this is useful. Fran

Fran Recht
PSMFC Habitat Program
P.O. Box 221
Depoe Bay, OR 97341
541-765-2229

From: radams@bendbroadband.com [radams@bendbroadband.com]

Sent: Monday, July 13, 2015 4:53 PM

To: Audrey.C.Hatch@state.or.us

Subject: Oregon Conservatiion Strategy

As an active member of Oregon Hunters Association and volunteer, I appreciate your putting together a varied but devoted group to find problems and work out solutions for Habitat and Wildlife that incorporates leading edge science to know what is going on in the areas that we recreate, Hunt and Fish on and dearly love to visit. Getting ahead of the game with information on species and habitat is the best way to stay in the lead for us all.

Rod Adams

Bend, Or.

radams@bendbroadband.com

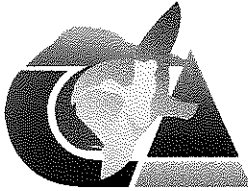
From: Thomas O'Neill [habitat@nwhi.org]
Sent: Tuesday, July 14, 2015 10:30 AM
To: 'Meghan C Dugan'
Cc: Audrey.C.Hatch@state.or.us; Greg.Krutzikowsky@state.or.us
Subject: Comments from NHI on Oregon Conservation Strategy

Hello Meghan: Attached please find our comments on the Oregon Conservation Strategy.

Best,

~Thomas O'Neill
Northwest Habitat Institute
P.O. Box 855
Corvallis, OR 97339
www.nwhi.org
voice: 541-753-2199
cell: 541-231-2527
fax: 541-753-2440

SEE PDF DOCUMENT ATTACHED



Northwest Habitat Institute

P.O. Box 855 • Corvallis, OR 97339
Phone: (541)753-2199 • Fax: (541)753-2440
habitat@nwhi.org • <http://www.nwhi.org>

July 14, 2015

Curt Melcher
Oregon Dept. of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem OR 97302

Re: Comments on the Revised Oregon Conservation Strategy

Dear Mr. Melcher,

Northwest Habitat Institute would like to take this time to comment on the Draft Oregon Conservation Strategy. Though there was quite a bit of effort to pull together and list all the plans that are active in Oregon there was little discussion on how to tie these plans together, how they may overlap or how they might be contrary to the Conservation Strategy. After seeing the planning section, I left with the feeling that there were so many plans that possibly the Oregon Conservation Strategy may not be even needed given that there has been very little action on implementing it.


In this regards, NHI has recently talked with ODFW staff about developing a mechanism that could help fund some of the Strategies goals and objectives. What is missing in the Strategy is a standardized method that can assess and track impacts in all habitats. The approach we recommend is the Combined Habitat Assessment Protocols or CHAP that also includes a system for valuing habitat quality. CHAP has been reviewed by an Independent Scientific Review Panel and Oregon Department of Fish and Wildlife (ODFW) used this approach in 2010 to reach a \$150 million dollar settlement with Bonneville Power Administration. These funds currently serve to operate and run the Willamette Wildlife Mitigation Program. Further, CHAP also serves as a method to inventory wildlife habitat to track creation and enhancement of habitat to meet mitigation needs. The Northwest Habitat Institute is willing to work with ODFW to implement CHAP in a manner that will help obtain additional funding that could be used to support or expand the current mitigation program or fund portions of the Conservation Strategy. Without such a standardized method, the Oregon Conservation Strategy would be significantly lacking in evaluating, tracking and meeting multi-species, habitats and functions assessments along with evaluating ecosystem services. This is because species, habitats, and functions are the biological foundation for ecosystem services. CHAP works in aquatic, terrestrial and near shore habitats.

The Northwest Habitat Institute has recently finished developing the Southern California Conservation Strategy Framework and Assessment. This document can now be found at the Southern California Association of Governments website. The area of the Conservation Strategy encompasses 6 counties and 18 million people. This strategy incorporates CHAP and gives examples showing coarse and fine scale evaluations along with the ability to track impacts across all landscapes and habitats.

Finally, the Strategy addresses species and habitat monitoring but does not appear to cite any specific overall goal, like trying to document cumulative effects; incorporating CHAP would help address this issue. Moreover, monitoring animals for the sake of monitoring seems in today's view unnecessary unless there is a specific question and sufficient funding to go with it to answer the question(s). An example of this in the radio collaring of black-tailed deer; much of the baseline information especially for big game has already been done. NHI does not support ODFW to randomly handle and monitoring animals without specific questions and funding to answer specific concerns.

I thank you for your time and if you want to talk about the funding opportunities using CHAP, please let me know.

Best,

A handwritten signature in black ink, appearing to read "Thomas O'Neill". The signature is fluid and cursive, with a large initial "T" and "O".

Thomas O'Neill
Director

c: Audrey Hatch
Greg Krutzikowsky

From: Bill Weiler [bill@sandyriver.org]

Sent: Wednesday, July 15, 2015 12:37 PM

To: Audrey.C.Hatch@state.or.us; Steve Wise; Corinne Handelman

Subject: Recommending Yellow-billed Cuckoo as a Strategy Species

Good afternoon Audrey:

I am writing to you to submit a formal comment to your Oregon Conservation Strategy revision process. I am a Wildlife Biologist working for the Sandy River Basin Watershed Council, and one of our main habitat restoration sites is the Sandy River Delta located in Troutdale, Oregon.

Many currently recognized Oregon Conservation Strategy Species are residents or visitors to the Sandy River Delta including salmonids, western painted turtle, and red-legged frog. I would also ask your consideration to include the federally threatened yellow-billed cuckoo to that important list. According to the U.S. Fish & Wildlife Service, the cuckoo's distribution west of the Rocky Mountains has "declined substantially with loss of stream side habitat being the primary reason for decline." Breeding cuckoos were most often sighted in willow bottoms along the Willamette and Columbia Rivers. Since 1990, other cuckoo sightings in Oregon have included central and southeast portions of the state.

Yellow-billed cuckoos prefer dense willow and cottonwood stands in river floodplains. Over the past 13 years, the Sandy River Delta has undergone a remarkable transformation as habitat restoration efforts have transformed blackberry-choked 1,500 acres into a re-established ecosystem of wetlands, oak woodlands, and cottonwood-willow forests. And the work has paid off regarding the yellow-billed cuckoo. Mister Bob Altman and others have confirmed two consecutive years of cuckoo sightings at the Delta, while U.S. Fish & Wildlife Service biologists have visited the site and told us that cuckoos now have ample available suitable nesting habitat at the Sandy River Delta.

With these facts mind, the yellow-billed cuckoo seems like a logical candidate to include as a Strategy Species addition to the Oregon Conservation Strategy, and we request that this species be come part of the avian contingent.

Sincerely,

Bill Weiler

Habitat Restoration Coordinator

Sandy River Basin Watershed Council

From: Dave Vesely [mailto:dave@oregonwildlife.org]

Sent: Friday, July 17, 2015 3:25 PM

To: 'Audrey C Hatch'

Subject: RE: Conservation Strategy update: Conservation Opportunity Areas

Hi Audrey,

Here's the final letter I would like to submit for public comments on the Conservation Strategy.

I'll send you the kit fox conservation assessment as soon as its completed.

Dave Vesely

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SEE PDF DOCUMENT ATTACHED

Audrey Hatch
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, Oregon 97302

July 17, 2015

Subject: Comments on 2015 Conservation Strategy Update

Dear Ms. Hatch,

I recently completed a conservation assessment on the kit fox (*Vulpes macrotis*) in Oregon for the USDI Bureau of Land Management/USDA Forest Service Interagency Special Status and Sensitive Species Program (ISSSSP). As part of the assessment, the Oregon Wildlife Institute (OWI) and staff from the ODFW Malheur and Klamath Watershed Districts conducted an extensive camera survey for the kit fox from 2012 to 2014 and detected the species at 10 previously unknown sites in Malheur County. The map attached to this letter shows the locations at which we detected kit foxes, as well as earlier records from the Oregon Biodiversity Information Center (ORBIC) that have been generalized by ORBIC to disguise their precise locations. The attached map also includes overlays of Conservation Opportunity Areas (COAs) from the 2006 Oregon Conservation Strategy.

The attached map shows that the existing (2006) network of COAs encompasses very little of the known geographic range of the kit fox. This concerns me because in describing the purpose of the COA network, ODFW stated, "focusing investments on priority landscapes can increase likelihood of long-term success over larger areas, improve funding efficiency and promoting cooperative efforts across ownership boundaries" (p. 21, 2006 Oregon Conservation Strategy). Therefore, COAs have a strong influence on where state and non-profit grant programs distribute conservation funds. For example, The Beulah Drake Grant program administered by the Oregon Wildlife Heritage Foundation evaluates project applications in part on whether the project occurs in a COA. The omission of the kit fox geographic range from the COA network creates a disadvantage toward kit fox conservation projects when their proponents apply for competitive grants.

The kit fox was among the earliest wildlife species to be determined as "threatened" by the Oregon Wildlife Commission. Yet ODFW has not prepared survival guidelines for the kit fox that are mandated for species more recently added to the state threatened and endangered

species list, nor has any state agency prepared a species management plan for the kit fox. Oregon Department of State Lands (DSL) administers state property within the known range of the kit fox and the 2012-2014 camera survey detected at least one kit fox on a DSL parcel.

I am aware that ODFW staff and their Conservation Strategy partners are presently considering major changes to the COA network as revisions to the Strategy are made this year. I encourage ODFW to consider the conservation needs of the kit fox before changes to the COA network in southeast Oregon are submitted to the Oregon Fish and Wildlife Commission. I hope this will be just the first step in acknowledging the need for greater emphasis on protecting this threatened species in Oregon.

Sincerely,

David Vesely, Executive Co-Director
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From: Gregory Green [ggreen@owlridgenrc.com]

Sent: Friday, July 17, 2015 10:21 AM

To: Audrey.C.Hatch@state.or.us

Cc: leonard.j.erickson@state.or.us; Joshuachapman@fs.fed.us; Penninger, Mark A -FS; Ronald Anglin

Subject: Rocky Mountain Red Fox - Oregon Conservation Strategy

Dear Ms. Hatch,

Attached is the draft report of a 4-year (and running) genetic study of the red fox populations of northeastern Oregon. The study was initiated to confirm whether expanding red fox populations in northeastern Oregon were native or not. It has been long assumed that with the exception of a small, extant population in the high Wallawas, fox populations in eastern Oregon are nonnative (even described as of European descent in the Oregon Conservation Strategy). In 2011, Leonard Erickson (ODFW) and I looked at red fox near La Grande and I noticed it had native characteristics. This led to the northeastern Oregon red fox genetic study. The attached report describes the mitochondrial DNA (mtDNA) results of that study, which clearly indicate that most foxes in northeastern Oregon are of native ancestry. Our nuclear DNA results are not complete, and we will start sampling of fox populations in the Wallowa Mountains this fall (with the USFS). However, the combined results to date show that fox populations in Wallowa, Union, and Baker counties (Blue Mountains ecoregion) are Rocky Mountain red foxes (*Vulpes vulpes macroura*), while populations in Umatilla, Morrow, and Malheur counties are foxes with mixed ancestry. Foxes that are mostly nonnative were found only near Stanfield, the site of a 1987 fur farm release. These foxes are likely Alaskan red foxes commonly found in fur farms (*V. v. alacensis*). But there are also foxes in the Columbia Basin of Umatilla and Morrow counties that are a mix of nonnative and native ancestry as well, while those ringing the Wallowa Mountains have very little, if any, nonnative ancestry.

Relative to the Oregon Conservation Strategy, I am recommending that it recognize that there are native fox populations occurring in northeastern Oregon outside the Wallowa Mountains, and that these Rocky Mountain foxes be added to the Data Gap list as is the Sierra Nevada red fox. As you will see in the report, there is very little evidence of nonnative red fox populations in the Blue Mountains ecoregion, while much evidence of native foxes.

A final mtDNA report will sent after final review, but I wanted to get this draft report to you before the July 20th deadline. We expect the nuclear DNA results to be published next year.

Greg

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Confidentiality Notice<http://www.owlridgenrc.com/confidentiality/>

GENETIC CHARACTERISTICS OF RED FOXES IN NORTHEASTERN OREGON. GREGORY A. GREEN, *Owl Ridge NRC, 22116 45th Avenue SE, Bothell, WA 98021*; BENJAMIN N. SACKS, *Canid Diversity and Conservation Lab, 248 CCAH, Veterinary Genetics Laboratory, University of California, Davis, One Shields Avenue, Davis, CA 95618*; LEONARD J. ERICKSON, *Oregon Department of Fish and Wildlife, 107 20th Street, La Grande, OR 97850*; KEITH B. AUBRY, *U.S. Forest Service, Pacific Northwest Research Station, 3625 93rd Avenue. SW, Olympia, WA 98512*.

Abstract - The Rocky Mountain red fox (*Vulpes vulpes macroura*), once common in the Blue Mountain ecoregion of northeastern Oregon, was considered rare in eastern Oregon by the 1930s and thought to be extirpated by the 1970s, when purportedly new red fox populations began to appear. Although the new foxes were long presumed to be nonnative (originating from fur-farms), they were often phenotypically similar to native red foxes, suggesting the alternative possibility that they arose from a range expansion, either from small numbers of remaining native foxes at higher elevation or from the Rocky Mountain red foxes to the east. Here, we used mitochondrial DNA to clarify the origin of extant red fox populations in northeastern Oregon. In addition to genetic indicators, understanding the ecological determinants of contemporary red fox range may provide insights about the recolonization of this area by natives or its invasion by nonnatives. Therefore, we conducted an investigation of the genetic characteristics and denning habitat of contemporary red foxes in northeastern Oregon. Our findings indicate that both native and nonnative sources contributed to red fox populations currently in this region. In particular, red foxes in montane habitats of their former range in northeastern Oregon reflect predominantly native ancestry, whereas those in more lowland habitats carry a mix of native and nonnative ancestry.

Introduction

Since European colonization, red fox (*Vulpes vulpes*) populations in North America have expanded both from habitat alteration (Lloyd 1980, Nowak 1991) and anthropogenic translocations (Long 2003). Farmland development has created open field habitats favored by this species, while foxes have been translocated across the continent either for sport (hound hunting) or to bolster fur trapping (Wilcomb 1948, Mace 1970, Aubry 1984). New populations have also purportedly become established from fur farm escapees (Ashbrook 1923, Witmer and Lewis 2001). Fur farm foxes, which reflect many generations of captive breeding and selection, were ultimately derived primarily from a small number of wild-caught individuals from southeastern Canada and Alaska. From a conservation standpoint, red foxes originating from translocations represent invasive nonnative species that could threaten the conservation of native competitors or prey (MacDonald et al. 1989, Simberloff 1997, Lockwood et al. 2007), or the genetic integrity of congeners through hybridization (Krueger and May 1991). However, all wild red fox populations exhibit variable morphological characteristics, both between and within standard color-phases (red, cross, and silver), which can obscure the ability to visually separate native from nonnative foxes. Conservation efforts to control nonnative red foxes might have led to the unintentional removal of native foxes, which is of special concern where the native fox may be naturally rare or endangered. Thus, understanding the genetic affinity and historical ecology of local fox populations is paramount to the conservation and recovery of native foxes,

including identifying the very existence of native foxes within a general population possibly composed of both native and nonnative ancestry.

In western North America, native foxes generally inhabit the mountainous regions, where higher elevation habitat conditions may closely parallel the colder southern refugium conditions of the last glacial maximum from which this fox evolved (Aubry et al. 2009). These mountain red foxes, in turn, are represented by three subspecies: the Sierra Nevada (*V. v. nicator*), Cascade (*V. v. cascadenensis*), and Rocky Mountain (*V. v. macroura*) red foxes (Aubry 1983, Perrine et al. 2007). (A fourth mountain fox subspecies, the recently described Sacramento Valley red fox [*V. v. patwin*], is found at lower elevations in central California [Sacks et al. 2010]). Mountain red foxes are naturally rare, possibly because foraging habitat is limited.

The Rocky Mountain red fox is historically native to the Blue Mountain ecoregion of northeastern Oregon and southwestern Washington (Bailey 1936). Between 1825 and 1857, 1,597 red fox pelts were traded at Fort Nez Perce located on the Walla Walla River (Cowan 1938). Based on trade patterns, Cowan (1938) and Stern (1993) concluded that the majority of these foxes would have come from the general vicinity of the fort, which in this case would likely have been the Blue Mountains of northeastern Oregon and southeastern Washington. In 1914, Dice (1919) investigated the fauna of southeastern Washington and stated that red fox were “commonly found on the ridges of the Blue Mountains”. By the 1930s, however, two decades of focused fox trapping, due to an inflated fur market (Bailey 1936), and the intensive predator reduction programs initiated by the Bureau of Biological Survey (DeCalesta 1976), had greatly reduced their number, although Bailey (1936) stated “their extermination...has not been accomplished”. However, no red foxes were reported in harvest records from southeastern Washington between 1938 and 1980 (Aubry 1984), and Mace (1970) concluded that by the date of his publication, native foxes had disappeared from Oregon, and that the “foxes today are descendants of eastern stock transplanted in the Willamette Valley”. Although Wilcomb (1948) did describe several incidents of nonnative fox translocations into the Willamette Valley between 1900 and 1924, the likely basis for Mace’s conclusions, Verts and Carraway (1998) could find no evidence to support Mace’s contention that the original foxes were extirpated state-wide.

Also, Mace (1970) identified (on a range map) small pockets of presumably nonnative red fox occurrence in northeastern Oregon, especially in the irrigated farmland of northern Malheur County on the Oregon-Idaho border. These foxes first appeared in the fur harvest records in 1971, and by the late 1980s over a hundred foxes were harvested annually (Verts and Carraway 1998). Separated from the Willamette Valley by nearly 500 km, including the Cascade Range and 350 km of dryland, the nonnative Willamette Valley fox populations were an unlikely source for this new population. Rather, the northern Malheur County irrigated farming district is the Oregon extension of an expansive Snake River Plains farming area that bisects southern Idaho. Red foxes began appearing in the Idaho portion of the Snake River Plain about 1960 (Fichter and Williams 1967). The lack of previous records from these low-elevation (700-1,600 m) farming areas coupled with known occurrences of fox fur farms in the region (Fichter and Williams

1967), suggested an Idaho establishment of nonnative foxes in southern Idaho in the early 1960s eventually progressing down river to Oregon by the late 1960s and early 1970s. However, Fichter and Williams (1967) described a fox with pelage characteristics more similar to native mountain foxes, and as a result tentatively assigned these foxes as *V. v. macroura*, with possible admixture with fur farm escapees.

Red foxes began appearing elsewhere in northeastern Oregon in the mid-1990s (Verts and Carraway 1997), and by 2010 populations were well established in 8 counties (and in Walla Walla County immediately across the Washington state line), including within original mountainous range described by Bailey (1936) and within new lowland range in the farmlands of both the Snake River Plain and the Columbia Basin.

The possible origins of these northeastern Oregon populations include expansion of animals from the Snake River Plain into similar farmland habitat in northeastern Oregon, fox farm escapees including a known release of foxes from a fur farm near Hermiston in 1987 (M. Kirsch, Oregon Department of Fish and Wildlife, pers. comm.), a down-slope expansion of a small, persistent native population in the Wallowa Mountains, immigration from mountainous central Idaho, or a combination of the above. The lowland distribution (at least in part) and known or suspected fur farm releases in the region seemed to support a nonnative origin for these northeastern Oregon foxes, prompting state management policy (e.g., the Oregon Conservation Strategy) to categorize them as invasive species. However, red-phase foxes examined near La Grande in 2011 were of a tawny-yellowish color more characteristic of mountain foxes than the reddish-yellow coloration of Eastern or Alaskan foxes. Because conservation management approaches towards native and nonnative wildlife populations are very different, determining the genetic affinity of northeastern Oregon fox populations is necessary to ensure applied management objectives are legitimate.

The mitochondrial DNA of red foxes, which represents their maternal lineages, has been extensively studied and catalogued throughout the world in both wild and captive populations, providing the most convenient starting point to understand population origins (e.g., Aubry et al. 2009; Statham et al. 2012, 2014). We therefore used mitochondrial DNA (mtDNA) analysis to investigate the genetic affinity of northeastern Oregon red fox populations, specifically testing the hypotheses that these populations originate from fur farms, or stem from expansion from nearby native populations.

Study Area

The northeastern quarter of Oregon where genetic samples were collected included three ecoregions: the Blue Mountains, Columbia Plateau, and Snake River Plain (EPA 2003) (Figure 1). The Blue Mountains ecoregion includes the Blue, Wallowa, and Ochoco mountains, with elevations in mountainous areas ranging from 2,100-2,900 m and basin areas ranging from 750-900 m (Franklin and Dyrness 1973). Forested areas are dominated by ponderosa pine (*Pinus ponderosa*) and Douglas-fir (*Pseudotsuga menziesii*) with western juniper (*Juniperus*

occidentalis) at the lower elevations and western larch (*Larix occidentalis*), spruce (*Picea* spp.), and fir (*Abies* spp.) at higher (Clarke and Bryce 1997, Thorson et al. 2003). The sediment-filled basins of the Blue Mountains include the Wallowa, Grande Ronde, and Baker valleys. The maritime-influenced Wallowa and Grande Ronde valleys are characterized by bluebunch wheatgrass (*Pseudoroegneria spicata*) and fescue (*Festuca* spp.) grasslands, while the Baker Valley, laying within the rainshadow of the Elkhorn Mountains is drier, and more characterized by shrub-steppe dominated with big sagebrush (*Artemisia tridentata*) (Thorsen et al. 2003). Much of the basin areas have been converted to improved pasture, including irrigated pasture, with some alfalfa and wheat production.

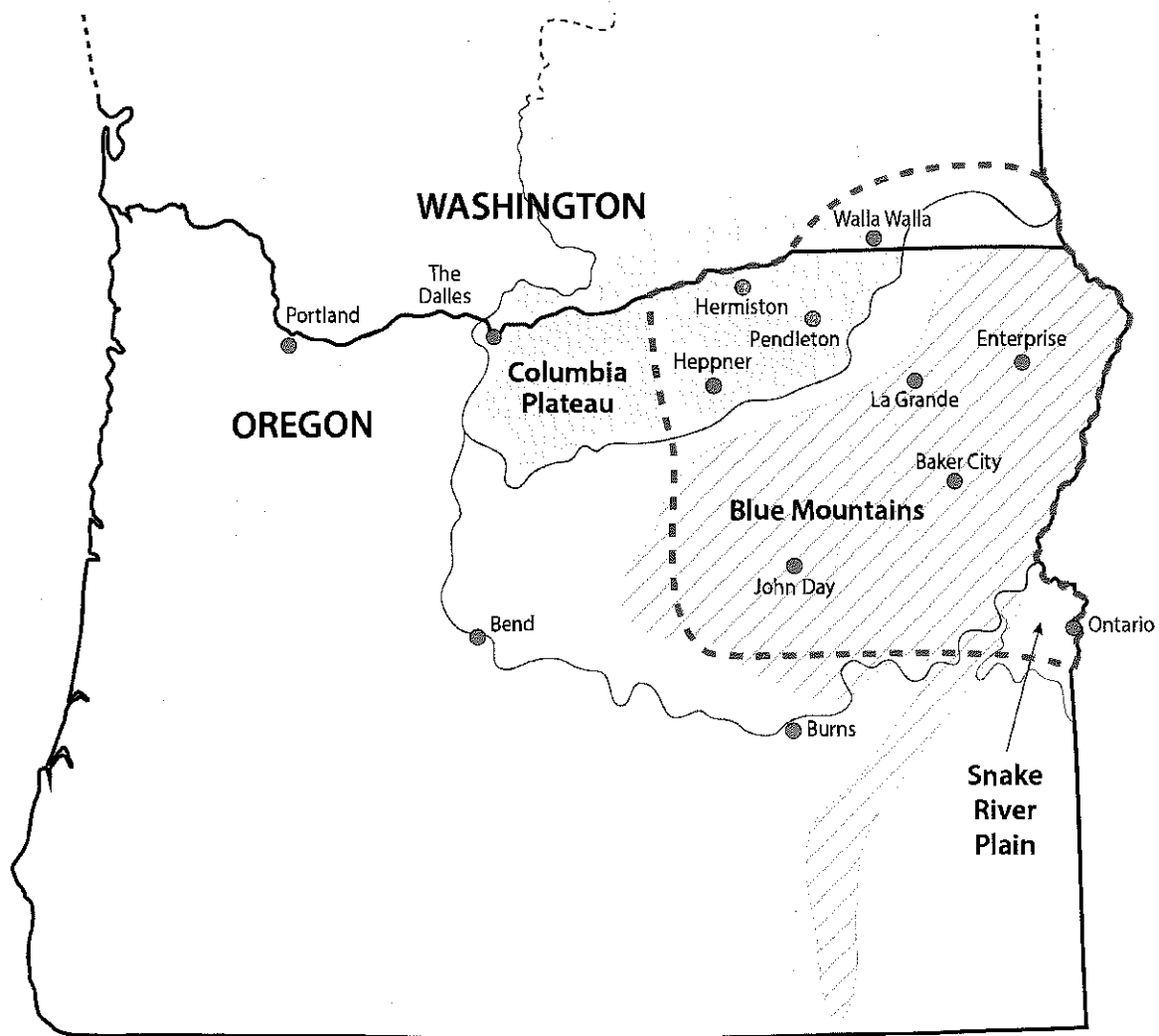


Figure 1. Location of the study area (red dashed line) and the three ecoregions (Columbia Plateau, Blue Mountains, and Snake River Plain) within the study area. The original Rocky Mountain red fox range in northeastern Oregon as described by Bailey (1936) is shown in shaded hatch.

The arid Columbia Plateau includes a sandy Pleistocene lake basin (Lake Condon) immediately adjacent to the Columbia River, and the Umatilla Plateau, a foothill region intermediate of the lake basin and the Blue Mountains. The flat (100-200 m elevation) lake basin is dominated by shrub-steppe including big sagebrush, rabbitbrushes, western needle-and-thread (*Stipa comata*), and the introduced cheatgrass (*Bromus tectorum*) (Clarke and Bryce 1997). Much of this area has been converted to irrigated cropland to produce potatoes, onions, and alfalfa. The foothills region is dominated by bunchgrasses (wheatgrass and fescue) with the deeper soiled areas converted to dryland wheat. Much of the stream bottomlands have been converted to improved pasture and alfalfa fields.

The Snake River Plain includes the Treasure Valley surrounded by alkaline foothills (Thorsen et al. 2003). Treasure Valley was formerly shrub-steppe, but an extensive network of irrigation canals has transformed the valley into irrigated pastureland and cropland. Crops include wheat, sugar beets, potatoes, onions, and alfalfa. The adjacent rangeland foothills are dominated by big sagebrush, bluebunch wheatgrass, and cheatgrass, and used primarily for cattle grazing.

Materials and Methods

Genetic Field Data Collection

Genetic material were collected from scats and hair samples collected at den sites, and from hair and tissue samples collected from carcasses (road kills, damage kills, fur harvest). All hair and scat samples collected directly in the field were stored in vials of 95% ethanol, while most carcass samples were initially frozen and then later transferred to vials of 95% ethanol before submission to the genetics laboratory for analysis.

Laboratory analyses

We conducted DNA extraction, polymerase chain reaction (PCR) amplification, sequencing, and genotyping at the Mammalian Ecology and Conservation Unit in the Veterinary Genetics Laboratory at University of California, Davis. DNA was extracted from tissue samples using a DNeasy Blood and Tissue kit (Qiagen, CA), while DNA from scats were obtained using a QIAmp DNA Stool kit (Qiagen, CA). DNA was extracted from hair samples by first digesting the follicles as per Pfeiffer et al. (2004), followed by purification using a modified phenol/chloroform method (Sambrook and Russell 2001). Primers, PCR chemistry, cycling conditions, and sequencing for the mtDNA D-loop and cytochrome *b* loci were as previously reported (Perrine et al. 2007, Aubry et al. 2009).

Results

Genetic Analysis

Of the 58 samples from which red fox mitochondrial DNA was successfully extracted, 46 (79%) were of the cytochrome *b*/D-loop haplotype combination A-19 (Table 1), the most common

haplotype found in populations from the Rocky Mountains, Sierra Nevada, and the Cascade Range of Oregon (Aubry et al. 2009), and indicative of native ancestry. Other native haplotypes found included A-37, A-43, and A-82 (Table 1). Haplotypes A-43 and A-82 have been found only in Rocky Mountain red fox populations to date (Aubry et al. 2009, Sacks et al. 2010, Statham et al. 2012), while A-37 is a rare haplotype found previously in the Rocky Mountains and central South Dakota (Aubry et al. 2009, Sacks et al. 2010, Statham et al. 2012).

The remaining 6 samples were haplotype G-38, a common fur-farm haplotype with an Alaskan or northern Canada origin (e.g., Sacks et al. 2011, Statham et al. 2012). Four of these non-native haplotype samples were collected at lower elevations (<775 m) in the Columbia Basin and likely have ancestry originating from a 1987 fur farm release near Stanfield, Oregon (M. Kirsch, Oregon Department of Fish and Wildlife, pers. comm.). The presence of both cytochrome *b* haplotype A and G within the same general vicinity in Columbia Basin also suggest mixed ancestry from both native and nonnative populations. One fox of haplotype G-38 was captured at approximately 1,250 m elevation in the Blue Mountains upslope from Walla Walla, while the other Blue Mountains haplotype G-38 fox was sampled near Baker City at 1,120 m elevation. Interestingly, both samples collected in the Snake River Plain ecoregion near Ontario were native haplotypes (A-19 and A-82) at elevations of only 680 and 720 m.

Table 1. Cytochrome *b*/D-loop haplotypes from red fox DNA samples collected in northeastern Oregon.

Haplotype (Cytochrome <i>b</i> /D- loop)	Ecoregion			Total
	Blue Mountains	Columbia Basin	Snake River Plain	
A-19	35	10	1	46
A-37	3	0	0	3
A-43	0	2	0	2
A-82	0	0	1	1
G-38	2	4	0	6
<i>Total</i>	42	16	2	58

Within the Blue Mountains ecoregion, 35 were A-19, 3 were A-37, and 2 were G-38 (Table 1, Figure 1). At the lowland ecoregions 11 were A-19, 2 were A-43 (both Columbia Basin), 1 was A-82 (Snake River Plain), and 4 were G-38 (all Columbia Basin). Ninety-five percent (n=40) of the fox samples collected within the Blue Mountains ecoregion and over 97% collected within the original range described by Bailey (1936; Figure 2) exhibited native haplotypes, while 74% of the samples collected within the Columbia Basin and Snake River Plains ecoregions, both outside the range described by Bailey (1936), were of native haplotypes.

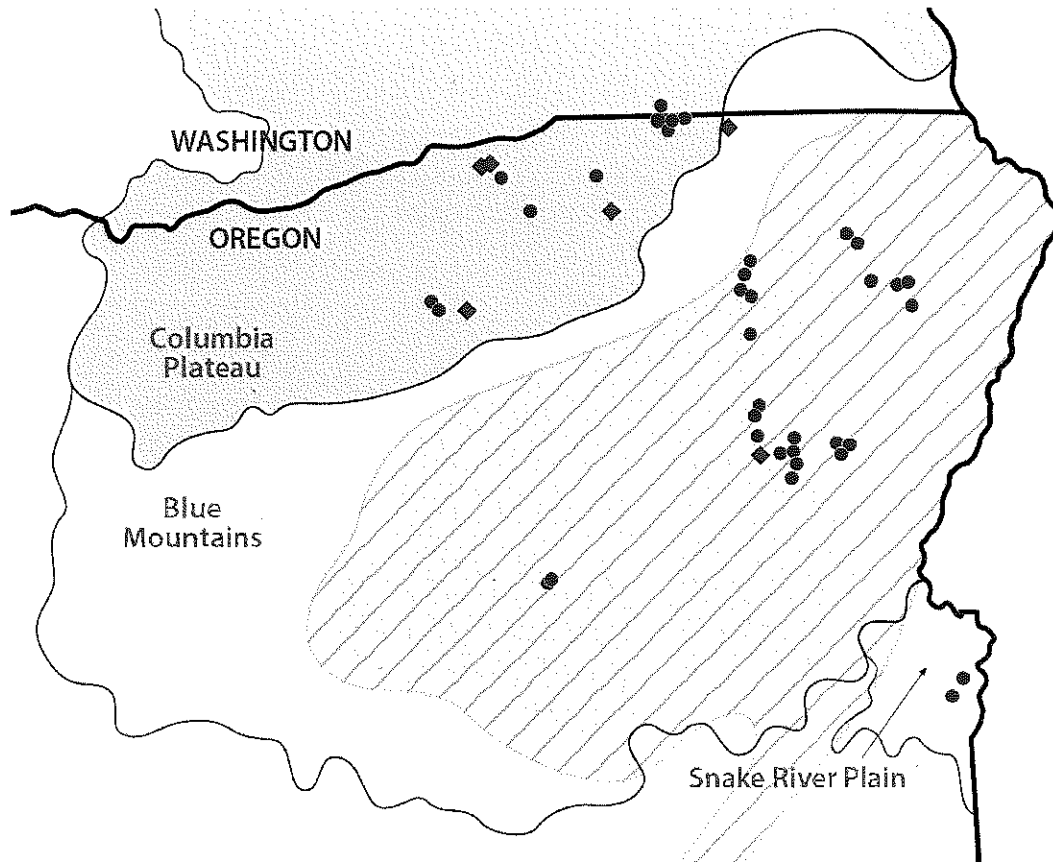


Figure 2. Locations where red fox genetic samples were collected. Blue-filled circles denote cytochrome *b* haplotype A samples (native) and red-filled diamonds haplotype G samples (nonnative). The shaded hatch represents the original Rocky Mountain red fox range as described by Bailey (1936).

Discussion

Our results suggest that red foxes inhabiting the original range in northeastern Oregon described by Bailey (1936) are native Rocky Mountain red foxes reestablishing former range. Although mtDNA analysis does not measure the level of genetic diversity within an individual (a fox that is genetically over 90% nonnative can still carry a native haplotype), the fact that over 97% of the foxes within the original range exhibited a native haplotype is compelling. Further, 90% ($n=35$) of 39 samples collected within Bailey's original range were haplotype A-19, which Sacks et al. (2010) also reported in a museum specimen collected in 1924 from the Wallowa Mountains.

It is unclear from this analysis whether these foxes originated from native populations in Idaho (perhaps dispersing into Oregon via the Snake River Plain) or a remnant population persisting in the higher elevations of the Wallowa Mountains. The distribution pattern of where fox samples were collected suggest that both scenarios are possible. Three foxes (all haplotype A-19) that were trapped at over 1100 m elevation near the mouth of the Lostine River in Wallowa County

may represent animals that originated from the Wallowa Valley, but might also have been high-elevation foxes that migrated downslope for the winter.

The presence of both native (A) and nonnative (G) haplotypes within the same vicinity in the lower elevation Columbia Basin (Umatilla and Morrow counties) suggest mixed ancestry. The presence of nonnative foxes within the Columbia Basin is not surprising given the known release of foxes from a Umatilla County fur farm in 1987, and the increase in red fox reports soon after. However, the high prevalence of native haplotypes in the Columbia Basin was not expected given that Rocky Mountain red foxes and other mountain fox subspecies typically occur at high mountain elevations. Aubry (1984) suggested that physiological and behavioral limitations may restrict native foxes (in his case Cascade red foxes) to higher elevations and non-native foxes to lowlands. However, Fichter and Williams (1967) included downslope movement of Rocky Mountain red foxes as a plausible explanation for the expansion of red foxes in the Snake River Plain in 1960s (support by the fact that both our samples from the Snake River Plain are haplotype A), and Statham et al. (2012) considered the possibility of downslope movement from the higher elevations of the Cascade Mountains for the current presence of native foxes in the Willamette Valley.

Why native red fox populations would expand into low-elevation habitats, where historically they were absent (Bailey 1936), might be explained by the dramatic changes in suitable habitat that have occurred in the Columbia Basin and Snake River Plain in the past 100 years. Large scale irrigation projects in the Columbia Basin and Snake River Plain, beginning with the Reclamation Enabling Act of 1905, resulted in the conversion of hundreds of thousands of acres of shrub-steppe, a habitat largely avoided by native red foxes (Bailey 1936), to irrigated pasture and cropland (especially alfalfa hayfields) that now provide improved habitat for red fox prey (Bailey 1931, 1936; Grinnell et al. 1937; Aubry 1983, 1984; Perrine 2005) such as Belding's ground squirrels (*Spermophilus beldingi*), yellow-bellied marmots (*Marmota flaviventris*), montane voles (*Microtus montanus*), and northern pocket gophers (*Thomomys talpoides*), all of which can reach pest levels (Dalquest 1948, Sullins and Verts 1978, Thompson 1979, Verts and Carraway 1998). These pastures and cropland are possibly surrogate to the mountain meadow habitat that native red foxes typically forage (Bailey 1931, 1936; Grinnell et al. 1937; Aubry 1983, 1984).

The presence of red foxes in the Blue Mountain Basins (Wallowa, Grande Ronde, and Baker valleys) may also represent a recent downslope movement of foxes out of the Wallowa Mountains. High-elevation populations of red foxes currently exist in the Wallowa Mountains (Magoun et al. 2013), and may have persisted there throughout the 1900s. Fox populations also occurred in the Grande Ronde Valley during the 1930s and 1940s before the widespread use of toxins to control predators (Mark Henjum, retired Oregon Department of Fish and Wildlife, pers. comm.). Further, portions of these valleys have also been converted from dry grassland to irrigated hayfields and pastures, creating additional foraging habitat for foxes. The genetic connection between high-elevation Wallowa Mountain fox populations and populations

inhabiting the Wallowa, Grande Ronde, and Baker valleys is currently under investigation. Also, the analysis of nuclear genetic markers to more accurately quantify the extent of nonnative introgression into native populations is underway.

Acknowledgments

We would like to thank the following people for assisting collecting DNA samples: Eddie Miguez, Terry Reynolds, Jim Akenson, Steve Rhea, Glenn Ward, Mark Kirsch, Hans Hayden, Ed Crain, Mike Hanson, Kevin Mitchell, Cathy Nowak, H. Petty, H. Reynolds, Ryan Torland, Melanie Henderson, and Walt Van Dyke. Ralph Anderson, Buster Gibson, Steve Cherry, Victor Coggins, Mark Henjum, Glenn Ward, David Kerley, Howard Bryant, and Jocelyn Akins provided historical perspective on the recent expansion of red foxes within northeastern Oregon, or assisted our understanding of mountain red foxes in general. We greatly appreciate the project support and manuscript reviews provided by Tim Hiller and Russ Morgan. We thank Mark Statham and Zach Lounsberry for supervising and training the following interns, who assisted with laboratory procedures: Michelle Holtz, Natalie Goddard, Siobhan Aamoth, and Tatyana Kalani.

The project was generously supported by the Oregon Department of Fish and Wildlife, Owl Ridge NRC, and Oregon Wildlife.

Literature Cited

[Forthcoming]

From: Lisa DeBruyckere <lisad@createstrat.com>
Sent: Sunday, July 19, 2015 7:52 PM
To: greg.krutzikowsky@state.or.us; ODFW NearshoreStrategyInput
Cc: Ben Enticknap; Charlie Plybon; Chuck Willer; Dick Vanderschaaf; Fawn Custer;
Heather Ludemann; Jena Carter; Jim Carlson; Joe Liebezeit; Kay Treakle; Lisa
DeBruyckere; Paul Engelmeyer; Pete Stauffer; Phillip Johnson; Robin
Hartmann; Ryan Cruse; Sybil Ackerman; Wayne Rifer
Subject: Comments on ODFW's nearshore strategy by the Oregon Marine Reserves
Partnership
Attachments: OMRPcomments_ODFWnearshorestrategy.pdf

Greg and the ODFW Nearshore Strategy Team, please accept the attached comments on ODFW's nearshore strategy on behalf of the Oregon Marine Reserves Partnership. Thank you for the opportunity to comment.

lisad@createstrat.com
www.oregonmarinereserves.org
Like us on Facebook!

"Unity is strength . . . When there is teamwork and collaboration, wonderful things can be achieved." –
Mattie Stepanek



Involving Oregonians in the stewardship of Oregon's marine reserves and protected areas

July 17, 2015

Oregon Department of Fish and Wildlife
Marine Resources Program
2040 SE Marine Science Drive
Newport, OR 97365

Dear Mr. Krutzikowsky:

Thank you for the opportunity to comment on Oregon's Nearshore Strategy, which is being updated in 2015 to reflect emerging trends, priorities, and science.

The Oregon Marine Reserves Partnership is a coalition of conservation organizations that seek to involve and engage Oregonians in the stewardship of Oregon's marine reserves and protected areas. Although our interests and efforts are focused on marine reserves and protected areas, the organizations that comprise our coalition are interested in the suite of factors degrading coastal ecosystems and threatening the services and functions these places provide. We acknowledge the health of Oregon's ocean affects the quality of life of our citizens as well as state, regional, and national prosperity.

We are providing comments to you in two categories – general overall comments and comments specific to certain sections of the document.

General comments:

- Oregon's Nearshore "Strategy" document lacks some key components contained in most strategic documents. Specifically, it doesn't:
 - Inform resource allocation choices
 - Describe what success looks like
 - Include specific, measurable, achievable, realistic and time-bound objectives
 - Describe how ODFW will achieve its vision for a functional and healthy nearshore ecosystem
 - Prioritize a set of actions to obtain the buy-in and support of stakeholders
 - Acknowledge the potential that exists for ODFW to expand its constituent base with non-extractive uses and activities
 - Include indicators to evaluate and measure success

- Describe, to the level of detail needed, where ODFW will focus its efforts relative to Oregon's nearshore ecosystem, in the coming years.
- There are key emerging trends that will affect the healthy and functioning of Oregon's nearshore ecosystem. Fully describing these trends, such as sea level rise and climate change, and how ODFW will adapt its management approach to address these emerging trends, is a necessity in this plan.
- Incorporating the values that Oregon's marine reserves and protected areas play relative to advancing science and understanding of our nearshore areas should be better represented in the nearshore strategy. There is very little mention of ODFW's Marine Reserve program in this document. Oregon's marine reserves and protected areas were created to "protect and sustain a system of marine reserves to conserve marine habitats and biodiversity, provide a framework for scientific research and effectiveness monitoring." ODFW was designated as the lead agency to implement Oregon's marine reserves and protected areas – and as such, they should be featured as a prominent program within the nearshore strategy, identifying where recommended research/monitoring/human dimensions research should occur. Other ODFW documents that detail marine reserve ecological monitoring objectives should be cited and linked within the strategy.
- The health and functioning of the nearshore ecosystem in Oregon is greatly dependent upon what occurs on the land. This should be fully explored and discussed in the nearshore strategy.
- The historical and current abundance of keystone and other species should be incorporated into the strategy. Changes in seabirds, otter, eulachon, herring, native oyster, salmon, abalone, scallop, and other populations and their effects on the functioning of nearshore ecosystems should be described to develop a shared understanding of needed conservation, restoration, and protection actions. Known stressors that have contributed to the decline of key nearshore species (e.g., contaminants from the Columbia River - every watershed is listed under the Clean Water Act 303(d) list as water quality impaired) should be fully discussed.

Comments specific to sections of the nearshore strategy:

Chapter 4 – Coastal Communities

- Page 33 of the strategy references that wildlife viewing generates more regional economic contribution than hunting and fishing, which is consistent with the USFWS "Wildlife Watching in the U.S.: The Economic Impacts on National and State Economies in 2011." In 2011, wildlife watching generated \$1,697,223,000 in expenditures, with a multiplier effect of \$3,121,531,880. Wildlife viewing generated 41,243 jobs for Oregonians that earned \$1,264,990,530 as well as state and local tax revenues of \$284,493,082 and federal revenues of \$274,511,570. Yet the strategy emphasizes recreational and commercial fishing revenue, which pales in comparison to the economic benefits of wildlife viewing. The significance of wildlife viewing to Oregon cannot be understated, and has been pointed out during the last decade, presents an opportunity for ODFW to expand its constituent base and thus its revenue base, which has been declining as fewer individuals hunt and fish. The revenue generated by hunters and anglers combined is less than the revenue generated by wildlife watchers in Oregon. Because marine reserves and protected areas provide some prohibitions on extractive uses, these specially

designated sites provide opportunities for ODFW to promote non-extractive activities, i.e., wildlife watching. Opportunities exist for Oregon to more fully understand and appreciate the different types of wildlife watching (e.g., observing, photographing, and feeding wildlife), the demographics of the Oregonians that participate in these activities, as described in [it's state report](#). In addition, opportunities exist to further analyze what locations along Oregon's coast support non-extractive uses as well as gaps in existing opportunities.

Chapter 5 – Species

- Table 5.1 –Include a secure prey base for seabird as an issue of concern – we know from the work on marbled murrelets that the shift in prey has had significant effects on productivity.

Chapter 8 – Research and Monitoring Needs

- There is no mention of marine reserves and protected areas in this chapter, despite the fact that ODFW is the lead agency for marine reserve implementation, and the marine reserves were created to “provide a framework for scientific research and effectiveness monitoring.” Oregon’s marine reserves and protected areas should be a focal point of research in comparison to reference areas.

Chapter 9 – Recommendations

- Under “Communication Partnerships,” use the Oregon Marine Reserves Partnership as a good example of working with a non-governmental consortium to expand the reach of ODFW’s Marine reserve program.
- Under “marine program website,” include a link to the Oregon Marine Reserves Partnership (OMRP) website (<http://www.oregonmarinereserves.org/>) as well as brief text describing the cooperative and supporting relationship that currently exists between ODFW and OMRP.
- Under the “how” section for “marine program website,” add that partner groups (i.e., OMRP, Redfish Rocks Community Team, Friends of Cape Falcon) can add capacity to ODFW’s outreach on marine reserves, and can create efficiencies for ODFW by sharing online and printed resources relative to marine reserves and protected areas.

Thank you again for the opportunity to comment on Oregon’s nearshore strategy document.

Sincerely,

Creative Resource Strategies, LLC

Lisa A. DeBruyckere



6159 Rosemeadow Lane NE Salem, OR 97317
(503) 704-2884 Fax: (503) 371-5939
www.creative.com
Helping organizations with their communication needs

Digitally signed by Lisa A.
DeBruyckere
Date: 2015.07.19 19:51:41
-07'00'

Lisa DeBruyckere, Coordinator
Oregon Marine Reserves Partnership

-----Original Message-----

From: Adam Novick [mailto:anovick@uoregon.edu]

Sent: Monday, July 20, 2015 1:13 PM

To: Audrey.C.Hatch@state.or.us

Subject: Public comment from Adam Novick (attached) on public review draft of Conservation Strategy

Audrey,

Thank you for the opportunity for the public to review the updated drafts of sections 1 and 2 of the Oregon Conservation Strategy. Hoping you find it useful, I'd like to please resubmit my comments of May 1, 2015, which I attach here, including an appended, minor correction of May 4, 2015.

Reviewing the current drafts of these two sections, I gather that most of these comments are still relevant to those sections (e.g., regarding statements that the Strategy is non-regulatory and will not expand regulations, and regarding the blanket claim that the state's land-use program has been found effective).

I presume you or others working on the strategy have already considered these comments, but for my love of Oregon's native species and the joy of maintaining them, I feel some responsibility to resubmit my comments here.

Many more thanks.

Best regards,

--Adam

Adam Novick
3715 Donald Street
Eugene, OR 97405
V: 541-345-0467
E: anovick@uoregon.edu

PS. As always, my views are not necessarily those of the U of Oregon.

SEE PDF DOCUMENT ATTACHED

1 May 2015 [with appended correction of 4 May 2015]

Audrey Hatch
Oregon Conservation Strategy Planner
Oregon Department of Fish and Wildlife
Sent via email to: Audrey C Hatch <audrey.c.hatch@state.or.us>

Re: Public comment on ODFW Conservation Strategy update

Dear Audrey,

Thank you very much for welcoming comments on early draft sections of ODFW's update for the Oregon Conservation Strategy. I gratefully offer some comments here, as a citizen.

As my comments question some aspects of the Strategy (in both its original edition and some of the newly proposed text), please let me begin by noting my deep appreciation for ODFW's efforts to conserve Oregon's native species and for ODFW's past recognition and help for my own efforts in this regard. Moreover, I am all the more grateful to ODFW for welcoming my comments, understanding that ODFW's resources have been shrinking.

I. Background

For background, please let me share that I offered essentially the same comments on the present Strategy in my master's thesis (2013), in the course of similarly questioning works by many, many others (cf. chapter III, its sole focus). In a PS, below, I include an abstract for my thesis, with a URL for a copy that is freely downloadable from the University of Oregon. (Please note that my views are not necessarily those of the University.)

Two themes run through and inspire all my comments here. The first is my concern that humans are widely disregarding risk posed by species-based land-use regulation to species whose survival depends on actively managing private land, such as to control invasive exotic species. (By species-based land-use regulation, I mean land-use restrictions or liability for mitigation fees or other exactions based on the presence of particular species, such as through ESA Habitat Conservation Plans. I review evidence of this risk in my thesis, as the sole focus of chapter II).

The second theme is my hope that by the same token, with constraints on public funding for conservation, humans might have opportunities to improve the fate of these species through policy efficiencies, by restoring a right for individuals so conserve or maintain a species without selectively incurring land-use restrictions or liability for mitigation fees as a consequence. (I offer these ideas in chapter IV, with some examples of actual governmental decisions that seem to me to be moving in this direction, however incrementally.)

II. Specific means of disregard for regulatory risk to species

I find the existing Strategy (and some of the newly proposed text) contributes to disregard for regulatory risk to maintenance-dependent species, and inadvertently intensifies that risk, by:

1. Unquestioningly endorsing and embracing Oregon's existing state and federal regulatory framework, without recognizing concerns that USFWS and others have raised regarding the potential for the existing framework to harm species on private land, due to regulatory disincentives for actively maintaining habitat; and
2. Implicitly encouraging increased use of species-based land-use regulation, while
3. Disavowing any intent to increase regulation of any kind

I now describe these three means of disregard in more detail, with examples. Hoping to offer some completeness, I have sought to incorporate all of the passages that give me concern; however, I have likely missed some essentially identical instances of some of these passages.

1. Unquestioningly endorsing and embracing the existing regulatory framework

I find the Strategy disregards regulatory risk to species in part by unquestioningly and misleadingly endorsing and embracing Oregon's existing state and federal regulatory framework, disregarding concerns that aspects of the framework might be counterproductive to the survival harm species, thereby dismissing the reciprocal opportunity to help species through changes to the framework, and discouraging efforts to do so.

For example, the Strategy describes the framework as a "solid foundation" and takes it as a given, not to be challenged:

A Solid Foundation: Oregon's Existing Planning, Regulatory, and Voluntary Framework
Oregon already has a conservation framework in the form of plans, regulations,
and grass-roots voluntary efforts.... The Conservation Strategy works to promote
integration and innovation within Oregon's existing conservation framework...

[The Conservation Strategy] works within the existing legal structure... It ... will not ...
challenge [or] change ... regulations." ...

(ConservationStrategyIntroductoryText.docx; emph. added here and in all subsequent quotes)

[T]he Conservation Strategy encourages innovative solutions within the existing
regulatory framework

(KCI_LandUseEnergy_March2015.docx)

In contrast, for example, USFWS has occasionally expressed concern that some aspects of the existing federal regulatory framework might be counterproductive. For instance, in rulemaking

concerning Fender's blue butterfly (an ESA-listed species found in the Willamette Valley), USFWS cautioned:

[T]here is mounting evidence that some regulatory actions by the Federal government, while well intentioned and required by law, can under certain circumstances have unintended negative consequences for the conservation of species on private lands... The magnitude of this negative outcome is greatly amplified in situations where active management measures (e.g., reintroduction, fire management, control of invasive species) are necessary for species conservation.

(USFWS 2006, 63896–63897; citations omitted)

Similarly, a Benton County Habitat Conservation Plan (HCP) for Willamette Valley Prairie Species (including Fender's blue butterfly) expressed concern that it was counterproductive to the survival of these species to impose liability for mitigation fees based on their presence on private land (Benton County 2010, i, 43; USFWS 2010, 13). In addition, the Plan called for identifying and modifying regulatory disincentives that hinder conservation (Benton County 2010, E61). (The Plan did not identify or assign resources to do so, illustrating the reciprocal potential for the Strategy to encourage such work, for benefit of species and humans alike.)

Or for example, the Strategy claims that a university study found Oregon's land-use planning program to be effective:

A 2008 report [<http://ir.library.oregonstate.edu/xmlui/handle/1957/13920>] by the Institute for Natural Resources at Oregon State University concluded that the land use planning system has been effective in achieving many of its goals since the 1970s...

("KCI_LandUseEnergy_March2015.docx"; newly proposed text)

In fact, the study expressly did not evaluate Goal 5 (the part of the land-use planning program that concerns wildlife habitat). Further, in my thesis (p. 58), I offer some evidence that Goal 5 poses regulatory risk to species, through prescriptive goals and goal confusion.

The Strategy does suggest some potential to improve the existing framework; however, the Strategy describes this potential solely as seeking to "streamline" programs, "resolve conflicting regulations", or "reduce barriers" to participation, rather than as seeking to identify or address regulatory disincentives that might be making some existing programs counterproductive (notwithstanding the significance of these other factors that could discourage conservation). For example, the Strategy states:

[I]n some cases, institutional barriers prevent landowners from completing projects that will benefit fish and wildlife. These barriers include the difficulty of obtaining multiple permits, cumbersome requirements for financial assistance, and rules originally passed for one purpose that block another one. Long-term voluntary participation by Oregonians in conservation can be increased if Oregon can build on successful landowner-assistance programs to address institutional barriers and create a voluntary conservation system that is streamlined, user-friendly, flexible and collaborative

(Institutional barriers.docx)

Action 38. Resolve conflicting regulations that hinder conservation and restoration of Strategy Habitats.

Permitting processes can be complex and time consuming for landowners and managers. Similarly, conflicting regulations create confusion and uncertainty that hinders conservation and restoration of Strategy Habitats...

(Institutional barriers.docx)

[I]ncentive program providers and regulatory agencies should look for opportunities to streamline the permitting process and address conflicting regulations.

(Institutional barriers.docx)

[Program application] requirements can limit the synergy and participation in these conservation opportunities. People face a daunting challenge in order to complete the paperwork.... [I]t can be difficult to receive approval from several agencies or foundations...

(Institutional barriers.docx)

The Strategy does suggest "increasing program flexibility where feasible" (Institutional barriers.docx). However, this suggestion is apparently limited to "Improv[ing] the coordination and delivery of incentives programs" (id.)

It seems to me ODFW might resolve the concern I raise here by (1) refraining from unquestioningly (or misleadingly) endorsing the existing state and federal regulatory framework; (2) recognizing potential concerns about regulatory disincentives inadvertently created by the existing framework (such as I describe above), and (3) suggesting some potential to improve the survival of species by identifying and addressing these disincentives (e.g., as the Benton County HCP suggests above).

2. Implicitly advocating increased use of species-based land-use regulation

I find the Strategy inadvertently intensifies regulatory risk to species in part by implicitly advocating increased use of species-based land-use regulation. Intensifying this risk still further, the Strategy apparently advocates facilitating such regulation and defending authority for it, while indiscriminately implying that it benefits species.

For example, apparently alluding to Goal 5, the Strategy states:

Oregon's statewide land use planning system offers an opportunity to continually reaffirm these [planning] values, even as community growth boundaries expand into areas with rich natural resources. Smart and sustainable planning is necessary to maintain habitat connectivity, a healthy environment and livability within the communities...

Every legislative session, bills are introduced that have the potential to alter the effectiveness of the land use planning system. Oregonians will need to continue working

collaboratively and find common ground to maintain the heritage and culture of our public trust resources...

Action. Increase access to maps and scientific data to support energy siting and land use planning while integrating fish, wildlife and habitat resources. Provide greater access to continually updated information, and encourage the use of updated information throughout the planning process. Local governments, state agencies and the public need access to this information so they can make decisions using the best available data. Information on Strategy Species, Strategy Habitats, Conservation Opportunity Areas, and other mapped information for Oregon can be found at [updated Compass link and other links to Strategy content]. Encourage state agencies to continue share and evaluate information on wetland permitting, restoration projects, and other information they may be gathering to track changes in land use over time...

(KCI_LandUseEnergy_March2015.docx; newly proposed text)

Action. Work cooperatively within existing land use planning processes to conserve Strategy Habitats... Land use planning laws are part of the existing regulatory framework.

(KCI_LandUseEnergy_March2015.docx)

Action. Support and encourage the development of local land use plans and ordinances that protect farm and forestlands and other fish and wildlife habitats in urban and rural areas. Many important decisions about land use occur at the local level through local comprehensive land use plans, Goal 5 planning, ordinances and other means. These local plans take into account local values, priorities, and needs. To implement this Conservation Strategy, agencies will need to work with local community leaders and other stakeholder groups to find opportunities to incorporate Strategy Species and Habitats and Conservation Opportunity Area approaches into local plans that conserve farmlands, forestlands, open space, and natural areas.

(KCI_LandUseEnergy_March2015.docx)

Action. Work cooperatively within existing land use planning processes to conserve Strategy Habitats... Land use planning laws are part of the existing regulatory framework.

(KCI_LandUseEnergy_March2015.docx)

Approach:Work with local communities to plan development in a manner that conserves critical habitats.

(OakWoodlands_April2015.docx)

It seems to me the Strategy might address the concern I raise here by omitting such advocacy altogether or (perhaps better) by recognizing concern that some aspects of the land-use planning program might be counterproductive to the survival of species, due to inadvertent regulatory disincentives, and by recognizing the potential reciprocal opportunity to help species by recognizing and addressing these disincentives.

3. Disavowing intent to increase regulation

I find the Strategy additionally intensifies regulatory risk to species by obscuring that the Strategy is apparently advocating for increasing land-use regulation.

I find the Strategy does this two ways. First, despite apparently advocating increased regulation as I describe above, the Strategy repeatedly disavows any intent to do so. For example, the Strategy states:

[The Strategy] is not a regulatory document but instead presents issues, opportunities, and recommended voluntary actions
(ConservationStrategyIntroductoryText.docx)

The Conservation Strategy is entirely voluntary and non-regulatory; it does not expand, replace, supersede, or contradict existing regulations.
(KCI_LandUseEnergy_March2015.docx)

[The Strategy] does not, and will not, challenge, change or expand regulations. It will not add new regulations.
(ConservationStrategyIntroductoryText.docx)

A state strategy that imposed additional regulation ... would not meet the intent or objectives of the State Wildlife Grants Program...
(ConservationStrategyIntroductoryText.docx)

Action. Conserve Strategy Habitats using voluntary, non-regulatory tools... The Conservation Strategy provides a summary of voluntary, non-regulatory approaches
(KCI_LandUseEnergy_March2015.docx)

Or for example, the Strategy in at least two places offers a rationale for why incentive-based (i.e., presumably nonregulatory) approaches are necessary (an observation I would otherwise support):

Because much of the remaining oak woodlands are in private ownership and maintenance of these habitats requires active management, cooperative incentive-based approaches are crucial to conservation.
(OakWoodlands_April2015.docx)

Second, I find the Strategy obscures its advocacy for increased regulation by misrepresenting some regulatory programs as non-regulatory, and further, as potentially beneficial to the parties who would be regulated. For example, the Strategy states:

Market-based approaches, such as conservation banking and Transfer of Development Rights (TDR), allow local communities to meet their goals while landowners and developers may continue to profit.
(KCI_LandUseEnergy_March2015.docx)

LCDC is adopting rules that would authorize the establishment of voluntary TDR program for counties. This tool could provide incentives to shift development to locations where residential development would have less impact on farm, forest, natural or environmentally sensitive areas. Strategy Habitat and Conservation Opportunity Areas could be used as incentive to offer “bonus credits” for landowners to transfer the development right out of those areas

(KCI_LandUseEnergy_March2015.docx)

Because so much of the Willamette Valley ecoregion is privately-owned, voluntary cooperative approaches are the key to long-term conservation using tools such as financial incentives, Candidate Conservation Agreements with Assurances, and conservation easements.

(WillametteValleyEcoregion_April2015.docx [with essentially identical language in Grasslands_April2015.docx])

As I describe in my thesis (pp. 61–72), species conservation banking — AKA species mitigation banking or ecosystem service markets — are in fact usually regulatory programs, and it is misleading to indiscriminately suggest that they allow landowners to profit. In fact, the underlying regulation (here, presumably species-based land-use regulation) turns existing populations of targeted species into liabilities for landowners. These programs in effect tax Peter to pay Paul, and a landowner typically cannot ensure he or she ends up as Paul, or at least not as Peter.

Similarly, though I do not address Transfer of Development Rights (TDR) programs in my thesis, I understand that like conservation banking, TDR programs are virtually always regulatory programs, selectively imposing land-use restrictions on “sending areas” (here, presumably identified by the presence of species).

Likewise, while I find others similarly represent Candidate Conservation Agreements with Assurances as “voluntary”, these programs are in fact regulatory. As I describe in my thesis (pp. 55–58), they in effect seek exactions from landowners under threat of future species-based land-use regulation (i.e., future listing of species under the ESA). [Please see appended correction.]

It seems to me the Strategy might address the concerns I raise here by avoiding these misrepresentations about these programs, and by recognizing some concern that when based on the presence of species, these programs might inadvertently create regulatory disincentives that are counterproductive.

III. CONCLUSION

Thank you again for the opportunity to comment. I hope you find my comments constructive and respectful, as I sincerely intend. Should you wish, I would be honored and grateful to discuss these comments with you or anyone else at ODFW.

Best regards,



Adam Novick, MS
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V: 541-345-0467
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PS. The abstract and URL for my thesis:

Novick, Adam P. 2013. "Risk to maintenance-dependent species from orthodoxy in species-based land-use regulation." Master's thesis. University of Oregon.
<<http://hdl.handle.net/1794/13343>>

I theorize and offer some evidence that humans inadvertently risk exacerbating the loss of maintenance-dependent species on private land by using species-based land-use regulation to seek other benefits. Drawing evidence primarily from the US, I argue that such regulation poses a risk to maintenance-dependent species, that humans routinely disregard this risk, and that this disregard widely serves to defend the power of individuals and organizations to use such regulation to seek other benefits. I suggest this implies that with constraints on public funding, humans might improve the survival of some species by clarifying the purpose of such regulation and considering openly refraining from such regulation for some species. I also suggest such change might depend on articulating the issue as whether the survival of a species could ever depend on individuals having a right to conserve or maintain it without selectively incurring harm from regulation intended to save it.

PPS. Additional works cited:

Benton County. 2010. "Benton County Prairie Species Habitat Conservation Plan." Accessed 9 January 2013 at http://www.co.benton.or.us/parks/hcp/documents/benton_county_prairie_species_hcp.pdf.

USFWS (US Fish and Wildlife Service). 2006. "Designation of Critical Habitat for the Fender's Blue Butterfly (*Icaricia icarioides fenderi*), *Lupinus sulphureus* ssp. *kincaidii* (Kincaid's Lupine), and *Erigeron decumbens* var. *decumbens* (Willamette Daisy)" (final rule). *Federal Register* 71 (210) (31 October): 63862–63977.

USFWS (US Fish and Wildlife Service). 2010. "Environmental Assessment for Issuance of an ESA Section 10(a)(1)(B) Permit for Incidental Take of Fender's Blue Butterfly, Taylor's Checkerspot Butterfly, Willamette Daisy, Kincaid's Lupine, Bradshaw's Lomatium, Nelson's Checkermallow, and Peacock Larkspur in Benton County." Portland, OR. Accessed 1 June 2013 at http://www.fws.gov/ecos/ajax/docs/plan_documents/neas/neas_836.pdf.

[A correction offered to ODFW regarding comment about CCAAs:]

Date: Monday, May 4, 2015 10:25 AM
From: Adam Novick <anovick@uoregon.edu>
To: Audrey C Hatch <audrey.c.hatch@state.or.us>
Subject: Correction regarding CCAAs in comment on ODFW Conservation Strategy update

Audrey,

Thank you again for welcoming my comment on the ODFW Conservation Strategy update. Hoping you find it useful, I'd like to please offer a correction to my comment, regarding Candidate Conservation Agreements with Assurances.

In my comment (p. 7), I wrote that CCAAs "in effect seek exactions from landowners under threat of future species-based land-use regulation". I indeed find that CCAAs appear intended to do so, and that some actors seem to advocate CCAAs for that purpose (e.g., cf. Register-Guard editorial of 20 Mar 2015, warning ranchers to take action now or face worse consequences from listing the greater sage-grouse under the ESA). However, I should add my understanding that CCAAs do not necessarily always serve to seek exactions (at least not as their sole or primary purpose).

For example, from the recent CCAA for greater sage-grouse in Harney County, and from related news reports, I gather that CCAAs for this species are intended to reduce regulatory disincentives for actions that ranchers would likely be taking anyway, for economic reasons (to maintain the economic viability of their land and public land, through active management, apparently paid for almost entirely with public funding).

I believe this distinction is important, in part to understand accurately what is going on with current policy efforts to save the sage-grouse.

I'm sorry I wasn't clearer about this distinction in my comment to you. In case helpful, I discuss [CCAAs] more fully in my thesis (Novick 2013, pp. 55-57, 68n93, 123-124, 128).

In any case, I thank you again for your efforts and generous consideration. As always, please note my views are not necessarily those of the U of Oregon.

Best regards,

--Adam

Adam Novick
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V: 541-345-0467
E: anovick@uoregon.edu

PS. Works cited:

Novick, Adam P. 2013. "Risk to maintenance-dependent species from orthodoxy in species-based land-use regulation." Master's thesis. University of Oregon.
<<http://hdl.handle.net/1794/13343>>

Register-Guard. 2015. "Avoid sage grouse listing Habitat protection is the key" (editorial). 20 Mar. Accessed 2015-05-04 at <<http://registerguard.com/rg/opinion/32883037-78/avoid-sage-grouse-listing.html.csp>>.

From: Sea Lion [sealiondefensebrigade@gmail.com]
Sent: Monday, July 20, 2015 4:17 PM
To: Audrey.C.Hatch@state.or.us
Subject: PUBLIC COMMENT --ODFW COSERVATION STRATEGY 2015

The Pacific Northwest Conservation Strategy plan must be written support predators and uphold the web of life and not erode it by egotistical, and false optimisms about technology and the reliance on so called predator "management" which currently employs lethal tactics that WEAKEN not strengthen out coastal life lines.

Thank you, for looking at the hatchery problems and the problems this is subsidized fish has caused to wild runs-- all fish should be shared with predators because the hatcheries have caused so much harm to original balance of species and the public has subsidized them, so the public ought to have a say in who gets to eat them (sea lions & sea birds)—The public did not subsidize these hatchery fish just to increase private industry profits and for sport killings.

Without healthy oceans & bio diversity of species we humans will not survive. I personally will rather have a salmon, sea lion, & cormorants on the coast of Oregon than a dollar. Because I inherently know that life without these animals will cost us a lot more than a dollar and that my dollar means nothing without a web of life.

The web of life on the Pacific North West Coast is a tangible life force that will sustain bio diversity and has sustained bio diversity and habitat health just fine without "management" of so called natural "resource value". The "intrinsic value" of the web of life on EARTH is worth protecting and will provide lasting benefits for future generations to come.

Thank you for this opportunity to participate.

"Meeting the biological goals of the CMP will require improvement on the status quo for primary habitat limiting factors and preventing other potential impacts from becoming limiting factors. SOURCE ODFW Pg 93.

It has been said that there can be no "salmon recovery " in the Columbia Basin if fish managers lack any control over the habitat-damaging activities of the Bonneville Power Administration (BPA). The BPA is a federal agency that effectively controls river flows through its hydropower sales.

"The habitat strategy that is being endorsed with this multispecies approach is to improve habitat forming processes and functions, without direct regard to improving habitat conditions for a particular species." SOURCE ODFW

Assuming scenario projections in climate change and human population growth are generally correct, it is hypothesized that maintenance of fish population status will require rehabilitated³⁵ and restored³⁶ habitat conditions to support current levels of life-stage survival in freshwater and estuarine zones.³⁷

So in my opinion there are already problems with contradictions with the current strategy as ODFW proposed does not seem to stand a chance to be successful in salmon recovery if heavy emphasis is placed on removing important predators and not addressing the bigger impacts facing the wild salmon and data gaps in the system.

There obviously there is a huge disconnecting between regulatory agencies that govern lands, water, and the atmosphere health. The wildlife ought not to have to suffer and ODFW ought to greatly improve on supporting of the "status quo" in so called salmon recovery that seeks to target important predators and not address the bigger issues facing the wild fish. The sea lions and a myriad of species that rely on this sacred fish's survival for their very survival not sport. Currently under ODFW's jurisdiction marine mammals are facing severe threats and this is not what I want to support in a State agency beholden to protect and care about the sea lions not just care about the fish in Oregon.

Mother Nature provided bio diversity that has supported salmon, sea lions & sea birds for thousands of years. It is NOT the sea lions or sea birds causing collapse in fishing. It is the exponential growth of human extraction from our oceans and rivers causing destruction and species extinction.

How can there be any salmon recovery if ODFW does not track the food source for the salmon's life stages in the estuary and on the North Coast?

1. "Currently, there are no funds, including Oregon Plan funding, available to routinely collect macroinvertebrate or aquatic vertebrate community information in the North Coast. Future biological assessments in the North Coast are in jeopardy and will yield a "data gap" without some investment in this form of monitoring." (Pg 16). SOURCE : <http://tinyurl.com/nuk896u>

ODFW opts to track predators instead of salmon sustenance

"The tracking of several relatively simple metrics for predators is proposed to provide a better understanding of the effects or abundance of these predators through time. Metrics include pinniped injury marks (at hatcheries), cumulative spring maximum daily number of double-crested cormorants, and smallmouth bass abundance." Source ODFW

yet

"Prey sources for freshwater salmonid life stages will not be tracked. However, carcass placement (conducted to address unidentified limiting factors associated with nutrient availability) will be tracked, as it has traditionally been, through STEP. Disease occurrence is tracked within the hatchery system; any concerns over disease in wild populations will be addressed as they arise." SOURCE Pg 183 ODFW near shore strategy.

"Estuarine habitats provide diverse rearing habitat and

high growth opportunities for outmigrating juvenile salmonids and also provide protection from predators (NMFS 2011; Roegner et al. 2012). The estuary is also an important staging area where juvenile and adult salmon, steelhead, and trout undergo significant physiological changes that allow transition to and from saltwater."

Source: Richard N. Williams, PhD Clear Creek Consulting

ODFW is doing a great disservice to the animals in their care by advocating for the removal of marine mammals and sea birds for eating in their coastal home. This is overstepping ODFW's jurisdiction and extending the sport industry's long arm of greed—ODFW either represents wildlife or industry both have very different goals and outcomes that will directly affect the coastal communities.

"The Oregon Department of Fish and Wildlife out-plants hatchery fish to net pens in Youngs Bay to increase salmon fishing opportunities. Of the four terminal fisheries sites in the Columbia River Estuary, the Youngs Bay site has the highest five-year average for Chinook harvest". Source : Columbia River Keeper EVEN with sea lions in the estuary!

Yes, a lot of people come to the Oregon Coast and do NOT want to KILL Anything so just because ODFW makes their funding off of the wholesale killing of fish and other deceased life forms—

ODFW be highly scrutinized for their jurisdiction over marine mammals and seabirds that sustenance fish on the coast or on the Columbia River because —it is the threat of profit loss-- not good science that fuels predator scapegoating hysteria.

Sea Lions are important to the Pacific Northwest ecology and they assist the salmon in a myriad of ways. <http://islandpress.org/trophic-cascades>

- Sea Lions Have an Ancient Predator Prey Relationship with the Wild Salmon that the Hatchery fish do not (Pg 3 & 5) <http://tinyurl.com/q7yf8mf>

Humans have many food and habitat choices that the Sea Lions do not. <http://tinyurl.com/oe7hxm>

- ODFW driver is charged with drunken and reckless driving after wrecking the state salmon delivery truck killing 11,000 juvenile Chinook salmon on the Highway. <http://tinyurl.com/ogftssz>

Sea lion sustenance is not crime human poaching is!

- Felony racketeering charges filed against Trade Winds Charter: <http://tinyurl.com/o64dwa8>
- Oregon State Police (OSP) Fish & Wildlife troopers cited an Astoria man on several commercial fish-related charges after seizing 748 pounds of illegally caught Chinook salmon on the Columbia River near the Willamette River. Troopers also seized an illegal 1,200 foot gillnet used to catch the fish.

SOURCE: <http://tinyurl.com/osyntqu>

Field reports: Banks Lake poachers get 'light' sentence

SOURCE: <http://tinyurl.com/neor3jj>

- As Caviar Prices Skyrocket, Sturgeon Poachers Invade Pacific Northwest. SOURCE: <http://tinyurl.com/pmsqsvy>
- Wildlife Detectives: Sturgeon Poachers Angling For Caviar On The Columbia <http://tinyurl.com/mttprmz>
- The felony warrants were due to their previous violations and history of illegal commercialization of sturgeon. <http://tinyurl.com/p59jk7c>
- Human Smelt-limit violators net about 100 citations in a single dipping day <http://tinyurl.com/o69e7xq>
- WDFW advertises "Surplus" Salmon for sale while condemning sea lions for eating. <http://tinyurl.com/nrs45hm>
- ODFW donates 175 tons of Hatchery Chinook Salmon to food banks across the county and state of Oregon in 2015. Yet ODFW does not want to share any fish with the sea lions . Humans have many other food and habitat choices that the sea lions do not. <http://www.dfw.state.or.us/news/2015/january/011215.asp>
- 400,000 Chinook Salmon Die when a water pipe clogs at a ODFW hatchery-- July 2015. <http://tinyurl.com/pne9oyy>

ODFW is a state agency to yet seems to cater exclusively to private sports clubs and industry not the public good or for the good of the wildlife in the region, and this needs to change.

ODFW represent approximately 10 percent of the Oregon Population (hunter and fishers) and that reflects that about 90 % of Oregon residence and wildlife are NOT being represented or fairly protected by ODFW.

The Sea Lions are starving, the star fish are melting & oysters can not form a shell. <http://tinyurl.com/lvdguvw>

- It is time to fund projects that will actually help save the salmon. The Orca, sea lions, star fish, & the oysters all need help too. It is time to protect our oceans because our lives depend on it.

The oceans are the life source for all biological beings on our planet, so the oceans, forest and fish must not be looked at as merely natural resources for mass human extraction. Planet Ocean: <https://youtu.be/eH1s9GCqPKo>

- If sea lions do not get enough to eat they can become very cold and are susceptible of catching hypothermia, pneumonia and dying. <http://tinyurl.com/l3br63t>

- These numbers only represent those animals that have been brought into a rescue or have received assistance and that many more animals remain uncounted and suffering on the beaches waiting for help.

<http://tinyurl.com/nqlxqdh>

- o Over four months 185 CSL were observed and 161 of these animals were never observed before at the dam, so it is far from being "only" the "worst" & "repeat" offenders that are being targeted and killed as some have suggested.

<http://tinyurl.com/nvk9kxn>

- o ODFW & WDFW killed thirty CSL at the Bonneville Dam in 2015. All for consuming some fish out of the Columbia River. Example: C092 trapped and branded 04/21/15 and killed 05/19/15 at the Bonneville Dam. He was observed at the dam for 6 days and observed consuming two salmon. Many sea lions have cruelly suffered his same fate and the lethal of take of sea lions at the Bonneville Dam needs to end.

We Have Met the Enemy and He is Us –Walt Kelly's Pogo Earth Day Poster, 1970

COUNCIL_FUKUSHIMA_STATEMENT_OCT_2013<http://www.indigenoussaction.org/wp-content/uploads/COUNCIL_FUKUSHIMA_STATEMENT_OCT_2013.pdf>

Census: Oregon, Washington populations climb more than 1 percent <http://tinyurl.com/pkt4nza>

Sea lions are what scientists' call an Indicator species, and their health is a direct reflection of the over all health of our environment. <http://tinyurl.com/phw9yse>

- When all of the resident fish in Oregon are labeled with a consumption warning that NOBODY is supposed to be eating them unfortunately, sea lions can not read fish consumption warnings. So they are dying from cancers and from other health related issues from hypothermia, & starvation along the west coast. <http://tinyurl.com/nqlxqdh>

BIOP

It has been said that there can be no "salmon recovery " in the Columbia Basin if fish managers lack any control over the habitat-damaging activities of the Bonneville Power Administration (BPA). The BPA is a federal agency that effectively controls river flows through its hydropower sales. 1

NMFS is a department under NOAA and that NOAA is under the Department of Commerce. NMFS is currently being sued by environmental and fishing groups for their failure to produce and salmon recovery plan that actually protects fish in 2015.

NMFS is charged with being negligent and by law they are required to develop the recovery plan, which would set federal standards and give the state direction for taking action across the region.

Many fishing and environmental groups are demanding for increased flows over the dams to aid smolts in getting to the sea and that four dams on the lower Snake River be removed to increase fish passage. They claim this will be a huge step towards protecting these iconic fish.

The reality of it is though just what kind of actual salmon "recovery" plan can the tax payer & the wild salmon really expect to receive from NMFS high atop their Corporate driven headquarters sheltered by their federal mandates to increase profits at any cost that does not include scapegoating wild salmon and sea lions?

"The strategy aims to restore habitat conditions for several anadromous salmonid species that are representative of overall aquatic ecosystem function; therefore an effective priority process would identify the best projects as those that can most improve population performance of all focal species, through improving the function of habitat formation and increasing habitat diversity." SOURCE ODFW Pg 80.

“ The overarching goal of the Strategy is to “maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats, prevent declines of at-risk species, and reverse declines in these resources where possible.” ODFW pg 80.

WHAT CAN WE DO?

“Monitoring wildlife habitats and seeking opportunities to maintain or enhance habitat value, connectivity, linking natural landscapes, and providing refugia are primary management strategies to help balance species viability and distribution in response to a fluctuating climate.” SOURCE: ODFW Pg 44

The Importance of FISH SCREENS

Obstructions to fish passage can cause migratory fish populations to become genetically isolated and therefore more vulnerable to disturbances that cause mortality to populations or individuals. Currently, many miles of stream habitat in Oregon are not producing fish because of passage barriers. Source ODFW Near shore strategy Pg 38

WDFW working in conjunction with the U.S. NAVY discovered that there are 30,000 blocked fish passages in Washington State alone, and that left unaddressed they are a huge detriment to successful salmon recovery. <https://youtu.be/BsAaNh2OZsA>

- The salmon need to be able to reach their spawning grounds, and sufficient escapement goals need to be met to help feed the ecosystem. With 30,000 blocked fish passages in Washington State alone there is a lot of work to be done.
- The most current information shows that approximately 27,800 fish passage artificial obstructions (those structures, such as culverts, dams, tide gates, levees, etc., placed in fish bearing streams that hinder, or have the potential to hinder fish passage) exist in Oregon. SOURCE: ODFW Near shore strategy Pg 41

“Although there are currently no requirements to ensure passage for wildlife, ongoing efforts to replace culverts present opportunities for developing, testing and implementing methods to maximize benefit for a variety of species.” ODFW Pg 42

Fish passage restoration is a key to helping native fish adapt to more extreme weather: Habitat connectivity for aquatic species means removing artificial barriers to migration, such as dams and poorly placed culverts. Restoring fish passage ensures that all life stages of all native migratory fish species, as well as aquatic wildlife, are able to move to habitat that meets their needs within a watershed. SOURCE : Near Shore Strategy ODFW Pg 39.

In 1989, the Oregon Legislature passed Senate Bill 148 (ORS §498.326) which required the Oregon Department of Fish and Wildlife (ODFW) to determine the needs for and location of potential fish screening projects.

Further direction in ORS §498.306 requires ODFW to identify 3,500 priority unscreened diversions.

An initial report of priority unscreened diversion was released in 1990 (An Inventory of Water Diversions in Oregon Needing Fish Screens – prepared by David Nichols, ODFW, 1990. Source:<http://tinyurl.com/nfs7s4l>)

DO the MATH : 3,500 x 3 salmon per culvert = 10,500 salmon killed and that is more salmon consumed by all the sea lion’s combined at the Bonneville Dam in 2015. — Fish screens that meet lamprey criteria are needed as well with a full time crew employed to maintain them in watersheds across Oregon /Washington. This will actually help save the salmon that scapegoating sea lions for their sustenance needs will not <http://tinyurl.com/qbu4q9k>

“Several monitored fish screening/trap designs in Oregon and elsewhere in the Pacific Northwest have shown that thousands of young salmonids can be lost in a single unscreened diversion in one season.(Baki, Pete (Pg 6, 1).

<http://tinyurl.com/ogu84mp>

Thousands of water diversions remain unscreened in Oregon, placing fish at risk." (Pg. 2, 5) Curt Melcher, Interim ODFW 2013 -15 fish screen report. Source: <http://tinyurl.com/ojsybay>

"Thousands of water diversions remain unscreened in Oregon, placing fish at risk." Curt Melcher (Pg. 2, 5) (11).

Barriers are frequently associated with irrigation, municipal, industrial and hydroelectric water diversions that can cause fish loss in the millions. ODFW Pg 42

Similarly, improperly sized culverts can impair passage of amphibians, small and large mammals and other terrestrial species, forcing wildlife to cross roads where they are vulnerable to vehicles and predators. Providing passage at these artificial obstructions is vital to recovering Oregon's native migratory fish populations. Source: ODFW Pg 38

Many unscreened diversions current result in fish being lost in irrigation systems. ODFW Pg 39

"Identifying additional funding sources and incentivizing voluntary landowner passage and screening would be greatly beneficial. A further recommended step is increased data collection in support of the statewide barrier inventory, which will better define "unknown" barrier types and improve our ability to prioritize artificial obstructions for fish passage." ODFW Pg 42

On Washington's Long Beach Peninsula, a recently spotted a sea lion wracked by seizures typical of domoic-acid poisoning. 06/15/2015 NOAA Fisheries mobilizes to gauge West Coast toxic algal bloom<http://www.westcoast.fisheries.noaa.gov/mediacenter/6.15.2015_final_algal_bloom_pr.pdf>

- The animal arched its neck repeatedly, then collapsed into a fetal position and quivered. "Clearly something neurological was going on." Source : <http://tinyurl.com/oo38y2x>

National ocean acidification study finds Northwest among hardest-hit regions. SOURCE: <http://tinyurl.com/onqvz7>

The proposed bill to strip all oversight and prevent the public from suing and directing outright violence to be unleashed upon sea lions by some congressional leaders being and supported by ODFW's Robin Brown and Curt Melcher which is very alarming, sets a bad example, leads to bad behavior that can lead to violent acts to be inflicted upon sea lions by those inclined to do so, and has no place in a humane society nor within an agency such as ODFW.

- Sea lions also are the victims of many horrible menacing and violent hate crimes. <http://tinyurl.com/ns5je32>
<http://tinyurl.com/p2foqmf>

- Violent acts against animals are considered recognized as indicators of a disease of the psyche that is not limited to animals. Source: <http://tinyurl.com/n7mwg7v>

<<https://www.animallaw.info/>>

- The Link: Cruelty to Animals and Violence Towards People <http://tinyurl.com/ph89zje>

- "It is brazen that these people will shoot these animals that are federally protected," said Rice. "It's really alarming." He also suspects the controversy over the sea lions at the Bonneville Dam may be contributing to the shootings. "The fact that it is something the state authorities are doing may give people the idea that is OK for them to shoot them, too," said Rice. "It is not OK." Source: <http://tinyurl.com/7xkya9v>

- In the end it is the Science that is quicker to change than bad policy. Unfortunately, such as with Oregon still participating in the "lethal" take program which has been documented can lead to "vigilante" type behavior which has led to abuse & violence to be inflicted upon the sea lions by those inclined to do so. <http://tinyurl.com/qhn4vn5>

- And this is another reason out of many as to why ODFW needs to stop scapegoating and participating in the "Lethal Take" of sea lions for consuming some fish below the Bonneville Dam.
- It is not in the public's interest and absolutely unacceptable for ODFW to work to expand hazing and killing of sea lions to the coast. If the sea lions do not have the coast. What do they have? What do any of us have?
- In the end it is the Science that is quicker to change than bad policy. Unfortunately, such as with Oregon still participating in the "lethal" take program which has been documented can lead to "vigilante" type behavior which has led to abuse & violence to be inflicted upon the sea lions by those inclined to do so. <http://tinyurl.com/qhn4vn5>
- We have seen a steep increase in the number of sea lions washing up shot on the Oregon/Washington coast. It is SLDB's position that some of this violence can be quelled if only the States will agree to no longer participate in such austerity, & sea lion hate slinging and rightfully share fish with the sea lions because humans have many other food and habitat choices that they do not. <http://tinyurl.com/ohyjy5r>
- It will do great harm to establish a five year bypass of all oversight regarding sea lions on the Columbia River. The sea lions need more protection not less.

The U.S. Environmental Protection Agency's (USEPA) Science Advisory Board has listed loss of biodiversity as one of the four greatest risks to natural ecology and human wellbeing (USEPA1990).

NIS SPECIES : The Columbia River was intentionally stocked with bass, walleye, and other non-native fish to benefit sport fishermen and the states limit what fishermen can catch in order to keep these non-native fish abundant. These fish eat up to 2 million young salmon each year. and compete for habitat. Finally catch limits have been lifted to reduce this impact. Read the study at the link below .

"A biological invasion is underway across the United States and on every other continent. In Oregon, non-native organisms are arriving and thriving, sometimes at the expense of native fish and wildlife, their habitats, and the state's economy." SOURCE ODFW Pg 17.

Although , we can not blame over fishing for creating all of the wild salmon's woes because there have been many contributors and many causes that have contributed to the decline of the wild salmon that have far bigger and devastating impacts on the wild fish than the sea lions

a. The study found that these non native fish kill more baby salmon than all of the 4 Hs (Hydro, Habitat loss, Hatchery and non native fish inundation and the Harvest) combined.---Beth L. SANDERSON, KATIE A. BARNAS,AND A. MICHELLE WARGO RUB 2009 Nonindigenous Species of the Pacific Northwest: An Over looked Risk to Endangered Salmon

The full article: Can be read at the link below.

<http://bioscience.oxfordjournals.org/content/59/3/245.full>

* International shipping (including its ballast water component), followed by aquaculture, have been identified as the two greatest sources of introductions of marine and estuarine invasive species worldwide (Molnar et al. 2008).

"Additionally, bass and other warmwater species which may prey upon juvenile salmon and trout are valued sportfish for a large number of anglers." SOURCE ODFW

"We're not interested in taking on the recreational fishing industry," says NOAA's Beth Sanderson.

Many of the introduced stocks, such as bass and walleye in the Columbia and Snake rivers, are prized fisheries regulated by the states.

- SOURCE: Posted in Regional News Saturday, March 7th, 2009 Non-native fish pose substantial threat to salmonids The Columbia Basin Bulletin March 6, 2009 <https://youtu.be/eDtdrpYEvH4>

ODFW provides angling for some of these species by transplanting fish from one waterbody to another, by stocking hatchery-produced fish in locations where impacts to native fish are believed to be acceptable, or by transplanting fish to ponds more accessible for angling. SOURCE ODFW Pg 18

Unfortunately, the ecological and food web effects of non-native invertebrates have received limited attention, and their potential effects on the Basin's native fishes are still poorly described. Given that aquatic invertebrates constitute much of the food of native fish and wildlife (McCabe et al. 1997).

Source: <http://tinyurl.com/oprru9g>

- In Columbia River reservoirs, large channel catfish (> 67 centimeters) consume thousands of juvenile salmon, which comprise 50% to 100% of their diets (Vigg et al. 1991<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-64>>).

Future increases in temperature, due to ongoing climate change, will favor further expansion of warmwater piscivores, particularly largemouth bass and channel catfish (Poe et al. 1991).

In addition, smallmouth bass have changed the size-based predation dynamics in some areas where they have largely displaced the native predator, northern pikeminnow (*Ptychocheilus oregonensis* Fritts and Pearsons 2006<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-15>>)

- * The presence of nonindigenous fishes poses one of the greatest threats to the persistence of healthy native fish populations (Lassuy 1995<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-30>>, Richter et al. 1997<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-53>>, Rahel 2002<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-50>>).

- * The northern pikeminnow is clearly the most abundant and significant fish predator of juvenile salmonids in the lower Columbia River above Astoria (Friesen and Ward 1999).

PIKE MINIOW BOUNTY PAID to anglers in 2014. GRAND TOTAL = \$572,185.00 <http://tinyurl.com/okhfrl2>

- Results from studies to date indicate that juvenile shad prey heavily on zooplankton taxa, which are also a primary prey resource for juvenile Chinook in the same habitats (Haskell et al. 2006a<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-23>>).

o Non-native riparian plants have been shown to change nutrient dynamics of riparian soils and associated streams. It is also well known that riparian vegetation has large effects on aquatic food webs (Naiman et al. 2005).

- For instance, there has been a dramatic decrease in the native fish biota between 1984-85 (Palmer et al. 1986) and 1995 (Barfoot et al. 2002).

"Oregon's rivers and lakes are vulnerable to aquatic invasive species such as the highly invasive zebra and quagga mussels." ODFW Pg 18

- * Quagga/ Zebra Muscle inspection, detection, education, and enforcement is needed because approximately 50,000 boats a year can launch at some sites throughout Oregon and Washington. <http://tinyurl.com/ogjvxt7> More attention & funding ought to be placed to help stop this invasive species from entering our waterways. <http://tinyurl.com/ot4xmtl> and stop spending so much money & time monitoring, hazing, trapping, branding and killing sea lions for their sustenance needs which are minimal compared to the bigger impacts facing salmon recovery that ODFW does have the power to change —The Silent Invasion<<http://www.opb.org/silentinvasion>>

- Sea Lion Defense Brigade can support that having Sea lions on the Columbia River actually aids the state in salmon recovery not hinders it.

1. National Marine Fisheries congressional reports to congress state that these salmon runs are listed as recovering and stable. (Pg 10). <http://tinyurl.com/nnyyc5t>

* Most listings cite non-native fishes as the cause of endangerment, typically involving changes in the food web, increases in predation and competition, and infection by non-native pathogens or parasites

(Mack et al. 2000, Simberloff et al. 2005)

* At least 54% of the resident fish species in Washington, 50% in Oregon, and 60% in Idaho are non-natives (Sanderson, et al. 2009).

* The sea lions are opportunistic eaters and they consume a variety of prey. Their diets tend to fluctuate by location and prey available and in the most abundance the Sea Lion's aid the state in salmon recovery by consuming some of these NIS & hatchery fish.

"Very small fry that enter the Columbia River estuary appear to be surviving and recruiting to later life stages ...," he said. "This is relevant because the prevailing thought has been these small fish, once departed from their natal stream do not survive." Source: <http://www.cbbulletin.com/433280.aspx>

- "Also, food-web models have been developed (Harvey and Karieva 2005<<http://bioscience.oxfordjournals.org/content/59/3/245.full#ref-22>>) that indicate that juvenile shad may act as a prey subsidy to larger predators of salmonids." <http://tinyurl.com/oprru9g>

* Over 2 MILLION American Shad crossed the Bonneville Dam in 2014. Source: Bonneville Dam Fish count

* Over one million Chinook salmon crossed the Bonneville Dam in 2014 even with all the sea lions which is more evidence that sea lions have an ancient relationship with this amazing fish that ODFW ought to support.

* A more ecological friendly or ecosystem management style is preferred by ODFW biologists that does not place the importance on one protected species above the other and as an agency seek to embrace a holistic approach to eco system recovery that can not be obtained by scapegoating sea lions.

- "This system perfectly demonstrates the need for eco-system-based management," says Dawn Noren. The NOAA physiologist. I wonder why NOAA does not follow this principle with sea lions and salmon at the Bonneville Dam.

Instead they just slaughter the sea lions.

- Could the Big Money and Politicians who benefit from recreational fishing industry have something to do with the different management by NOAA? From ACS: Orcas and Salmon Management

It is time for ODFW to stop killing sea lions at the Bonneville Dam fro consuming some fish out of the Columbia River.

1. Sea Lions are important to the Pacific Northwest ecology and they assist the salmon in a myriad of ways. <http://islandpress.org/trophic-cascades>

- Sea Lions Have an Ancient Predator Prey Relationship with the Wild Salmon that the Hatchery fish do not (Pg 3 & 5) <http://tinyurl.com/q7yf8mf>

When Sea Lion's eat the whole eco system gets to eat. Humans just extract fish and other resources and the eco system is starving. Sea lions only consume some fish. They do not allocate it ALL for themselves. Any conservation plan ought to begin with ODFW sharing fish with the sea lions and seabirds. Considering they make so many that they do not car to spend money to investigate

3. The sea lions have an important job to do.

- The Columbia River Estuary has always been home to sea lions and seals. The Columbia River Estuary extends 146 miles from the mouth of the Columbia River to the Bonneville Dam (pg 3 & 5) Source: <http://tinyurl.com/q7yf8mf>
- The sea lions help keep the genetic strength of the wild fish strong and they aid in bio diversity of the Columbia River habitat. The sea lions help create the lushness of phytoplankton which are the cornerstone of the food chains for all life in the ocean. Sea lions and seals help feed and assist with fish distribution throughout the basin. The science supports the importance of key stone species in our region and that removing them causes a great detriment to the ecology. <http://tinyurl.com/nmr77v9>
- "Maybe it's more accurate to describe pinniped poop as the nearshore fertilizer equivalent to a gardener's Miracle-Gro because it promotes the well-being and lushness of phytoplankton populations, from giant kelp beds to microscopic marine algae." Source: <http://tidelines.org/columns/scoop-pinniped-poop-0>

"The volume of plant plankton has declined across much of the world over the past century, probably as a result of rising global temperatures. But the decline appears to have been steepest where whales and seals have been most heavily hunted <<http://www.newscientist.com/article/mg21128201.700-vital-giants-why-living-seas-need-whales.html>>. The fishermen who have insisted that predators such as seals should be killed might have been reducing, not enhancing, their catch." Source: <http://tinyurl.com/pnem8jn>

Marine mammals reside in the area year round and they will be greatly affected by the increased marine vessel traffic.

In 1998, NMFS identified ship strikes as one of the primary threats to the endangered blue whale in the Pacific. (NMFS,1998).

At least 18 fin whale mortalities and injuries due to ship strikes were conclusively documented off the coasts of California, Oregon, and Washington between 1993 and 2008. (NMFS 2010).

- "The word salmon comes from the Latin salire, to leap, which clearly captures the return of salmon to rivers and their upstream migration to spawn. Salmon the leaper creates in my mind a picture of a salmon jumping over falls, log jams, and beaver dams on its journey to close the cycle and start a new generation. Salmon may be a product to some, but when I look inside the word "product" I see no trace of the leaper" Jim Lichatowich (99).

According to the Oregon Values project where a number of surveys were taken to gauge the pulse of Oregonians about what they value. Here are a few examples of their findings and another reason to stop scapegoating sea lions for their sustenance needs.

Excerpts: from the link below

Environmental Quality and Protection Are Important:

Oregonians value the state's natural beauty, outdoor recreation opportunities, and relatively clean air and water. They also value a good economy, but they want an approach to economic development that recognizes the importance of the state's natural environment to its quality of life.

Asked to choose: A. Economic growth should be given priority even if the environment suffers to some extent or B. Protection of the environment should be given more priority even at the risk of slowing economic growth, 57% of Oregonians favor environmental protection and 35% choose economic growth (S1.27).

This finding is validated through all three surveys using a number of different question styles, levels of detail, and relationships with other cultural values. When asked qualitatively what they value about Oregon (as an open response in their own words), fully 78% of the responses include environmentally positive terms, 17% refer to the friendliness of the people and Oregon's climate, and 5% touch broadly on other topics. "Natural landscapes," "cleanness of air and water,"

“green landscape,” “forests and mountains,” and “open spaces” are the kinds of spontaneous replies we encountered again and again, demonstrating that values related to environmental quality are paramount to Oregon’s citizens.

Natural Resources : protection of clean air and water, was judged important by 74%, just below K-12 education services and public safety like fire and police protection (\$1.15,8,7).

Climate Concern Comes of Age:

Public opinion appears to be crystallizing on this issue after several decades of skepticism and uncertainty. Given a choice between statement A (Climate change requires us to change our way of life such as driving less or living more simply) and statement B (If climate change becomes a problem we can deal with it later) 72% opt for “change way of life” vs. 21% who say “deal with it later”—more than a 3:1 ratio (\$1.32). This result was consistent across all five geographic regions, with Portland’s metro counties going over 4:1 in favor of statement “A” and Eastern Oregon lowest but still higher than 2:1. SOURCE:<http://oregonvaluesproject.org/findings/top-findings/>

A. Warming waters of the region wreak havoc on migrating fish <http://tinyurl.com/nvhr7xl>
<http://tinyurl.com/orqmq4w>

- Extreme Water Temperatures & Low Flows in Pacific Northwest Rivers Creating Lethal Conditions for Salmon - <http://tinyurl.com/ph9uyfw>

- * All of the mainstem Columbia sites and the John Day and Umatilla Rivers exceeded Oregon’s Columbia Basin 20 C temperature criterion intended to protect salmonids (State of Oregon, OAR 340-041-0101) Salmon are cold water fish. <http://tinyurl.com/p7nh6d3>

- * Bioenergetics simulations of juvenile shad during their July-September feeding period in John Day Reservoir during years of warmer (1994) and cooler (1996) reservoir temperatures show that juvenile shad grow faster and consume more food during warmer conditions than during the cooler conditions (data from Haskell et al. 2006).

The warming polluted waters of the Pacific Northwest will no longer be life sustaining for salmon whether there are sea lions on Columbia/ Willamette Rivers or not if we do not take action today to mitigate the past errors of our ways. <http://wildfishconservancy.org/.../extreme-water-temperatures...<http://wildfishconservancy.org/about/press-room/press-releases/extreme-water-temperatures-low-flows-in-pacific-northwest-rivers-creating-lethal-conditions-for-salmon>>

Atmospheric carbon dioxide absorbed by ocean waters has resulted in more acidic ocean waters in Oregon (Feely et al. 2008). SOURCE ODFW Pg 4

“The ocean isn’t just the water, it’s the entire environment,” says DiMaggio. Source:
<http://tinyurl.com/lqyg5ey>

b. Drought devastates counties in Oregon+ Washington + California <http://tinyurl.com/q2jh5m3>
<http://tinyurl.com/q2m8cwr>

- 06/17/2015 Drought Conditions Force Difficult Management Decisions for Sacramento River Temperatures<http://www.westcoast.fisheries.noaa.gov/mediacenter/pr061615_shasta.pdf>

c. Hydro Power dams<<https://nrmp.dfw.state.or.us/crl/images/SCPS/dams.jpg>>. : NMFS 2008

The Biological Opinion (BiOp) <http://tinyurl.com/njcctc8>

- * 2014 Biological Opinion (BiOp): Read SOS’s factsheet on the 2014 Federal Salmon Plan here.<http://www.wildsalmon.org/images/stories/PDFs/Fact_Sheets/2014.Final.BiOpSOS.Factsheet.pdf> Hydrological

changes associated with dams significantly change freshwater fish assemblages, both above and below dams in the Columbia River Basin (Paragamian 2002) and elsewhere (Quinn and Kwak 2003, Greathouse et al. 2006, Propst et al. 2008). <http://tinyurl.com/nujhx8x>

Aquatic insects require a series of temperature cues to produce eggs, hatch, and develop into nymphs. Over time, dammed rivers behave more like lake ecosystems, losing their capacity to support riverine fish species. ODFW Near shore strategy Pg 36.

Puget Sound orcas need salmon to survive. Dammed to Extinction calls for lower Snake River dam removal to save our killer whales. <http://tinyurl.com/odfahe4>

Sea Lion Defense Brigade (SLDB) is in support of the removal of the four lower dams on the Snake River <http://tinyurl.com/qxocbqu> to save the salmon the orca and many other species that rely on cold flowing water not slack water lakes the temperature of hot tubs, Salmon are cold water fish. <http://tinyurl.com/qxocbqu>

d. Habitat Losses—over 50% of the original salmon spawning grounds have been removed from production on the Columbia River. SOURCE: DEQ REMAP 2009

- Studies conducted by DEQ and ODFW showed poor condition for fish (15% of stream miles) and macro-invertebrates (40% of stream miles) in the North Coast [1]. Temperature, sediment (bedded, total solids and turbidity) and dissolved oxygen have been identified as pollutant stressors that affect these fish and aquatic life throughout North Coast subbasin in part due to inadequate streamside shading and vegetation, and in the case of temperature, warm water discharges. (pg 7) NCP. Source : please see the link below
- At the broader Coastal Coho ESU scale (results were not summarized specifically for the North Coast), the most extensive stressors were temperature, sediments (total solids and fines), and nutrients (phosphorus and nitrogen). Stressors that posed the greatest risk to the aquatic life were total solids, fine sediment, dissolved oxygen, the presence of non-native fish, an dpH (pg16). Source: <http://tinyurl.com/nuk896u>
- Habitat disturbance grew worse with increasing land use intensity, declining from forestry through range, agriculture, and urban areas. Roughly 40% of the riparian area was characterized as having 25% or more bare ground, with some sites nearly barren. Large and small woody debris was absent or sparse in 90% or more of the LMC. Invasive Himalayan Blackberry (17% of the LMC) and English Ivy (4% of the LMC) appeared to be held in check by rip rap and basalt. The limited extent and fair condition of off-channel habitat and aquatic vegetation reflect the loss of salmonid rearing habitat due to anthropogenic activities. SOURCE:DEQ REMAP 2009 <http://tinyurl.com/pzrmvt9>

Oceans Are Losing Oxygen—and Becoming More Hostile to Life

<http://tinyurl.com/pu4734o>

e. The Hatchery fish : In 2009, an independent blue-ribbon science panel reported to Congress that it was concerned about the impacts wild fish faced from competition with hatchery raised fish. The panel recommended reforming hatchery management, yet the federal government admitted in a 2012 report that no changes have been made.

90% of the salmon caught in the Columbia River originate from hatcheries, as do 88% of all steelhead. Source <http://tinyurl.com/7bfaufs>

- “Every major peer-reviewed scientific study confirms the presence of hatchery fish causes an often-rapid decline in wild population.” The federal government makes the connection too, Tomine said, “citing genetic pollution from hatchery programs as the main factor in Oregon wild-steelhead decline.” Source :<http://tinyurl.com/ncmqvz>

f. The Harvest / extinction<<https://nrimp.dfw.state.or.us/crl/images/SCPS/extinct.jpg>> wild salmon are scappogated for the maximization of the harvest. <http://tinyurl.com/qafckl4>

- In 2008 Columbia River fisheries incidentally killed 16% of ESA fish, well over a quota of 11%. In 2009 10.2% of ESA were killed, under quota, and in 2010 17% were killed, over the quota of 13%” .-- HSUS Sharon Young’s testimony on June 10, 2011.
- In 2014 according to the 2014 ACOE field report stated that the California sea lions consumed 1.6% of the run at the Bonneville Dam and this is deemed significant. While Humans took upwards of 12% of this very same ESA fish and yet, this is considered insignificant. <http://tinyurl.com/og4yrj3>
- There is Extra fish for humans yet, why not any for the sea lions? <http://tinyurl.com/nfpoyh>
- Recreational watercraft can disturb wildlife, and fuel runoff can pollute water. ODFW Pg 27
- The sin of salmon farming <http://tinyurl.com/qx4quoj>
- Cancer rates are 50 % higher in human populations that eat fish weekly out of the Columbia River than once a month. SOURCE: <http://tinyurl.com/oad2cdc> <http://tinyurl.com/q6gbnd7>

Bioaccumulation and biomagnifications of chemical contaminants can reduce or eliminate critical components of the food web, leading to food shortages for higher trophic levels. Further, it can reduce the ability of species and individuals to cope with normal environmental stresses due to behavioral deficiencies, slower somatic growth rates and increased disease susceptibility. This problem is rapidly expanding and could negate many of the restoration efforts. Further, fish migrating from the oceans to fresh water transport persistent industrial pollutants acquired at sea (Pg 3). Source: <http://tinyurl.com/qavrsaq>

- For example, the U.S. Department of Energy Hanford Site near Richland, Washington, produced radioactive materials until the early 1990s; high concentrations of PCBs and other organic chemicals have been measured for several decades in fish collected downstream from the facility (USEPA 2002). <http://tinyurl.com/q8I5fac>
- The more persistent organochlorine pesticides widely used in previous years were largely replaced in the 1970s by less persistent, but often more toxic organophosphates (OP), carbamates (CB) and pyrethroids. The OPs and CBs are anticholinesterase inhibitors which affect the central nervous system and have been shown to alter salmon swimming behavior (Sandahl et al. 2005, Brewer et al. 2001), predator avoidance behavior (Scholz et al. 2000), and foraging behavior (Morgan and Kiceniuk 1990).
- The full extent of glyphosate’s eco-toxicity has emerged in new experiments. At concentrations of several parts per million, Roundup is lethal to the neotropical fish *Piaractus mesopotamicus*, a native to Brazil and Paraguay of considerable ecological and commercial value (Shiogiri). Exposure of the freshwater fish *Channa punctatus* to similar concentrations of Roundup caused oxidative stress, lipid peroxidation and DNA damage in blood and gill cells (Nwani).

<http://tinyurl.com/nm2y97y>

- US EPA forced to study impacts of Roundup on endangered species

<http://tinyurl.com/o9ognhg> <http://tinyurl.com/parvc6f>

- Once applied, glyphosate and its break down products are transported throughout the plant into the leaves, grains or fruit [5]. They cannot be removed by washing, and they are not broken down by cooking [6]. Glyphosate residues can remain stable in foods for a year or more, even if the foods are frozen, dried or processed [7]. Some processing may even concentrate the residues; for example, during production of wheat bran the glyphosate residues may be concentrated by a factor of four [8]. <http://tinyurl.com/oqdx5s>

* In order to improve controls over nonpoint sources of pollution, Oregon rules encourage land management agencies to implement programs to regulate or control runoff, erosion, and turbidity on a basin-wide scale. The narrative rules prohibit,

"The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry..." (OAR 340-041-0007 (12)).
SOURCE: DEQ REMAP 2009 : <http://tinyurl.com/qdvounb>

8.8 million tons of plastic dumped into ocean annually, study estimates<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.oregonlive.com%2Ftoday%2Findex.ssf%2F2015%2F02%2F88_million_tons_of_plastic_dum.html%23incart_river&h=MAQHAEWbo&s=1>

Excerpt: The amount of plastics estimated going into the water is equal to how much tuna is fished year, so "we are taking out tuna and putting in plastic," study co-author Kara Lavendar Law said in a news conference at the American Association for the Advancement of Science conference.

Yakama Nation Sues Army Corps of Engineers in Columbia River Superfund Site Cleanup source:
<http://tinyurl.com/o983nq9>

TOURISM is the life blood for the iconic OREGON COAST

Most coastal counties are experiencing steady growth in tourism. Visitation is increasing at state parks (White et al. 2012), and employment at motels/hotels and food service industries continues to increase.2

There are many benefits to retain and gain by embracing & protecting wild salmon & sea lions.
<http://tinyurl.com/pzkmta2>

- The salmon need cold water to be able to survive in the region. The sea lions need sustenance, & safe haul out sites where they can seek respite on the Oregon coast and along the Columbia River route.

ODFW, & WDFW's survey data reflects that there ought to be more opportunities to access non violent and non invasive activities like wildlife viewing. <http://tinyurl.com/klwqvbf>

The majority of people in Oregon are no longer being represented by ODFW nor is our wildlife being protected by those beholden to do so.

- * ODFW and WDFW own numbers reflect that --Hunting and fishing are in decline while wildlife watching is number #1 in the US and a favorite activity for visitors and locals across Oregon and Washington State. Source <http://wdfw.wa.gov/viewing/tourism>

- * 2011 Washington Department of Fish and Wildlife (WDFW) compared hunting, fishing and wild life watching. The survey shows that non lethal-- non invasive activities brought in more money than hunting and fishing and that more people participate in a myriad of hugely popular wildlife watching & other non violent outdoor related activities yearly. <http://tinyurl.com/qgwh94m>

- * In Portland, crowds gather nightly every autumn to watch 35,000 migrating Vaux's swifts swirl and funnel into an old chimney at Chapman School; the largest known Vaux's swift roost in the world. Source ODFW Pg 3

By Embracing sea lions and creating wildlife watching opportunities for folks in the Pacific Northwest is good for tourism and creates new business opportunities. Most of these dollars stay in the state & are the vital life blood for so many of our local communities. <http://tinyurl.com/o4equry>

People have long appreciated the spectacle of thousands or millions of animals gathered in one area. Oregonians enjoy wildlife viewing at several popular festivals that celebrate seasonal animal gatherings, including wintering bald eagles and migrating songbirds, shorebirds, or waterfowl. SOURCE ODFW Pg 3 ----- AND SEA Lions

- Sea Lions are voted as a favorite attraction in Astoria, in 2014. <http://tinyurl.com/pdvll4b>
<http://tinyurl.com/nswsfvy>

- * Sea lions are the favorite attraction at San Francisco at Pier 39.

- * "68% of our visitors visit the sea lions during a visit to PIER 39, making the sea lions are most popular attraction at the PIER."

Source: PIER 39 2012 Visitor Intercept Study conducted by Rigney & Associates and Destination Analysts.
<http://tinyurl.com/o3qj7zt>

Whale Watching Spoken Here<http://www.oregonstateparks.org/index.cfm?do=thingstodo.dsp_whaleWatching>
<http://tinyurl.com/ppfvnxa>

"In addition to regulating species abundance, distribution and diversity, top predators provide essential food sources for scavengers (Sergio, et al. (2006) and remove the sick and weak individuals from prey populations. (Temple, S.A. (1987).

- * Our results imply that marine top predators play a critical role in maintaining both ocean health and global climate. <https://youtu.be/M18HxXve3CM>

- The benefits of re-wilding- <http://tinyurl.com/qgevreu>

The U.S. Environmental Protection Agency's (USEPA) Science Advisory Board has listed loss of biodiversity as one of the four greatest risks to natural ecology and human wellbeing (USEPA1990). <http://tinyurl.com/pkvudrc>

The data shows us that it is better to not fund the killing sea lions for consuming as little as one fish at the Bonneville Dam in the name of saving the salmon.

- Our study reflects that there are many projects worthy of our time and investment to "aid" in salmon "recovery" and science shows us that it is paramount for the wild salmon's sake that scapegoating and killing sea lions ought not to be part of any progressive wild salmon "recovery" program.

"Cycles and renewal are a fundamental part of the miracle of life and of the biophysical process that support it. Look inside the word product and you will see no ecological cycles." Jim Lichatowich (99).

The bigger impacts facing the wild fish ought not to be overlooked if we truly want to save the wild salmon.

Human Predation on Salmon: <http://tinyurl.com/ph67292>

- Progressive overfishing that leads to serial depletion of the highest trophic levels is called "fishing down the food web" (Pauly et al. 1998), <http://tinyurl.com/ofa9h7c>

1917 Purse seines are prohibited in the Columbia

<http://tinyurl.com/qafckl4>

2014 Purse seines are back on the Columbia River. The government killed 6,000 ESA salmon in just one seine test
<http://tinyurl.com/nbk26cn>

Commercial fishermen unhappy with Columbia River

reforms<<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.columbian.com%2Fnews%2F2015%2Fjan%2F21%2Fcommercial-fishermen-unhappy-columbia-river-reform%2F%23&h=xAQFQk776&s=1>>

Excerpt: Robert Sudar, a fish buyer from Longview, said all the talk about growth in sport fishing is simply not true. "The trend on angler license sales is down," he said. "There isn't a growth in that industry." <http://tinyurl.com/pb6ktv7>

a. Tac Mortality Rates 2014: <http://tinyurl.com/ndo3hdy>

- Chinook: Beach 35% Purse 22%
- Coho: Beach 38.3 % Purse 28.9 %
- Steelhead: Beach 8.35 Purse 3.3%

b. The Human take is 12% on the same ESA salmon that the sea lions are being killed for consuming 1.6 %. Source <http://tinyurl.com/ph67292>

- "On a regular basis, NMFS deems takes well in excess of sea lion predation levels, which peaked at 4.2%, to be insignificant to fish recovery (PG12). <http://tinyurl.com/qbu4q9k>

- Overfishing began centuries ago but accelerated dramatically after World War II, when new technologies armed industrial fleets with sonar, satellite data and global positioning systems, allowing them to track schools of fish and find their most remote habitats. The result is that the population of big fish has declined by 90% over the last 50 years
Source: <http://tinyurl.com/pu3wslj>

- Increasing evidence shows that, far from enhancing global food security, salmon farming is hastening the collapse of the world's fisheries, starting with the Pacific Northwest's remaining populations of wild salmon. In other words, by opting for farmed salmon today, we could be guaranteeing ourselves a future in which wild fish will forever be off the menu.
SOURCE: <http://tinyurl.com/p9upzro>

- In 2015 strong run returns has the sport fishing season extended for humans and this abundant harvest has been easily obtainable with sea lions in the Columbia River. Over one million Chinook salmon returned to cross the Bonneville Dam in 2014 which has the ACOE calling it a "record" year. <http://tinyurl.com/qy4xnpb>.

- BY Catch Report 2014 Oceana <http://tinyurl.com/p95bw75>

11. There is a lot of important work that can be done that will actually help save the Salmon that does not involve blaming sea lions.

The following are examples of specific on-the-ground actions that could be done to meet temperature WQS, protect salmonid populations and also aid in the recovery of threatened and endangered salmonid species.

- * Replant native riparian vegetation
- * Install fencing to keep livestock away from streams
- * Establish protective buffer zones to protect and restore riparian vegetation
- * Reconnect portions of the river channel with its floodplain
- * Re-contour streams to follow their natural meandering pattern
- * Increase flow in the river derived from more efficient use of water withdrawals
- * Discharge cold water from stratified reservoirs behind dams
- * Lower reservoirs to reduce the amount of shallow water in "overbank" zones
- * Restore more natural flow regimes to allow alluvial river reaches to function
- * Restore more natural flow regimes so that river temperatures exhibit a more natural diurnal and seasonal temperature regime. SOURCE: <http://tinyurl.com/puhnn35>

- Although temperature is highlighted salmonid populations, it by no means is the only factor in their decline. Certainly, degradation of habitat unrelated to temperature (e.g., impassable barriers to spawning and rearing areas and physical destruction or inundation of spawning grounds), fishing harvest, and hatchery operations have all played a role in their decline. However, as described above, elevated temperatures are an important factor in the decline of salmonids and restoring suitable temperature regimes for salmonids is a critical element protecting salmonid populations” (Pg 10). Source: <http://tinyurl.com/puhnn35>

* “One specific study worth noting is by Theurer et al. (1985) in the Tucannon River in southeastern Washington. This study shows how human-caused changes in riparian shade and channel morphology contributed to increased water temperatures, reduced available spawning and rearing space, and diminished production of steelhead and chinook salmon.” Source: <http://tinyurl.com/puhnn35>

Now is the time more than ever to come together for the wild salmon and many other species of the Bio Region. It is crucial for all species that we humans foster a culture of tolerance & respect and work to build communities of peace and non violence on our rivers, in our homes and in our hearts which will attract and unite us and will help to sustain us into the future.

It is important that we protect all key stone species of the region which means supporting and protecting the native flora & fauna of the Pacific Northwest and by doing this will actually help the save the salmon and many others including ourselves.

In Closing Sea lions and salmon are both important key stone species in the Pacific Northwest Bio Region. They are both native to the Columbia River estuary ecology and the presence of sea lions helps support the food web in the estuary they do not hinder it.

“Similarly descriptions of estuarine habitats may include the various substrate components. These components include geologic origin substrates like bedrock, gravel, sand and mud, for example as well as anthropogenic substrates such as the rock of jetties or the construction materials of pilings, and the biogenic substrates such as large fallen trees. “ ODFW Pg 14

Sea Lion and salmon species need food and habitat space to survive and in the ever warming waters of Cascadia, unfortunately, now the pike minnow and the shad populations have the native fish out numbered.

There are a lot of important steps that we can take to aid the salmon that does not involve wasting tax dollars to scapegoat and kill sea lions for consuming some fish out of the Columbia River below the Bonneville Dam.

Sea Lion Defense Brigade (SLDB) invites various user groups to gather to engage in meaningful, measurable, peaceful, tolerant, generous conversations about what really constitutes wild salmon recovery, bio diversity, and supports genetic strength that has allowed the salmon and the sea lions to co exist just fine for thousands of years without human intervention.

Our research revealed that the Columbia River Sea Lion’s impacts are minimal compared to ONE intoxicated ODFW employee who crashed the state’s salmon delivery tanker spilling and killing 11,000 juvenile Chinook salmon out onto the highway.

Further research revealed the sea lion’s impacts are minimal compared to the impacts on ESA wild salmon from: Dams, Habitat loss, Harvest, NIS fish & plants, Hatchery Fish, Warm Water, Drought, Unscreened Culverts & water diversions, Deforestation, poisonous road run off compounded with a myriad of endocrine disrupting chemicals and heavy metal s that industry has leached into the Columbia /Willamette Rivers that are known to cause cancer and kill fish. These persistent pollutants have been found in the, sand, , water, fish, sea lions, orcas, & human populations throughout the Pacific Northwest Bio-Region.

It is cost effective and will provide measurable outcomes to invest in the above mentioned steps to aid in wild salmon recovery. It is clear from this research & the data reflects that to aid the wild salmon for future generations that it is crucial that big business extractors are not allowed to continue to scapegoat sea lions & other wildlife.

It is a great disservice to these amazing fish, the sea lions and future generations of Cascadians not to acknowledge that there are many impacts facing the wild fish that we have not yet addressed and that there are many other steps that we have not yet taken to help, the wild salmon that does not include removing important native predators from their native environment.

It is SLDB's belief that we can help save the wild salmon without scapegoating and killing sea lions for consuming some fish below the Bonneville Dam. And by doing so we will also assist the Orca, the eagle, the bear, and the myriad of other species that rely on this sacred "Gift" of salmon & cold flowing water for their very life sustenance not sport.

For the Sea lions, the Salmon, and the Columbia River

This report compiled by

Ninette Jones

Portland Oregon, 97217

Sea Lion Defense Brigade Volunteer

References Cited :

Baki , Pete Oregon Department of Fish and Wildlife Fish Screening and Passage Program Priority Unscreened Diversion Inventory February, 2013.

Blumm, Michael C. Hydropower vs. Salmon: The Struggle of the Pacific Northwest's Anadromous Fish for a Peaceful Coexistence with the Columbia River Power System, 11 *Envtl. L.* 211, 249-56 (1981) (explaining the mechanics of how hydropower demand affects river flows, through agreements between BPA and the U.S. Army Corps of Engineers which operates the federal dams on the Lower Columbia).

DEQ Columbia River Re Map Study of 2009: <http://tinyurl.com/qdvounb>

Dose, Jeffery "Commitment, Strategy, Action: The Three Pillars of Salmon Recovery." In *Salmon2100: The Future of Wild Pacific Salmon*. Edited by R Lackey, D Lach and S Duncan, 253-59. Bethesda , MD: American Fisheries Society 2006

European Food Safety Authority (2009) Opinion on the modification of the residue definition of glyphosate in genetically modified maize grain and soybeans, and in products of animal origin *EFSA Journal* 7(9):1310 p 17

Factors Affecting Strategy Species and Habitats ODFW

Feely, R.A., C.L. Sabine, J.M. Herndandez-Ayon, D. Ianson, and B. Hales. 2008. Evidence for upwelling of corrosive "acidified" water onto the continental shelf. *Science*, 320: 1490-1492.

Friesen, T. A., and D. L. Ward. 1999. Management of northern pikeminnow and implications for juvenile salmonid survival in the Lower Columbia and Snake Rivers. *North American Journal of Fisheries Management* 19:406-420.

Fritts AL, Pearsons TN 2006. Effects of predation by nonnative smallmouth bass on native salmonid prey: The role of predator and prey size. *Transactions of the American Fisheries Society* 135: 853-860.

Getting to Know the Nearshore Marine Ecoregion Oregon ODFW

- Harvey C, Karieva P. 2005. Community context and the influence of non-indigenous species on juvenile salmon survival in a Columbia River reservoir. *Biological Invasions*7: 651–663.
- Haskell CA, Tiffan KF, Rondorf DW. 2006a. Food habits of juvenile American shad and dynamics of zooplankton in the lower Columbia River. *Northwest Science*80: 47–64.
- Lassuy D. 1995. Introduced species as a factor in extinction and endangerment of native fish species. *American Fisheries Society Symposium*15: 391–396.
- Lichatowich, Jim "Salmon People, & Place : A Biologist's Search for Salmon Recovery." Corvallis, Oregon State University Press 2013
- Melcher, Curt ODFW 2013 -15 fish screen report. Source
- Molnar, J. L., Gamboa, R. L., Revenga, C., and Spalding, M. D. 2008. Assessing the global threat of invasive species to marine biodiversity. *Frontiers in Ecology and the Environment* 6: 485–492
- Morgan, M. J., and J. W. Kiceniuk. 1990. Effect of fenitrothion on the foraging behavior of juvenile Atlantic salmon. *Environmental Toxicology and Chemistry* 9:489-495. (C7)
- National Marine Fisheries Service. 1998. Recovery plan for the blue whale (*Balaenoptera musculus*). Prepared by Reeves R.R., P.J. Clapham, R.L. Brownell, Jr., and G.K. Silber for the National Marine Fisheries Service, Silver Spring, MD.
- National Marine Fisheries Service. 2010. Recovery plan for the fin whale (*Balaenoptera physalus*). National Marine Fisheries Service, Silver Spring, MD.
- Nichols, David ODFW, 1990 An Inventory of Water Diversions in Oregon Needing Fish Screens – prepared
- Nwani CD, Nagpure NS, Kumar R, Kushwaha B and Lakra WS. DNA damage and oxidative stress modulatory effects of glyphosate-based herbicide in freshwater fish, *Channa punctatus*. *Environ Toxicol Pharmacol* 2013, 36, 539-47.
- Oregon Nearshore Strategy - Public Review Draft June 19, 2015
- Poe, T. P., R. S. Shively, and R. Tabor. 1994. Ecological consequences of introduced piscivorous fishes in the lower Columbia and Snake rivers. Pages 347-360, in Stouder, D. J., K. L. Fresh, and R. J. Feller, editors.
- Salmon Hatcheries as Fish Factories: Forgetting the Lessons of Leopold *SJEL* : Seattle Journal of Environmental Law.
- Sandahl, J. F., D. H. Baldwin, J. J. Jenkins, and N. L. Scholz. 2005. Comparative thresholds for acetylcholinesterase inhibition and behavior impairment in coho salmon exposed to chlorpyrifos. *Environmental Toxicology and Chemistry* 24:136-145. (C7)
- Sanderson, L Beth KATIE A. BARNAS, AND A. MICHELLE WARGO RUBNonindigenous Species of the Pacific Northwest: An Over looked Risk to Endangered Salmon 2009.
- Sanderson L Beth, Posted in Regional News Saturday, March 7th, 2009 Non-native fish pose substantial threat to salmonids The Columbia Basin Bulletin March 6, 2009“ <http://tinyurl.com/oprru9g>
- Save Our Wild Salmon, "Why do scientists support partial removal of the 4 lower Snake River dams?"
- Scholz, N. L., and 6 others. 2000. Diazinon disrupts antipredator and homing behavior in Chinook salmon (*Ocorhynchustshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 57:1911-1918. (C7)

Rahel FJ 2002. Homogenization of freshwater faunas. *Annual Review of Ecology and Systematics* 33: 291–315.

Sergio, F., Newton, I., Marchesi, L., and Pedrini, P. (2006). Ecological justified charisma: preservation of top predators delivers biodiversity conservation. *Journal of Applied Ecology* 43:1049-1055

Shiogiri NS, Paulino MG, Carraschi SP, Baradi FG, da Cruz C, Fernandes MN. Acute exposure of a glyphosate-based herbicide affects the gills and liver of the Neotropical fish *Piaractus mesopotamicus*. *Environ Toxicol Pharmacol* 2012, 34, 388-96.

Stansell, J Robert, Bjorn K. van der Leeuw, Karrie M. Gibbons, and William T. Nagy 2014 FIELD REPORT: EVALUATION OF PINNIPED PREDATION ON ADULT SALMONIDS AND OTHER FISH IN THE BONNEVILLE DAM TAILRACE, 2014

Richter B, Braun D, Mendelson M, Master L. 1997. Threats to imperiled freshwater fauna. *Conservation Biology* 11: 1081–1093.

The idea that actions can be symbolic in nature came from steel, "Saving Wild Salmon: Moving From Symbolic Politics to Effective Policy".

USEPA (United States Environmental Protection Agency). 2002. Columbia River Basin fish contaminant survey, 1996-1998. EPA 910-R-02-006, Seattle, Washington, USA. 284pp. (C7)

Ward, D. L., J. H. Petersen, and J. J. Loch. 1995. Index of predation on juvenile salmonids by northern squawfish in the lower and middle Columbia River and in the lower Snake River. *Transactions of the American Fisheries Society* 124:321–334. (C3)

Williams, Richard N. PhD Clear Creek Consulting 524 W. Two Rivers Dr. Eagle, ID 83616 Review of the draft Biological Assessment and Essential Fish Habitat Assessment for Proposed Oregon LNG Terminal Project

White, E.M., D. Goodding, and R.S. Rosenberger. 2012. Spending and Economic Activity From Recreation at Oregon State Parks - Coastal Region and Milo McIver State Park. Oregon State University.

(8) WHO/FAO (1994) Report of the 1994 Joint Meeting of the FAO Panel Of Experts On Pesticide Residues In Food And The Environment And The WHO Expert Group On Pesticide Residues, Rome. Section 4.2.6

Zemanek, S.L. 2014. U.S. Travel and Tourism Satellite Accounts for 2010-2013. Via Internet: http://www.bea.gov/scb/pdf/2014/06%20June/0614_travel_and_tourism_satellite_accounts.pdf. Survey of Current Business.

Young, S. "Written Testimony on H. R. 946."

51 Plaintiff-Appellant's Reply Brief, USCOA for the 9th Circuit, No. 08-36038. Pp. 1

From: Gary Ivey [Ivey@savingcranes.org]

Sent: Monday, July 20, 2015 4:36 PM

To: Audrey.C.Hatch@state.or.us

Cc: Marty St. Louis; Brandon Reishus; Mark Nebeker; Simon Wray

Subject: Comments on OR Conservation Strategy Species

Hello Audrey,

My apologies for not participating in your strategy review earlier in the year. I was very busy finishing up my PhD dissertation. I do have comments (attached) on a couple of species that I think deserve to be on the Strategy Species List, the Canadian Sandhill Crane and the Trumpeter Swan. Let me know if you have questions or if you want copies of references I cite. Thanks for the opportunity to comment.

Sincerely,

Gary Ivey, PhD

Research Associate

West Coast Crane Working Group

International Crane Foundation

541-383-2033

Visit our website! www.savingcranes.org

"Working worldwide to conserve cranes and the wetland, grassland, and other ecosystems upon which they depend"

Audrey Hatch
ODFW
4034 Fairview Industrial Drive SE
Salem OR 97302

20 July 2015

Dear Audrey,

I would like to submit comments on ODFW's Draft Strategy Species list by nominating two additional bird species. I have worked with Sandhill Cranes and Trumpeter Swans in Oregon and the Pacific Flyway for over 30 years, serving as a biologist at Malheur National Wildlife Refuge for 15 years, and more recently as a part-time scientist with the International Crane Foundation. I have conducted several research projects on Sandhill Cranes, including studies at Sauvie Island. I completed my PhD on wintering ecology of Sandhill Cranes at OSU last March and I also serve on the Board of The Trumpeter Swan Society (TTSS) and also work with your agency in a TTSS partnership on the Oregon Trumpeter Swan Restoration Project.

1. Canadian Sandhill Crane (*Grus canadensis rowani*)

The Lower Columbia River region (i.e., primarily Sauvie Island) is a major staging and wintering area for the rowani subspecies of sandhill Crane (Ivey et al. 2005), peaking at just over 5,000 staging birds (USFWS unpublished data). Approximately 1,500 of these birds spend the entire winter along the Lower Columbia River, primarily using Sauvie Island Wildlife Management Area and Ridgefield National Wildlife Refuge (NWR). The birds that use Oregon primarily breed along the coast of British Columbia and Southern Alaska.

Additionally, there is evidence that there is a small breeding population of Canadian Sandhill Cranes in Western Oregon, indicated by the presence of a small summering population which appears to be increasing on Sauvie Island (~20 birds) and, 2 breeding records in this region which are most likely this subspecies (Ivey and Dillinger, unpublished data). In recent years, a few sandhill cranes have been reported during the breeding season further south in Oregon's Coast Range, adding to the evidence of breeding in the region.

The rowani population that uses Oregon is among the smallest populations of cranes in North America, with a total population estimate of approximately 5,000 birds (compared to a population of about 8,500 Greater Sandhill Cranes in the Central Valley Population; Ivey et al. 2014).

These cranes roost on protected wetlands on Sauvie Island and Ridgefield NWR and forage on these wildlife areas and also on private agricultural lands in the adjoining landscape. Their private foraging areas are rapidly being converted to unsuitable habitats because of changes to permanent crops such as orchards and berries and urban expansion. This continuing loss of suitable foraging habitats (grain and row crops) could reduce the carrying capacity of the Lower Columbia region to support the population which might cause future population reductions. These agricultural habitat issues also affect many other species that utilize open agriculture landscapes, such as waterfowl.

2. Trumpeter Swan (*Cygnus buccinator*)

Trumpeter Swans were historically on ODFW's Sensitive Species List at least through 1982. I believe they were dropped during development of the 1998 version of the list and were also not included in the original Oregon Conservation Strategy. I believe that decision was based more on politics than biology or science at that time, because of a 1998 lawsuit (which was settled in 2008) against the USFWS regarding "generic swan hunting" in the Pacific Flyway which included a petition for listing the Rocky Mountain Population of Trumpeter Swans (OR birds are considered to be of this population), resulted in your agency halting our restoration project to restore a viable breeding Trumpeter Swan population to Oregon (which began in 1994 and ended in 1999). My understanding was that ODFW's rationale was that the agency did not want to restore a population which may be listed as Federally T&E because such a listing might put private landowners who support swans at risk from federal regulations. After settlement of the lawsuit, ODFW agreed to resume the swan restoration program and we have an ongoing partnership between TTSS, USFWS and ODFW to meet Pacific Flyway Plan Trumpeter Swan population goals for Oregon of at least 25 nesting pairs and 100 adults. There is some question about their native status as breeders in Oregon. I have pasted text from Gabrielson and Jewett's 1940 Birds of Oregon for your reference:

“THE TRUMPETER SWAN, the largest and most magnificent North American waterfowl, is practically extinct and has been for many years. A few are known to breed in British Columbia, Alberta, Montana, and Yellowstone Park and, because of the careful protection afforded them, may now be holding their own. Whether or not these few remaining birds are enough to increase their numbers remains to be seen.

The first Oregon report of the Trumpeter Swan was made by Lewis and Clark (1814) from the mouth of the Columbia River (January 2, 1806), and they reported it again, from Deer Island (March 18, 1806), on their return trip. Townsend listed it in 1839; Newberry (1857) considered it not rare in early November on the Columbia River; Bendire (1877) re-reported collecting a single specimen at Malheur Lake, March 24, 1877; Mearns (1879) listed it from Fort Klamath on the authority of Dr. McElderry, the post surgeon; Johnson (1880) stated that it was a common migrant in the Willamette Valley; Anthony (1886) considered it common on the Columbia River; Woodcock (1901) reported it from only two localities, one a single bird in the winter of 1894-95 that stayed for several days on a small lake near McMinnville (Pope) and one a rare migrant in October and May at Dayton (Hadley). Allan Brooks (1926) stated that at least 18 birds crossed from British Columbia, at Okanogan, to winter in Washington, Oregon, or Idaho, which indicated that there might still be a possibility of finding Trumpeter Swans in our State. On September 7, 1929, Oberholser, Gabrielson, and Jewett saw a single swan at Davis Lake that, judging from its huge size, might have been this species. This is the only recent record of even its hypothetical occurrence within the State. So far as we can learn, the only Oregon specimen of this noble bird in existence is one in the Chicago Academy of Science collection that was taken three miles west of Portland in the Columbia River on April 8, 1881.”

The April 1881 specimen along the Columbia River is late for migrants which generally depart Oregon in March, suggesting a summering bird. The May record of the bird at Dayton in 1895 proves historic presence during the breeding season, and the September 1929 record also suggests a summering bird, as migrants don't arrive in Oregon until late October at the earliest. Additionally, there was a Trumpeter Swan present from late May until June 1922 in the Blitzen Valley which is now part of Malheur NWR which also confirms historic breeding season presence of the species in Oregon. An introduction program began in 1939, which moved birds from Red Rock Lakes NWR, Montana, to Malheur NWR (Cornely et al. 1985). First nesting occurred in 1958, with the flock slowly growing to a peak of 77 in the early 1980s (Ivey 1990), but a shortage of winter food due to flooding and the invasion of carp, compounded by sedentary behavior, resulted in increased mortality, thereby limiting the population (Ivey et al. 2000). By 1989, a harsh winter dropped the total to 18 birds and only 2 nesting pairs (Ivey and Carey 1991). Because of this declining trend, a proposal was developed in 1990 to enhance conditions in Oregon by increasing the breeding population and expanding their breeding and wintering range (Ivey and Carey 1991). Implementation began in 1991 with summering sites only in Harney Co.; by 1999 had expanded to Lake, Klamath, Crook, Grant, and Baker Cos. (Ivey et al. 2000). However, because the releases were halted after 1998, the population outside of Harney County dwindled. The reintroduction program partnership and releases of trumpeters at Summer Lake WMA was reinitiated in 2009 and the Oregon Flock is slowly increasing; however, only 1 actively-nesting pair was documented the state this year.

Therefore, I contend that the Trumpeter Swan is an Oregon native breeding species which is very vulnerable to extinction as a breeder from Oregon. It depends on high quality deepwater freshwater wetlands for breeding and has been used as a symbol to promote wetland conservation in other states.

Let me know if you have questions or if you would like to see my references.

I hope you find my suggestions useful.

Sincerely,

Gary Ivey, PhD

From: Gillian Lyons <GLyons@pewtrusts.org>
Sent: Monday, July 20, 2015 5:02 PM
To: ODFW NearshoreStrategyInput
Cc: Greg Krutzikowsky
Subject: Oregon Nearshore Strategy Comments

Dear Mr. Krutzikowsky:

Thank you for the opportunity to provide input on the Oregon Department of Fish and Wildlife's (ODFW) 10-year revision of the Oregon Nearshore Strategy (ONS). We appreciate ODFW's attention to the conservation of Oregon's nearshore resources, as well as the Department's efforts to ensure that the ONS remains a valuable and timely document for guiding management of those resources. In particular, we note a number of changes to and recommendations in the ONS that have the potential to enhance Oregon's management and protection of forage fish species in state marine waters: a linkage between the ONS and marine fishery management plans (FMPs), the inclusion of estuarine habitats in the scope of the ONS, and the addition of Pacific sand lance to the ONS's list of Strategy Species.

We are especially glad that the ONS recognizes the role that marine FMPs have the potential to play in the conservation of nearshore species. This new management tool will have its debut in the next several months in the form of a marine FMP for unmanaged forage fish, as described on page 25 of the ONS. We strongly support the inclusion of the development of marine FMPs as a key recommendation in the ONS under the category of Management and Policy; doing so will help to ensure alignment between Oregon's overarching goals and priorities for nearshore fisheries resources and its on-the-ground/on-the-water management and implementation efforts.

Similarly, we support the expansion of the scope of the ONS to include estuarine habitats. While we understand that estuaries were previously part of the Oregon Conservation Strategy, we hope that shifting significant portions of them into the scope of the ONS will allow for improved coordination among managers working to conserve marine and anadromous species that utilize and rely upon estuarine environments for at least a part of their life histories. Further, the inclusion of estuaries in the ONS provides the Department with a great opportunity to better address the linkage between forage fish management and the protection of forage fish spawning habitat. We anticipate that the marine FMP for unmanaged forage fish will include identification of spawning habitat for those species, but recommend that the ONS specifically articulate a suite of objectives for identification and prioritized protection of spawning habitat utilized by managed forage species, such as herring.

Finally, we applaud the addition of Pacific sand lance (an important forage species in the California Current Ecosystem, including off the coast of Oregon) as an ONS Strategy Species. We note that sand lance still appears on the Watch List in addition to the List of Strategy Species, and recommend that the Watch List entry be updated/deleted.

Thank you again for the opportunity to offer these brief comments, and for ODFW's work on this important document. We look forward to continuing to work with the Department as the ONS's 10-year revision is finalized over the next few months.

Sincerely,

Gilly Lyons
Officer, U.S. Oceans, Pacific
The Pew Charitable Trusts

p: 503.765.1133 | c: 503.975.3202
e: glyons@pewtrusts.org | www.pewtrusts.org

From: Brian Posewitz [brian@waterwatch.org]

Sent: Monday, July 20, 2015 4:38 PM

To: Audrey.C.Hatch@state.or.us

Subject: Draft Oregon Conservation Strategy - Comments of WaterWatch of Oregon

Greetings,

Please see the attached regarding the above matter. Thank you.

Brian Posewitz

Staff Attorney

WaterWatch of Oregon

SEE PDF DOCUMENT ATTACHED



July 20, 2015

Audrey Hatch
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, OR 97302
Email: Audrey.C.Hatch@state.or.us

Re: Comments on Draft Oregon Conservation Strategy

Dear Ms. Hatch:

Please consider the following comments from WaterWatch of Oregon (“WaterWatch”) on the 2015 Draft Oregon Conservation Strategy (“Strategy”).

CONTEXT FOR COMMENTS

WaterWatch is a private, nonprofit river conservation organization founded in 1985 and dedicated to protecting and restoring stream flows in Oregon’s rivers for fish, wildlife, and the people who depend on healthy rivers.

Our understanding of the Strategy is that it updates a 2005 plan and is Oregon’s version of the State Wildlife Action Plan that is required by the U.S. Fish and Wildlife Service as a condition of receiving State Wildlife Grants. The Introduction to the Strategy emphasizes that the Strategy is meant to guide grant-making and voluntary efforts within the existing regulatory structure and not to change any laws or regulations or to prescribe additional laws or regulations. Our comments are limited based on this understanding. Our comments would be different if the Strategy endeavored to set forth a general conservation strategy for Oregon that included changes and/or additions to existing laws and regulations.

Given the organizational focus of WaterWatch, we have directed our attention at sections of the Strategy dealing with “water quantity.” However, because protection of stream flow for fish and wildlife tends to overlap with other issues, we also comment briefly on a few other issues.

The Strategy includes designation of particular species as “Strategy Species” and “Data Gap Species” and provides assessments regarding those species. Given the need for specific information and expertise to comment on those assessments, we have not attempted to do so here.

COMMENTS

Our specific comments, using the headings and order from the Strategy, are as follows. Our headings refer only to the topics on which we are commenting; i.e., we are not addressing each section.

I. General/Introduction

- The Introduction document perhaps overemphasizes that the Strategy is for voluntary, and not regulatory, activity. The federal guidelines may not require the Strategy to address regulatory components, but they do not seem to prohibit it either. The Introduction also seems to treat all conservation strategies as falling in one of two categories (voluntary action or new laws and regulations). We believe there is a lot of middle ground, such as directing policy for comments on permit applications, guiding positions on policy changes proposed by others, pursuing instream water rights for fish and wildlife, and developing strategies for enforcement of existing laws and regulations. Even if the Strategy cannot call for new laws and regulations, these types of activities could be further developed in the action items of the Strategy. Voluntary activities (restoration, acquisitions, banking, trading, etc.) may be useful tools for conservation, but we do not think they can adequately address Oregon’s conservation needs by themselves (as the draft acknowledges in some of the narrative). We think Oregon would benefit from a conservation strategy that incorporates all tools in the toolbox.

II. Key Conservation Issues

A. Altered disturbance regimes: fires and floodplains

- We generally support the goal and action items to restore the natural function of floodplains.
- We agree that supporting and encouraging natural beaver dams in appropriate locations will help restore natural floodplains.
- The Strategy appropriately calls for removal of artificial structures that impede natural floodplain functions and notes the importance of sediment movement within a stream system. Continuing this theme, the Strategy should more explicitly discourage new artificial structures within streams, including those claimed to be for restoration, that prevent important floodplain functions such as movement of sediment within a stream.

B. Barriers to Fish and Wildlife Movement

- We support the broadly stated goal to “[p]rovide conditions suitable for natural movement of fish and aquatic animals throughout their native range.”
- We support the action items designed to encourage removal of existing aquatic barriers and to encourage the screening of diversions.
- We suggest the following additional action item for fish passage: “Maximize the use of Research and Enhancement funds, Passage Program funds and other state funding sources to remove passage barriers across the state on ecologically important streams.”
- We encourage an additional action item to explicitly discourage new artificial obstructions, some of which are proposed for restoration, that would impede fish migration anywhere within their native range.
- The comments in this section also apply to the habitat strategy for flowing water and riparian habitat.

C. Water Quality and Quantity

- The “Overall Goal for Water Quality and Quantity” is to “[m]aintain and restore water quality and quantity to support native fish and wildlife and habitats *in balance with the economic and social needs of rural and urban communities.*” (Emphasis added.) We see at least two problems with this terminology. First, we think it should call for more than “support[ing]” fish and wildlife habitats at some unspecified level. It should call at least for supporting habitats necessary for “healthy and abundant populations of fish and wildlife.” Second, the Conservation Strategy should not hedge its commitment with the “balance” reference. Conservation objectives will necessarily be balanced with other objectives, particularly where, as here, you limit the Strategy to voluntary measures. Moreover, economic and social objectives will undoubtedly be well represented in other strategies. There is no reason to bring them up in your Conservation Strategy, and doing so serves only to show weakness in your commitment to conservation.
- In the discussion regarding instream water rights, we appreciate the comment that “[t]he long-term goal of this policy is to obtain an instream water right on every waterway that has value to fish and wildlife.” To further this goal, we suggest the following additional action items, which do not require additional laws or regulations:
 - Resolve outstanding challenges on pending instream water right applications.
 - Complete conversion of minimum perennial stream flows to instream water rights.
 - Seek and obtain instream water rights for all waterways that have value to fish and wildlife.

- Determine the seasonally varying flows (including peak and ecological flows) necessary to protect and restore abundant populations of fish and wildlife.
- Add seasonally varying flows to instream water rights that project only minimum flows, and include seasonally varying flows in all new instream water right applications.
- The initial discussion of water quantity accurately notes that “ODFW biologists also provide advisory comments regarding impacts on fish and habitat from proposed water uses.” We believe this role should be better leveraged by the Strategy. For example, the Strategy should include action items that ODFW oppose new water uses that would be contrary to the Strategy’s goals, and that ODFW oppose new water uses for which there is not adequate data or information to determine the impacts to fish and wildlife. The Strategy also should include an action item that ODFW expand the water quantity/quality capacity at the agency to better participate in decisions across Oregon involving water.
- The Strategy states the “water quantity” “goal” as “[m]aintain or restore sufficient stream flows to support native aquatic species and Strategy Habitats.” Here again, we think “support,” by itself, lacks clear direction. We suggest something such as “support abundant populations of native aquatic species.”
- One of your action items is “[w]ork with OWRD and DEQ to develop tools to maintain or restore instream flow (e.g., water markets and water banks).” We think the examples should either be eliminated or expanded to include such things as water right transfers, reduction of waste, and use of the conserved water statute. Otherwise the action item is impliedly limited to the transactional strategies mentioned in your examples.
- Another action item is to “[s]eek opportunity to enhance aquifer recharge and maintain groundwater.” While it is true that groundwater may affect fish and wildlife through connection to surface water, that link is not made in this action item. Without such a link, it is not clear why this item is in a strategy for conserving fish and wildlife.
- Another proposed action item is “[w]ork with OWRD and other partners to establish priorities and implement projects to restore streamflows.” We support this action. However, the discussion refers to supporting “local, or place-based efforts that are aimed at meeting both instream and out-of-stream water needs.” We are not opposed to meeting out-of-stream needs, but they should be addressed elsewhere. It is not clear to us why meeting out-of-stream water needs would logically be part of this Strategy. Projects intended to meet out-of-stream water needs would not, at first glance, seem to be eligible for the type of grant-making that the Strategy is meant to serve.
- The Strategy should include an additional action item that ODFW participate in the Willamette Reallocation Process to ensure instream values and stream flows are represented.

- The Strategy should include an action item that ODFW work with other agencies to develop drought-year tools that accompany drought declarations to provide relief for salmon and aquatic species.
- The comments in this section also apply to the habitat strategy for flowing water and riparian habitat.

CONCLUSION

Thank you for considering our comments on this important matter.

Sincerely,

Brian Posewitz

Brian Posewitz
Staff Attorney, WaterWatch of Oregon

From: Mary Anne Nash [maryannenash@oregonfb.org]

Sent: Monday, July 20, 2015 4:51 PM

To: Audrey.C.Hatch@state.or.us

Cc: Seth Barnes (seth@ofic.com)

Subject: OFB and OFIC Comments on ODFW Conservation Strategy

Ms. Hatch,

Attached please find comments submitted by OFB and OFIC on the Oregon Conservation Strategy. Can you please confirm receipt of the comments when you have a moment?

Please let me know if you have any issues with the attachment.

Thanks,

Mary Anne

Mary Anne Nash | Public Policy Counsel

Oregon Farm Bureau

1320 Capitol St. NE, Suite 200, Salem, OR 97301

M: 541.740.4062 • O: 503.399.1701 x. 306 • F: 503.399.8082

maryanne@oregonfb.org<mailto:maryanne@oregonfb.org> • oregonfb.org<<http://www.oregonfb.org/>>

SEE PDF DOCUMENT ATTACHED

From: Mary Anne Nash <maryannenash@oregonfb.org>
Sent: Monday, July 20, 2015 4:58 PM
To: greg.krutzikowsky@state.or.us
Cc: Seth Barnes (seth@ofic.com)
Subject: OFB and OFIC Comments on Nearshore Strategy
Attachments: OFB and OFIC Comments on ODFW Conservation Strategy.pdf

Mr. Krutzikowsky,

Attached please find comments provided by OFB and OFIC on the Oregon Conservation Strategy. In reviewing the nearshore strategy, we noticed some of the same issues as those we raised in the Oregon Conservation Strategy, and therefore request that the attached considerations be adopted as our comments to the Oregon Nearshore Strategy as well.

Please contact me with any questions.

Thanks,

Mary Anne

Mary Anne Nash | Public Policy Counsel
Oregon Farm Bureau
M: 541.740.4062 • O: 503.399.1701 x. 306 • F: 503.399.8082
maryanne@oregonfb.org • oregonfb.org



July 20, 2015

VIA EMAIL

Audrey Hatch
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem OR 97302
Audrey.C.Hatch@state.or.us

RE: *Comments on ODFW Conservation Strategy*

Dear Ms. Hatch:

The Oregon Farm Bureau Federation ("OFB") and Oregon Forest Industries Council ("OFIC") submit the following comments regarding the Oregon Conservation Strategy.

By way of background, the OFB is a voluntary, grassroots, nonprofit organization representing Oregon's farmers and ranchers in the public and policymaking arenas. As Oregon's largest general farm organization, its primary goal is to promote educational improvement, economic opportunity, and social advancement for its members and the farming, ranching, and natural resources industry as a whole. Today, OFB represents over 7,000 member families professionally engaged in the industry and has a total membership of over 60,000 Oregon families.

The OFIC a trade association representing more than fifty large forestland owners and forest products manufacturing-related firms who own and manage roughly 5,000,000 acres of forestland throughout the State of Oregon.

1. Non-Regulatory Nature of Oregon Conservation Strategy.

The Oregon Conservation Strategy is non-regulatory, and it's important that the measures suggested and offered in this strategy remain non-regulatory - that is to say that they inform volunteer actions that result in improved ecosystem health. Oregon has many mechanisms to address standards and operating procedures, with several agencies, boards, commissions, etc. that are tasked with these decisions. This Conservation Strategy should continue to be complimentary to these other statutory and regulatory frameworks already established.

2. Acquisition of Private Lands for Conservation Management.

The State of Oregon is blessed to have productive working lands that produce food and fiber, provide wildlife habitat, preserve open spaces, and support family businesses. While OFB and OFIC understand the public attraction to these open landscapes, we are growing concerned about ODFW's acquisition and management of an increasing acreage of agricultural and timber land. OFB, OFIC and its members adamantly oppose unnecessarily exposing landowners to public conflicts and impairing the productive

capacity of working lands through the acquisition and creation of public access to these formerly working lands. OFB and OFIC encourage ODFW to move away from acquisition as a means of conservation in this iteration of the Oregon Conservation Strategy.

The Oregon Conservation Strategy mentions “protection” of lands as a long-term goal of the Oregon Conservation Strategy. Historically, ODFW has used acquisition of working lands as one of its primary methods through which to accomplish this objective. Indeed, one of the successes touted from the 2005 conservation strategy is the use of the Willamette Wildlife Mitigation Program (WWMP) to acquire nearly 10,000 acres of land for wildlife mitigation properties. ODFW appears to support continued acquisition as an acceptable means to protect lands, naming “targeted acquisition” as one of the methods it will use to accomplish its objectives. (Chapter 2 at 15).

Agricultural and timber land should be kept in agricultural and timber use. The public owns enough property, and agencies should not be entering into the private market to compete for the purchase of neighboring properties—often artificially inflating the price of the property. Acquisition of working landscapes lessens the amount of land available for production, reducing our ability to provide safe food and fiber for our state and nation. Additionally, acquisition and conversion of land away from the working landscape takes lands off the tax rolls, removes a valuable input into the local community, and increases the burden on neighboring lands.

In several recent ODFW acquisitions, we have seen one of the primary purposes of the project be providing hunting, fishing and recreational access to the public. Negative impacts from public access is one of the primary complaints we receive from landowners who border government-owned land, and, unfortunately, one that our members have come to view as inevitable with these types of projects. There are a host of issues that can arise when public access occurs next to adjacent private lands. These conflicts include increased risk of trespass, increased costs due to the need for more frequent oversight of livestock, farming, and timber operations, damage from trespass on foot or by vehicle, the risk of harm to livestock through gates being left open, animals being chased or shot, water troughs being vandalized, and other critical infrastructure being damaged. With significantly increased public traffic in an area formerly in private ownership, the costs of this access to neighboring operations are real, and make it more difficult for our members to maintain productive working operations.

ODFW has historically done little to manage and control public access, and restrict or eliminate public access in areas that become chronic problems. Our members frequently complain that agencies in charge of these projects are slow to respond and control issues arising from public access, do not design the project in a way that avoids conflicts between public uses and neighboring private uses, and do not appropriately mark, monitor, and enforce the boundaries of these areas.

As a policy matter, we believe that ODFW should move away from acquiring working lands (and opening them to public access) as a primary means of achieving conservation benefits. As a practical matter, our members have told us that ODFW frequently does not have the means or ability to design, monitor, and manage public access in a manner that avoids impacts on its neighbors. We ODFW to partner with private landowners to achieve the desired conservation values on a property while maintaining that land in production as part of the working landscape and avoiding negative impacts on neighboring landowners.

3. ODFW Project Design and Impacts to Neighbors.

The Oregon Conservation Strategy should also emphasize that landowners, organizations, and agencies undertaking conservation projects should construct and design those projects to avoid impacts on neighboring landowners and should communicate with neighbors early and often to ensure that any impacts from an ODFW project are minimized. (Chapter 2, page 54). In addition to the public access concerns highlighted above, we have received frequent complaints from neighbors who border ODFW projects about impacts from the design and implementation of the projects. In the Oregon Conservation Strategy, ODFW places a priority on restoring natural flow to areas through the creation of additional wetland areas or the removal of diking, culvert and ditch structures. (Chapter 2, Page 36; Chapter 2, Page 50; Ecoregion Descriptions; Strategy Habitat).

Creation of Wetland Habitat. We have had several members who have bordered ODFW wetland projects and have raised concerns about the changes in hydrology from the wetland project impacting their neighboring operations. In some cases, these members have experienced flooding from the wetland project that impacts their ability to productively use their land. When undertaking wetland projects, ODFW needs to ensure that the project is engineered and designed to avoid impacts to neighboring operations, and that neighboring landowners have a clear vehicle for raising and resolving any impacts that result from the project.

Removal of Critical Infrastructure. In some areas of the Oregon Conservation Strategy, ODFW prioritizes the removal of dikes, culverts, and other drainage and irrigation related structures to facilitate habitat improvement for key fish species. Dikes, culverts, and other structures are critical to agricultural operations throughout the state. In areas without districts, each landowner must do their part to maintain the structures for the benefit of the agricultural community. In areas with districts, the districts are charged with ensuring that these structures are maintained for the benefit of the member landowners. In at least one ODFW project, our members have complained that ODFW is seeking removal and restructuring of flood control structures to facilitate wetland creation in a manner that will negatively impact neighboring operations. ODFW should not undertake any infrastructure removal or modification in areas where it is needed for neighboring agricultural operations or where the removal of those structures would negatively impact neighboring landowners.

4. Citizen-based monitoring.

The plan states that citizen-based monitoring should play some role in the implementation of the plan. (Introduction, Page 5; Chapter 3, Page 6). To the extent that ODFW utilizes citizen based monitoring, they should ensure that any monitoring does not occur on privately owned land without first securing the approval of the landowner and that any data submitted meets minimum data integrity standards.

5. Instream Water Rights.

ODFW discusses the use of instream water rights to achieve conservation objectives. (Chapter 2, Page 52-53; Strategy Habitat, Page 21). Any instream leases should be contingent on a finding of no injury to other water uses, and should give priority to agricultural water uses in the system.

6. Grazing.

The plan discusses historic grazing and modern grazing practices in several areas, often stating that historic overgrazing has created legacy issues which are beginning to resolve in some areas with more intensive management. (Introduction, Page 3; Ecoregion Descriptions; Strategy Habitat). Oregon ranchers have always taken pride in managing their operations well, and many Oregon ranching operations have always been well-managed. While some areas are recovering from historic practices and there may be isolated problem areas, available information suggests that conditions are improving in many areas throughout the state. The Oregon Conservation Strategy should recognize the important contributions Oregon's ranchers have made and continue to make toward ensuring that their practices are sustainable and help provide a significant portion of Oregon's fish and wildlife habitat.

7. Forestry Operations.

With regard to Oregon's forest sector, we would like it to be on the record that Oregon's forest landowners already contribute tremendously towards conservation outcomes on their properties. The state Forest Practices Act (ORS 527.610 to 527.770, 527.990 and 527.992) and related Administrative Rules (OAR 629) are among the most comprehensive in the country. These regulations constitute a series of intense conservation measures that have been recommended, debated, reviewed, studied, codified, enforced and implemented across Oregon. As a result, many of the habitats that occur on the forested landscapes of Oregon have been improved, and countless species, including several aquatic and upland species, have thrived. These rules coupled with strong land use regulations and healthy voluntary measures constitute "The Oregon Way."¹ This collective contribution made by Oregon's forest landowners is significant and should not be overlooked in the context of Oregon's overall conservation strategy.

8. Water Quality.

Within the "Key Conservation Issue: Water quality and quantity" section there is a passage outlining "ODF Water Quality Programs" (Page 49). The section is clearly meant to provide information to readers regarding the role of ODF in protecting water quality. We have a few suggestions for this section.

a. Suggested rewording of the second paragraph:

"Forestlands supply abundant, clean water for Oregonians. The Private Forests division serves a critical role in ensuring high water quality around the state by enforcing rules that protect drinking water and fish habitat from unnecessary human caused impacts. It also conducts research and monitoring to verify that current forest management practices are indeed protective and works with the Board of Forestry to adjust ~~develop new~~ rules or policies where needed to maintain water quality and fish habitat."

b. It is unclear to me what value the third paragraph on page 49 adds in this context. We recommend removing this paragraph. The paragraph addresses a single rule consideration by the Board of Forestry regarding timber harvest buffers and stream

¹ http://oregonforests.org/sites/default/files/publications/pdf/OregonWay_Fish_Habitat_singles.pdf

temperature. While interesting, it is only one component of an overarching program that is very well described in the two paragraphs above. If you choose to maintain this paragraph, we strongly recommend the following changes:

~~“In January 2012 The Board of Forestry directed ODF staff to begin analyzing options the Board should consider for meeting the Protecting Cold Water (PCW) criteria of the temperature water quality standard in small and medium fish-bearing streams that flow through non-federal forest lands in the state. The objective of the rule analysis is to establish riparian protection measures for small and medium fish-bearing streams that maintain and promote shade conditions that ensure, to the maximum extent practicable, the achievement of the PCW criterion. The results from the “RipStream monitoring study” and subsequent analyses describe the magnitude and expected frequency of two year postharvest temperature change. These findings indicate that Oregon FPA riparian protection measures for small and medium fish streams do not maintain stream temperatures similar to control conditions, and are inadequate to insure forest operations meet the state water quality standard for protecting cold water. In 2015 The Board of Forestry will likely make a decision select an alternative regarding on how to ensure that stream buffer requirements as they relate to maintain stream temperatures. that meet the state water quality standard for protecting cold water in 2015.~~

Thank you for the opportunity to submit comments on the Oregon Conservation Strategy.

If you have any questions or concerns, please do not hesitate to contact OFB or OFIC.

Respectfully,

Mary Anne Nash
Oregon Farm Bureau
1320 Capitol St. NE, Suite 200
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Seth Barnes
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From: Jena Carter <jcarter@TNC.ORG>
Sent: Monday, July 20, 2015 2:30 PM
To: greg.krutzikowsky@state.or.us
Cc: Cathy Macdonald; Gway Kirchner
Subject: TNC Comments on Oregon Nearshore Strategy
Attachments: TNC Oregon Nearshore Strategy Comments FINAL 7-20-15.pdf

Hi Greg – Please accept the attached comments on the Oregon Nearshore Strategy on behalf of The Nature Conservancy. We appreciate the opportunity to comment and look forward to working with you on this important document. All the best – Jena

Please consider the environment before printing this email

Jena Carter
Oregon Marine & Coast Director
jcarter@tnc.org
(503) 802-8114 (Phone)
(703) 863-2997 (Mobile)

nature.org

The Nature Conservancy
821 SE 14th Avenue
Portland , OR 97214

From: Cathy Macdonald [cmacdonald@TNC.ORG]

Sent: Monday, July 20, 2015 4:57 PM

To: Audrey C Hatch (audrey.c.hatch@state.or.us)

Subject: Strategy Comments

Here's the official letter. I will send the detailed comments in separately. Thanks

Catherine Macdonald

Director of Conservation Programs

cmacdonald@tnc.org<mailto:cmacdonald@tnc.org>

(503) 802-8134 (Phone)

(503) 802-8199 (Fax)

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The Nature Conservancy in Oregon

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SEE PDF ATTACHED



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nature.org/oregon

July 20, 2015

Oregon Fish and Wildlife Commissioners
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, OR 97302

Dear Commissioners:

Thank you for the opportunity to provide comments on the revision of the Oregon Conservation Strategy. The Nature Conservancy is a science-based, nonprofit organization whose mission is to conserve the lands and waters on which all life depends. Over the past 50 years, we have been a consistent champion of fish and wildlife conservation in Oregon and of the Department of Fish and Wildlife. We have played an active role in advancing the conservation science and planning, land protection and habitat restoration. We were very proud of the work ODFW did in 2005 to develop the Oregon Conservation Strategy and we appreciate ODFW's efforts over the past year to update the Strategy.

We have provided technical and clarifying recommendations on the Draft Strategy under separate cover as part of our role on the Stakeholder Working Group but wanted to highlight one overarching recommendation to you as Commission members. While we recognize that the Department can't commit to a level of funding for the Oregon Conservation Strategy in future budgets but, we recommend that ODFW make a stronger statement about its commitment to use the Strategy to prioritize Departmental investments, as well as to work with others to grow the available funds to achieve the vision and goals of the Strategy.

The Oregon Conservation Strategy can be a powerful force to help all of us accelerate the pace and scale of fish and wildlife conservation that the future will demand.

Sincerely

Catherine Macdonald
Oregon Director of Conservation Programs

July 20, 2015

Greg Krutzikowsky
Nearshore Policy Project Leader
Oregon Department of Fish and Wildlife
2040 SE Marine Science Drive
Newport, Oregon 97365

Dear Mr. Krutzikowsky:

Thank you for the opportunity to provide comments on the revision of the Oregon Nearshore Strategy (ONS). The Nature Conservancy is a science-based, nonprofit organization whose mission is to conserve the lands and waters on which all life depends. Over the past 50 years, we have been a consistent champion of the nearshore and estuarine habitats in Oregon. The Conservancy has played an active role in intertidal science, marine reserves, the Territorial Sea Plan, estuary restoration, and land protection. We are a founding member of the Pacific Marine and Estuarine Fish Habitat Partnership, and recently released a report titled, "*Nursery Functions of U.S. West Coast Estuaries: The State of Knowledge for Juveniles of Focal Invertebrate and Fish Species.*"

In reviewing the Oregon Nearshore Strategy, we are pleased with many of the revisions in this report. The revisions are thoughtful and based on the best available information. We recognize that updating the ONS is a significant task and appreciate the time and effort you are committing to this project. Below the Conservancy provides five specific comments that we believe would strengthen and improve the ONS.

Linking the ONS and Oregon Conservation Strategy

There should be stronger and more explicit links between the Oregon Conservation Strategy (OCS) and the ONS. Presently, it is not clear how the two documents are intended to interact, if at all. There is clear overlap between these important strategies (e.g. species list, estuary habitat, nearshore ecoregion), but little cross-pollination is present in either document. While we understand there are good reasons to have separate documents, we advocate that the two documents should be clearly connected. For example, the ONS could easily be referenced in the estuary habitat section in the OCS in at least three areas: (1) a general reference in the description; (2) a link in the invasive species discussion; and (3) a link in the climate change discussion.

Climate Change

Climate change and sea level rise should be specifically addressed in the ONS. Climate change is well documented and the early impacts can be seen today. The OCS specifically identifies climate change as a 'Key Statewide Conservation Issues;' however, it is not addressed in the ONS. Specific comments include:

- Climate change trends should be fully described in the ONS.
- Research and Data Needs should be identified, including the need to collect information directly related to climate change (e.g. investigate species responses to ocean acidification and reactions to increasing water temperatures);
- Climate change should be called out in Table 7.1 as an 'anthropogenic factor' impacting strategy species and their habitats. The elements of climate change are buried as potential sources for other factors, which reduces the importance of the issue.
- The ONS should articulate how ODFW will adapt its management approach to address climate change trends and add a recommendation calling for response plans to address issues arising from climate change.
- Specific climate change recommendations should be identified.

Marine Reserves

As written, there is very little mention of ODFW's Marine Reserve program in this document. Oregon's marine reserves and protected areas were created to "protect and sustain a system of marine reserves to conserve marine habitats and biodiversity, provide a framework for scientific research and effectiveness monitoring." ODFW is designated as the lead agency to implement Oregon's marine reserves and protected areas – and as such, they should be featured as a prominent program within the nearshore strategy and recommendations regarding research, monitoring and human dimensions should be incorporated. Other ODFW documents that detail marine reserve ecological monitoring objectives should be cited and linked within the strategy.

Smelt Species

We recommend including all osmerid smelts as strategy species, rather than limiting the inclusion to longfin smelt, which is limited in geographic scope and has little data to support its role in Oregon waters. We understand that Eulachon and surf smelt are already included as strategy species, and the proposed revision would include longfin smelt, a third member of the Osmeridae family. Expanding the scope of smelts to all members of the Osmeridae family would permit longfin smelt to remain a focus but also incorporate other more prominent smelt species, such as night smelt. There is a great amount that we do not know about the habits and the current status of smelt species in Oregon that is increasingly important, as the focus on forage fish and the need for ecosystem based management builds. Knowing spawning habitat, migration patterns, range shifts, predator-prey relationships for any of the smelt species is critical. By including all of the members of the Osmerid family, researchers interested in finding these answers would have greater access to funding. Additionally, protection of important habitat could be supported by their importance as a strategy species.


Robust Objectives and Actions

The ONS, in general, and the Recommendations section, in particular, could be greatly strengthened by adding more specific elements that are common in strategic planning. Adding additional details to the Recommendations section would help increase buy-in and support of stakeholders. It will also identify where stakeholders can lend their resources and expertise to help ODFW accomplish outcomes. Specific elements to add include:

- Recommendations beyond existing work to incorporate future and emerging actions
- Objectives that are time-bound
- Indicators that are quantitative in nature to help measure success
- A prioritized set of actions to increase buy-in and support of stakeholders
- Dollar amounts of resources needed to accomplish each recommendation
- Additional cross-pollination between the ONC and OCS recommendations. For example, Recommendation 11 (Estuarine Fish and Wildlife Management) is well constructed but could be strengthened by increased correlation with the OCS (and vice versa). Restoration of tidal floodplains and estuary habitats should also be included in the list of benchmarks.

Again, thank you for the opportunity to provide these comments. We look forward to working with ODFW on this document and the future work that it envisions. If you have questions, please do not hesitate to contact myself at jcarter@tnc.org or Gway Kirchner, our Marine Fisheries Project Director, at gway.kirchner@tnc.org.

Sincerely,



Jena Carter
Oregon Marine and Coast Director

From: Robert Bailey <robert.bailey5055@gmail.com>
Sent: Monday, July 20, 2015 12:43 PM
To: Greg.Krutzikowsky@state.or.us
Subject: Comments on Draft Nearshore Strategy
Attachments: Final OSCC comments ODFW draft Nearshore Strategy.pdf

Mr. Krutzikowsky:

Attached are comments on the draft Nearshore Strategy from Phillip Johnson, Executive Director of the Oregon Shores Conservation Coalition. The Board of Directors of Oregon Shores has reviewed and shaped these comments and pleased to send them to you.

Thank you for the opportunity to provide these written comments. As a heads-up, Oregon Shores plans to provide oral comment on the draft to the Fish and Wildlife Commission at its meeting on August 7.

My best,
Bob Bailey

--

robert.bailey5055@gmail.com
503-507-9507
Oregonian
Coastal Advocate
Washboard Specialist



July 20, 2015

Gregory K. Krutzikowsky
Nearshore Policy Project Leader
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Dear Mr. Krutzikowsky:

The Oregon Shores Conservation Coalition (Oregon Shores) appreciates the opportunity to provide comments on the 2015 Draft Oregon Nearshore Strategy. These comments are intended to help the Oregon Department of Fish and Wildlife and all Oregonians achieve sustainable use and enjoyment of our nearshore ocean and coastal resources.

Oregon Shores is a non-profit organization founded in 1971 to protect the public's interest in Oregon's beaches and the entire coastal region. For over 40 years, Oregon Shores has advocated for and taken legal action to protect a wide range of public coastal resources and values in estuaries, rivers, and the nearshore ocean. Oregon Shores recently adopted a comprehensive Coastal Conservation Planning Framework that seeks to address the entire coastal region's conservation needs through an integrative, multi-issue, collaborative approach that advances the concept of the "land-sea connection." Oregon Shores sees many of the same concepts in the 2015 Draft Strategy. We thus offer these comments in an effort to relate the ODFW strategy to the goals, objectives, and actions in our own strategic plan.

Strategic Goals, Objectives, and Actions

Oregon Shores finds the 2015 draft to be a useful summary of marine and coastal resources of concern, and of ODFW's current responsibilities and potential interests. Unfortunately, it seems to be simply an update of the 2006 – 2015 plan rather than a fully developed new strategy. The document is missing a number of elements that would make it relevant and useful in addressing oncoming resource conservation challenges on the Oregon coast. ODFW should clearly identify priority issues, which do not appear in the draft, and articulate strategic goals, objectives and specific program activities that would address those priority issues during the plan period. As part of the overall framework for these strategic goals and objectives, we urge ODFW to acknowledge the State of Oregon's overall goals for marine resources in Statewide Planning Goal 19, Ocean Resources, and in the Oregon Territorial Sea Plan. We strongly suggest that ODFW develop these strategic goals, objectives, and actions to serve to guide and evaluate the program actions of ODFW and other entities over the next decade with respect to nearshore issues. Oregon Shores believes that these goals should address the following priority topics:



Climate Change

The draft lacks a consideration of the profound conservation issues likely to arise due to the almost certain effects on the coastal and marine environment resulting from climate change. Oregon Shores believes that the prospect of climate change is one of the most serious strategic issue facing Oregon's coastal and marine environment. We strongly urge ODFW to recast this document to clearly and strategically address conservation needs presented by rising sea levels in estuaries, rivers, and the ocean shore; the effects of acidification and of hypoxic conditions; changing levels and patterns of precipitation including the likelihood of extended droughts; and rising temperatures. The coming decade will be important in setting the direction for ODFW, other resource agencies, non-governmental organizations, and citizens to address these serious issues. We believe that ODFW's current planning process is a key opportunity to embed these considerations into a nearshore conservation strategy for the coming decade and that failure to seize this opportunity could lead to a "strategy" that will be increasingly irrelevant in addressing coastal and marine resource conservation challenges presented by the effects of climate change.

Marine Reserves

The strategy should take advantage of the existing network of five marine reserves and other marine protected areas to address many of the research, monitoring, and management issues discussed in the draft. During the previous strategy period of 2006 – 2015, ODFW directed a significant amount of effort to the designation and implementation of the existing marine reserves, and is likely to continue to conduct program activities in these areas. These reserves are valuable assets to the State of Oregon for the long-term ecosystem-based management of nearshore marine resources and thus need to be explicitly addressed. In addition, the strategy timeframe includes a period during which it is highly likely that the effectiveness of the current marine reserves will be assessed by the Oregon legislature and potential expansion of the network may be considered. It is especially important that the strategy capture the opportunities presented by these reserves and articulate how the ODFW will take advantage of them to obtain data needed to assess their effects, along with plans for collecting data and information identified in this draft that are needed for management and conservation of nearshore marine species.

Coastal Watersheds and Estuaries

Oregon Shores fully supports the concept of the "land-sea connection" as an organizing principle for meaningful conservation of marine and coastal resources. However, even though the draft strategy briefly discusses the concept of the "land-sea connection" in resource conservation, this concept must be more fully developed to be meaningful. To do so, we recommend that the material pertaining to the Coast Range in the draft Statewide Conservation Strategy be incorporated into this document, and the analysis of coastal watershed conservation needs and issues be more thoroughly developed.



The strategy should also more thoroughly discuss and account for current real-world efforts to manage and restore Oregon's estuaries and expressly consider the effects of climate change on Oregon's estuaries. We recommend that the strategy include

- 1) an assessment of the current ecological and habitat conditions of Oregon's 22 estuaries, identifying priority issues to be addressed during the plan period, particularly related to the likely effects of climate change on these vulnerable, sensitive ecological areas;
- 2) an assessment of the effectiveness of Oregon's current estuary management program under Statewide Planning Goals 16 and 17, both of which are strongly protective of estuarine and shoreline habitats, to meet conservation needs and habitat restoration opportunities, especially in light of projected sea level rise;
- 3) consideration of the current efforts by and effective coordination among ODFW, the Oregon Watershed Enhancement Board, local watershed councils, the US Fish and Wildlife Service and other federal agencies, coastal Indian tribes, local governments, and non-governmental organizations to protect and restore habitat for salmonids and other coastal species such as Marbled murrelets; and
- 4) a discussion and assessment of current program activities within ODFW and with partners to address estuarine management and conservation issues, including the need for program capacity to address the multitude of issues likely to arise in estuaries and coastal watersheds due to effects of climate change.

Rocky Shores

The draft strategy discusses concerns with human impacts on rocky shores habitats but does not acknowledge the significant work already done by the ODFW, the Oregon Ocean Policy Advisory Council, Oregon Parks and Recreation Department, other state agencies, university researchers, and local community groups to document and address these impacts in rocky shore areas. The strategy should consider the specific measures ("management prescriptions") recommended in the Rocky Shore Management Strategy of the Oregon Territorial Sea Plan adopted in 1994 are directed to ODFW and other state and federal agencies to better protect rocky shore resources. ODFW was instrumental in devising these recommended actions for rocky shores within a comprehensive ecosystem-management context and so we urge that this conservation strategy address these measures as opportunities to advance conservation of these critical resources.

Fisheries Management

We urge that the strategy address ODFW's relationship to the initiatives of the Pacific Fishery Management Council (PMFC) to achieve ecosystem-based management of fisheries and key species in the Exclusive Economic Zone (EEZ), many of which are listed as "strategic species" in the matrices in the draft strategy. In particular, the PMFC has developed and adopted a Fishery Ecosystem Plan (FEP) that is intended to modify various fishery management plans to more fully

account for ecosystem effects of particular fisheries. The PMFC has also made available its ecosystem initiatives in support of the FEP. We recommend that the ODFW's nearshore strategy recognize, be consistent with, and support the ecosystem-based strategies of the PMFC, especially with regard to nearshore species for which ODFW has management authority.

Scientific Data and Information

The draft strategy contains many references to the need for more or better information by which to manage marine and coastal resources. However, the document contains no recommendations or steps for filling these data needs during the planning period. Oregon Shores believes that three conditions exist that should be accounted for in developing a data strategy:

- 1) Marine Reserves: the five existing marine reserves offer ODFW an outstanding strategic opportunity to fill many of the identified data needs pertaining to life histories of marine species, the ecological connections among estuaries, the nearshore ocean, and offshore marine environments, and the effectiveness of various management measures;
- 2) Oregon Ocean Science Trust: although the Oregon Ocean Science Trust, established in 2013 by the Oregon legislature, has yet to become operational, we urge ODFW to consider how that entity could serve to meet the need for data and information about the nearshore marine environment; and
- 3) Marine Spatial Planning and On-Line Data Portals: From 2008 to 2013, ODFW and other state agencies worked closely with university researchers, stakeholders, and non-governmental organizations to develop state-of-the-art digital marine spatial planning tools, an on-line data portal, and acquire significant new data sets and information about the nearshore marine environment and uses. These new data and mapping tools were applied by ODFW and other agencies to support the process of amending the Oregon Territorial Sea Plan for ocean wave energy and the process of designating the marine reserves that exist today. These data and tools should be fully considered in support of activities proposed in the new conservation strategy.

We recognize that developing a plan for identifying and acquiring needed data and information is a daunting task, but we believe the document should more fully account for present data and information conditions, identify priority information needs, and articulate a strategy for acquiring needed data during the plan period.

Strategic and Priority Species

The treatment of "strategic" and "priority" species should be clarified. The extensive list of Strategic Species in the draft contains many fish species for which the PMFC, rather than ODFW, has primary management authority or interest, as well as other species for which federal agencies such as US Fish and Wildlife Service have primary management authority. We urge that "strategic species" for purposes of this document be identified and listed based on criteria



that reflect strategic conservation needs and the ability of ODFW to effect conservation or management measures for them. Likewise, criteria need to be included and rationales presented for identifying certain species as “priority” as opposed to “strategic.” While all species are important ecologically, we urge ODFW to clearly articulate the basis on which certain species are identified as strategic or priority.

Overall, we recommend that the draft clearly identify and discuss the priority strategic conservation issues of importance to ODFW, articulate conservation goals and objectives to address those strategic issues, and offer specific activities to achieve those goals and objectives, with resources needed to achieve them, over the coming decade.

Oregon Shores appreciates consideration of these comments and looks forward to working with ODFW to carry out this important work.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip Johnson", followed by a long horizontal line extending to the right.

Phillip Johnson
Executive Director

From: Quinn Read [qr@oregonwild.org]

Sent: Monday, July 20, 2015 4:55 PM

To: Audrey C Hatch

Subject: Oregon Wild Comments on Oregon Conservation Strategy Update

Hello Audrey,

Attached are Oregon Wild's comments on the Oregon Conservation Strategy update!

Thank you so much for the opportunity to provide feedback.

Best,

Quinn

--

Quinn Read

Wildlife Coordinator

Oregon Wild | www.oregonwild.org<<http://www.oregonwild.org>>

(503) 283.6343 ext 226 | qr@oregonwild.org<<mailto:qr@oregonwild.org>>

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**OREGON
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Formerly Oregon Natural Resources Council (ONRC)

www.oregonwild.org

July 20, 2015

Audrey Hatch
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, Oregon 97302

Re: Oregon Wild Comments on ODFW's draft revision of the Oregon Conservation Strategy

Dear Ms. Hatch,

We are writing to thank you for undertaking this important review and update of the Oregon Conservation Strategy and to provide comments on the list of Strategy Species for consideration in the final version of the 10-year update. Specifically, we would like the list of Strategy Species to include every fish and wildlife species listed as threatened or endangered under Oregon state law and the Federal Endangered Species Act.

The Strategy Species list, as it currently stands, omits several threatened or endangered species. Because the Oregon Conservation Strategy is intended to be a comprehensive planning document to guide natural resources agencies, conservation organizations, landowners and others who want to enhance and conserve Oregon's fish, wildlife, and their habitats, it should reflect the current legal and regulatory framework for threatened and endangered species.

The following species are listed as either threatened or endangered under Oregon law or the Federal Endangered Species Act and are absent from the list of Strategy Species in both the Oregon Conservation Strategy and the Oregon Nearshore Strategy.

- Blue Whale -- Listed as endangered under Oregon and Federal law.
- California Least Tern -- Listed as endangered under Oregon and Federal law.
- Canada Lynx -- Listed as threatened under Federal law.
- Fin Whale -- Listed as endangered under Oregon and Federal law.
- Green Sea Turtle -- Listed as endangered under Oregon law, and threatened under Federal law.
- Humpback Whale -- Listed as endangered under Oregon and Federal law.
- Leatherback Sea Turtle -- Listed as endangered under Oregon and Federal law.
- Loggerhead Sea Turtle -- Listed as threatened under Oregon law, and endangered under Federal law.
- Northern Pacific Right Whale -- Listed as endangered under Oregon and Federal law.

- Pacific Ridley Sea Turtle -- Listed as threatened under Oregon and Federal law.
- Sea Otter -- Listed as threatened under Oregon and Federal law.
- Sei Whale -- Listed as endangered under Oregon and Federal law.
- Short-tailed Albatross -- Listed as endangered under Oregon and Federal law.
- Sperm Whale -- Listed as endangered under Oregon and Federal law.
- Yellow-billed Cuckoo -- Listed as threatened under Federal law (with no critical habitat in Oregon).

These species, and other invertebrate and plant species listed as threatened or endangered under Oregon law or the Federal Endangered Species Act, should all be considered for inclusion on the list of Strategy Species.

The Oregon Conservation Strategy is led by the Oregon Department of Fish and Wildlife and is part of a nationwide framework for fish and wildlife conservation through the State Wildlife Grants program under the U.S. Fish and Wildlife Service. The Strategy should, accordingly, include every species listed under Oregon endangered species law and the Federal Endangered Species Act. To fulfill its goal to guide conservation throughout Oregon, it should incorporate existing regulatory mandates. Therefore, species protected by state and Federal law, and under active management by ODFW and USFWS, should be addressed in the list of Strategy Species.

Thank you for considering our comments.

Respectfully,

Quinn Read
Wildlife Coordinator
Oregon Wild

July 2015

Dear Ms. Hatch and Mr. Krutzikowsky,

Thank you for your work on the draft revisions of the Oregon Conservation Strategy and the Oregon Nearshore Strategy. I am writing today to request that you include sea otters in your list of Strategy Species and include a plan for recovering this important species and for identifying important habitat. Sea otters are a critical keystone species and beloved to Oregonians who wish to see them once again flourish off our shores.

Sea otters once thrived in Oregon -- before they were hunted to near extinction to meet the demands of the fur trade. However, aside from one failed reintroduction in the 1970s, Oregon has put little time or effort into recovering a native sea otter population. The website for the Oregon Department of Fish and Wildlife -- the state agency charged with protecting and enhancing all of Oregon's fish and wildlife -- fails to even mention sea otters on its list Oregon wildlife species (even though they are listed as threatened under the State's endangered species law).

The presence or, in Oregon's case, absence of sea otters has a profound influence on their native ecosystems. Without otters to prey on sea urchins and keep their numbers in check, urchin populations flourished and devoured coastal kelp forests. This compromised the health and abundance of species dependent on those forests for food and shelter. The return of sea otters to Oregon would help restore the overwhelmed kelp forest and restore the diversity of plants and animals along the coast.

ODFW should include sea otters on their list of Strategy Species for both the Oregon Conservation Strategy and the Oregon Nearshore Strategy. But they should not stop there. ODFW should craft an Oregon Sea Otter Recovery Plan that identifies potential habitat, and develops a plan for restoring and managing these iconic animals. Now, more than ever, a comprehensive management and conservation plan is needed so that we can welcome these important and charismatic animals home to the Oregon coast.

Thank you for providing the public the opportunity to comment on this important matter.

Respectfully,

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Dear Ms. Hatch and Mr. Krutzikowsky,

Thank you for your work on the draft revisions of the Oregon Conservation Strategy and the Oregon Nearshore Strategy. I am writing today to request that you include sea otters in your list of Strategy Species and include a plan for recovering this important species and for identifying important habitat. Sea otters are a critical keystone species and beloved to Oregonians who wish to see them once again flourish off our shores.

Thank you for providing the public the opportunity to comment on this important matter.

Respectfully,

Jessica Eagan
6636 se 78th
Portland, OR 97206

Dear Ms. Hatch and Mr. Krutzikowsky,

Sea otters are beloved to Oregonians! We wish to see them once again flourish off our shores.

They once thrived in Oregon before they were hunted to near extinction by the fur trade. However, aside from one failed reintroduction in the 1970s, Oregon hasn't put much effort into recovering a native sea otter population. The website for the Oregon Department of Fish and Wildlife doesn't even mention sea otters on its list of Oregon wildlife species even though they are listed as threatened under the State's endangered species law.

The absence of sea otters has a profound influence on ecosystems. Without otters to prey on sea urchins, urchin populations flourish and devour coastal kelp forests. This compromises the health and abundance of species dependent on those forests for food and shelter. The return of sea otters to Oregon would help restore the kelp forest and restore the diversity of plants and animals along the coast.

Please make the sea otter a Strategy Species for both the Oregon Conservation Strategy and the Oregon Nearshore Strategy.

And PLEASE develop a Sea Otter Recovery Plan that identifies potential habitat. Now, more than ever, a comprehensive management and conservation plan is needed. I'd LOVE to welcome these important and (and charming!) creatures home to the Oregon coast.

Thanks for listening!

Sincerely,

Mary Hayden
18347 S. Redland Rd.
Oregon City, OR 97045

Dear Ms. Hatch and Mr. Krutzikowsky,

I am writing today to request that you include sea otters in your list of Strategy Species and include a plan for recovering this important species and for identifying important habitat.

The return of sea otters to Oregon would help restore the overwhelmed kelp forest and restore the diversity of plants and animals along the coast.

ODFW should include sea otters on their list of Strategy Species for both the Oregon Conservation Strategy and the Oregon Nearshore Strategy. But they should not stop there. ODFW should craft an Oregon Sea Otter Recovery Plan that identifies potential habitat, and develops a plan for restoring and managing these iconic animals. Now, more than ever, a comprehensive management and conservation plan is needed so that we can welcome these important and charismatic animals home to the Oregon coast.

Thank you for providing the public the opportunity to comment on this important matter.

Respectfully,

james thompson
2743 nw thurman street
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portland, OR 97210

Dear Ms. Hatch and Mr. Krutzikowsky,

We really appreciate what you've done so far, but you're missing a critical and irreplaceable species -- the sea otter.

So thank you for your work on the draft revisions of the Oregon Conservation Strategy and the Oregon Nearshore Strategy. But I am writing today to request that you include sea otters in your list of Strategy Species and include a plan for recovering this important species and for identifying important habitat. Sea otters are a critical keystone species and beloved to Oregonians who wish to see them once again flourish off our shores.

Sea otters once thrived in Oregon -- before they were hunted to near extinction to meet the demands of the fur trade. However, aside from one failed reintroduction in the 1970s, Oregon has put little time or effort into recovering a native sea otter population. The website for the Oregon Department of Fish and Wildlife -- the state agency charged with protecting and enhancing all of Oregon's fish and wildlife -- fails to even mention sea otters on its list Oregon wildlife species (even though they are listed as threatened under the State's endangered species law).

The presence or, in Oregon's case, absence of sea otters has a profound influence on their native ecosystems. Without otters to prey on sea urchins and keep their numbers in check, urchin populations flourished and devoured coastal kelp forests. This compromised the health and abundance of species dependent on those forests for food and shelter. The return of sea otters to Oregon would help restore the overwhelmed kelp forest and

restore the diversity of plants and animals along the coast.

ODFW should include sea otters on their list of Strategy Species for both the Oregon Conservation Strategy and the Oregon Nearshore Strategy. But they should not stop there. ODFW should craft an Oregon Sea Otter Recovery Plan that identifies potential habitat, and develops a plan for restoring and managing these iconic animals. Now, more than ever, a comprehensive management and conservation plan is needed so that we can welcome these important and charismatic animals home to the Oregon coast.

Thank you for providing the public the opportunity to comment on this important matter.

Respectfully,

Kayla McKee-Price
327 NW Gina Way Apt 232
Beaverton, OR 97006

Dear Ms. Hatch and Mr. Krutzikowsky,

I am writing today to request that you include sea otters in your list of Strategy Species and include a plan for recovering this important species and for identifying important habitat.

I also request that ODFW create an Oregon Sea Otter Recovery Plan that identifies potential habitat and develops a plan for restoring and managing these iconic animals.

Thank you for providing the public the opportunity to comment on this important matter.

Respectfully,

Mark Van Ryzin
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From: LANIER Andy
Sent: Tuesday, July 21, 2015 3:49 PM
To: KRUTZIKOWSKY Greg;
'ODFW.NearshoreStrategyInput@coho2.dfw.state.or.us'
Subject:Re: Nearshore Strategy Comments

Dear Greg,

The Oregon Coastal Management Program has received the latest draft of the Oregon Nearshore Strategy, and is submitting these comments to you for consideration. The Oregon Coastal Management Program, a division within the Department of Land Conservation and Development, is charged with administering the state land use planning Goals that deal specifically with coastal resources, specifically 16, 17, 18, and 19. In general, the OCMP is highly supportive of the updates and modifications to the Nearshore Strategy proposed in this opportunity for public comment. Specifically, we support all actions and recommendations that enhance the ODFW's ability to research, monitor, and manage the Nearshore coastal environment using ecosystem based management principles and techniques, as they are also foundational aspects of the Coastal Goals. The OCMP supports the combination (or merge) of the Nearshore Strategy and Oregon Conservation Strategy species lists, as we feel that the combination of the two will result in increased awareness of the state's important marine and estuarine species. Below you will find some specific recommendations regarding species for consideration, general recommendations on the strategy document, and a factual correction to the strategy.

Species Recommendations:

- * Include the Bald Eagle as a strategy species. The increased presence of bald eagles on the Oregon coast over the past several years may have a profound effect on other important nearshore strategy species, especially colonial nesting seabirds, and should be closely monitored.
- * Include the Sand Dollar in the invertebrate "Watch List" as a species that may become more important in the future. During the past several years, the presence of very large sand dollar beds located in the subtidal nearshore environment became known. Due to the very large size of some of the aggregations, this species should be added to the list.
- * Include the Native Oyster in the invertebrate "Watch List" as a species that may be ecologically impacted by changing ocean water conditions over the next decade.
- * Correction: the Blue Mud Shrimp is listed both as a Strategy Species, and as a "Watch List" species. It should probably only be listed as one or the other.

General Recommendations:

- * Increase the number and quality of images, graphics, and maps (especially the map resolution) in the document. Images of the habitats described in the Strategy, with links to the known locations of some of the habitats, would provide a more direct connection to places of importance, thereby making connections with the public that would reaffirm the descriptions provided in the text.
- * Did we mention improving the resolution of the maps? The maps are so blurry at print resolution that the information being presented is hard to concentrate on. The content in the maps is good it's just that they are hard to read.

Corrections:

- * In your summary of changes (p. 26) the term "rearshore" needs to be changed to "nearshore."
- * In the Estuaries section (page 116) the reference to the Estuary Mapping Tool <http://www.coastalatlant.net/estuarymaps/> should list us (the Oregon Coastal Management

Program) as the program administering the tool, as it is hosted on our server through the Oregon Coastal Atlas, and updated by our staff. The Oregon Local Government Web Mapping consortium was a group that helped to build the Open source tool, GeoMoose, which is the platform we used to build the tool.

Cheers,
Andy

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From: [Shannon Davis](#)
To: ["Greg Krutzikowsky"](#)
Subject: draft nearshore strategy update
Date: Tuesday, June 23, 2015 3:52:57 PM

Greg:

I just read through all of the posted chapters. Nice concise writing. Much less accusatory and depressing than the California draft document. It left me with the impression there is conservation hope when we understand environmental relationships and get to work on overcoming the adverse impacts. I also learned a lot about future ODFW plans for ecosystem management approaches like development of forage fish FMP.

Anyway – good job to you and your team.

Shannon

From: kirsten.potter
To: Greg.Krutzikowsky@state.or.us
Subject: Nearshore Strategy
Date: Wednesday, June 24, 2015 2:14:05 PM

Sir,

I am a retired biologist but not a fisheries biologist. I live in Klamath Falls so will not be attending one of the two meetings.

I do not have time or interest in plowing through the, no doubt, voluminous stacks of paperwork various agencies generate on this issue. Indeed, my view is that while agencies produce more and more paperwork, various animal and fish species continue to slip away. Sad.

My wife, Kirsten, and I were very pleased when Oregon finally adopted coastal fish sanctuaries as a means of enhancing fish populations. They have proven beneficial in other states and we are confident they will improve Oregon's fisheries.

We write to urge full support for establishing more fish refuges along the coast and increasing the size of the ones we have.

Dave Potter
Klamath Falls, OR

From: [Kelsey L. Adkisson](#)
To: [Greg Krutzikowsky](#)
Subject: NSS feedback via Twitter
Date: Wednesday, June 24, 2015 2:30:32 PM

Hey Greg,

Not sure if Twitter counts as feedback on the NSS, buuuut the Healthy Ocean Coalition (aka "Nat'l Ocean Policy") liked the marine planning recommendation. Just FYI.

Kelsey



Nat'l Ocean Policy [@NatlOceanPolicy](#) · 15m

Nice to see #MarinePlanning called out as a recommendation given OR's leadership in planning for renewable energy.



Kelsey Adkisson [@KelseyAdkisson](#)

Just released by @ODFW for healthy oceans and thriving habitats! tinyurl.com/o598hkb #nearshore #conservation

8:47 AM · 27 Jun 2015 · Details



Reply to [@NatlOceanPolicy](#)



EDF Oceans [@EDFOceans](#) · 17m

Redefining sustainability as triple win for environment, food security, people
[@AVLeland](#) [@Huffpostgreen](#) #OceanSummit ow.ly/OxzBW

[View summary](#)

From: Audrey C Hatch
Sent: Tuesday, June 30, 2015 12:28 PM
To: Fran Recht
Cc: Greg Krutzikowsky; Caren Braby
Subject: RE: nearshore plan comment: Chap 4 coastal communities

Thank you Fran;

ODFW appreciates your time in the review process, and your comments. I am forwarding this to Greg Krutzikowsky and others in the nearshore planning team to consider over the coming weeks.

Best, Audrey
Audrey Hatch
Oregon Conservation Strategy contractor
Home office phone: (541) 207-1038

From: Fran Recht [franrecht@centurytel.net]
Sent: Tuesday, June 30, 2015 12:08 PM
To: Audrey C Hatch
Subject: nearshore plan comment: Chap 4 coastal communities

Hi Audrey, I think the restoration economy should be included in the Chapter 4 section about local communities economics in the nearshore strategy. The study I cite can be found here: http://www.oregoncoastalliance.org/documents_13/Restoration_Economy_Study_2010.pdf The figures about the amount of funds spent to date was from a search I did of OGMS site- for regular and small grant expenditures in the coastal watershed areas. Here is my suggestion for addition to the Coastal Oregon Economic Characteristics section of the report. Thanks

Fran Recht
Pacific States Marine Fisheries Commission
Habitat Program
P.O. Box 221
Depoe Bay, OR 97341
541-765-2229

Mr. Brutzikowsky,

Concerning Nearshore planning:

- 1) continue closing snowy plover nesting grounds.
- 2) Keep coastal areas wild. Minimize development.
- 3) Reduce O.R.V. use.
- 4) increase marine sanctuaries.
- 5) stop coastal forest logging. Riparian area temperatures are presently not in compliance due to minimal logging buffer zones.
- 6) reduce invasive species.
- 7) continue marbled murrelet survey/management

Sincerely,

Charmaihe Rich

2026 Lake Isle Dr.

Eugene, OR 97401

Roxann B Borisch

Subject: Ninette Jones shared "ODFWCONSERVATIONSTRATEGYB.doc" with you
Attachments: SeaLionDefense_Comments.docx

From: Ninette via Dropbox [no-reply@dropbox.com]
Sent: Thursday, July 23, 2015 9:56 AM
To: audrey.c.hatch@state.or.us
Subject: ninette Jones shared "ODFWCONSERVATIONSTRATEGYB.doc" with you

[https://www.dropbox.com/static/images/emails/glyph/glyph_34@2x.png]

From Ninette:

"Hello Audrey, If I am so permitted to share this copy with you and the ODFW commission and I will be able to correspond more in the future. Thank you for your time understanding and assistance with this matter. Ninette"

Click here to view<<https://www.dropbox.com//eY80sJ2CP22tKMMVccwKHt>>

(Ninette shared these files using Dropbox. Enjoy!)

© 2015 Dropbox

The Pacific Northwest Conservation Strategy plan will benefit everyone if it is written to support key stone species and uphold the native web of life in the Bio region. Today, they have become widely recognized as a barometer of the health of aquatic ecosystems.² ODFW must not erode the relationships that support the health of these aquatic systems with false optimism and inundation of hatchery technology and removal of important predators. There is concern for the status quo to dilute the chance of funding support for other progressive projects that will actually aid the wild salmon & sea lions.

Does ODFW just want to run hatcheries and or aid the wild fish?

In exchange for targeting important predators which is bad for the eco-system. The unblocking of thousands of fish passages and installing lamprey criteria screens in culverts and water diversions across Oregon and Washington State will actually help save the salmon that scapegoating the sea lions for their sustenance needs will not. Hatchery fish outcompete wild fish for food and habitat space.

The Pacific Northwest region --Tim Egan once memorably described as "anywhere a salmon can get to."¹

- "The most current information shows that approximately 27,800 fish passage artificial obstructions (those structures, such as culverts, dams, tide gates, levees, etc., placed in fish bearing streams that hinder, or have the potential to hinder fish passage) exist in Oregon."
SOURCE: ODFW Near shore strategy Pg 41

ODFW ought to cease employing unjust, cruel, hazing and lethal tactics of removal of the sea lions in the Pacific Northwest. These acts of violence and constant harassment by ODFW in the East Mooring Basin or at the Bonneville Dam- Critfc and the USDA bombing the fish and sea lions with m-80s. Is cruel, costly for the tax payer and these actions set a bad example for our children that do not understand why Uncle Sam will not share fish with the sea lions? At an early age we would all like our children to learn to share so ODFW ought to set a good example and share some of their 53 million hatchery fish with the sea lions not kill them for eating.

History on the Columbia River shows us that ODFW is not new to scapegoating and jumping to eradicate important native predators so that they do not interfere or inhibit ODFW's "product" (Litchawhich, 99) getting to market. Yet ODFW does not complain about their "product" dying in the warming waters or in the turbines of the ACOE Dams. ODFW accepts ACOE death & destruction that their dams cause for the wild fish. ODFW will just make more fish in the factory anyway— which these actions do not "really" help the wild salmon.

ACOE does not want to breach any of their dams so the wild salmon suffer and especially in the warming waters. So hatcheries are ODFW's way of scapegoating the wild salmon while renting space from ACOE at the Bonneville Dam so they can operate mass production in their fish factories (Lichatowich). It is my opinion that they write off these wild fish because to protect them under the current business model employed by ODFW and NMFS means lowering profits which Corporations are mandated by law to raise profits no matter what the costs right? Dams or wild salmon?

So to boost profits they turn their backs on the dams, clear cuts and Big Agriculture and opt to maximize the harvest. And instead blame sea lions. It is easy for ODFW to chalk up the many impacts that dams cause for the wild fish as just the "costs" of "progress" and the wild salmon & the sea lions will pay the "price" of ODFW doing business running Hatcheries and not protecting the wildlife. This is neither fair nor acceptable from an agency beholden to protect the wild fish & the sea lions. The current business model that ODFW is employing in regards on the Columbia River does neither.

- **"This system perfectly demonstrates the need for eco-system-based management," says Dawn Noren. The NOAA physiologist. I wonder why NOAA does not follow this principle with sea lions and salmon at the Bonneville Dam.**

Instead they just slaughter the sea lions.

- **Could the Big Money and Politicians who benefit from recreational fishing industry have something to do with the different management by NOAA? From ACS: Orcas and Salmon Management**

History repeats itself:

- “The Pacific Lamprey once deemed “predator” to salmon by sport fishermen whom like the sea lions now were once accused of eating too many of “their “salmon as well.
- So to appease the cries of fishermen from **1940-1980---** **ODFW engaged in poisoning the Pacific lamprey.**” (WHOOOPS) SOURCE : <http://tinyurl.com/q3zpj4v>

This is not the type of business model ODFW ought to employ if they want to save the salmon. Sea Lion extraction weakens the web of life in the bio region. It does not strengthen it as history has shown us.

It is time for ODFW to stop killing sea lions at the Bonneville Dam for consuming some fish out of the Columbia River

“Barriers are frequently associated with irrigation, municipal, industrial and hydroelectric water diversions that can cause fish loss in the millions.” Source ODFW Pg 42

ODFW dumps 53 million salmon into the Columbia River from the Bonneville Dam hatchery yearly for the tribes, sport & commercial fishermen. While sea lions are hazed trapped and killed at the Dam after being identified consuming as little as one salmon in a five year period.

This is severe austerity and greed from ODFW not wildlife protection and ODFW can not meet their mission statement to “protect” wildlife for future generations when ODFW makes millions of fish yearly that have been known to cause problems for the wild salmon for humans to take and yet lethally removes sea lions for consuming as little as one salmon over a five year period at the Bonneville Dam. When sea lions have no other food or habitat choices like humans do.

Hatchery fish compete with resources with the wild salmon. Since they are publicly subsidized it makes sense that the public ought to have some say in who gets to eat some of these fish. Allocate some for the (sea lions & sea birds) ODFW—

It was probably not the public’s intent when they agreed to help subsidize hatcheries that salmon will be grown just to increase the private profits for industry and to improve opportunities for sport killings while at the same time funding ODFW to deny sustenance fish for the sea lions. If fish are grown for the economy they ought to be grown to feed the ecology as well –forests, streams, birds, & sea lions.

Without healthy forests, oceans & an array of bio diversity of species in the Bio Region our survival odds decrease. trophic cascades

I personally will rather have salmon, sea lions, & cormorants on the Oregon Coast than a dollar in my pocket. Because inherently I know that life without these animals will cost us a lot more than what money can buy, and that my dollar means nothing without a web of life to support biological beings.

The web of life of the Pacific North West Coast is a tangible life force that will sustain bio diversity and has sustained bio diversity and habitat health just fine without “management” of so called natural “resource value”. The “intrinsic value” of the web of life on EARTH is the value worth protecting and will provide us lasting benefits for health and happiness for many future generations to come.

If we protect the salmon's food, habitat, and honor their social relationships within the rivers by supporting native predators which the science shows aids the wild fish. And ODFW has the opportunity to unblock the 27, 800 blocked fish passages that have been identified by their own biologists in Oregon. That is if ODFW really wants to help save the WILD salmon?

Thank you for this opportunity to participate.

"Meeting the biological goals of the CMP will require improvement on the status quo for primary habitat limiting factors and preventing other potential impacts from becoming limiting factors. SOURCE: ODFW Pg 93.

AGAIN -It has been said that there can be no "salmon recovery" in the Columbia Basin if fish managers lack any control over the habitat-damaging activities of the Bonneville Power Administration (BPA). The BPA is a federal agency that effectively controls river flows through its hydropower sales. Source: (see :Blume, Michael)

"The habitat strategy that is being endorsed with this multispecies approach is to improve habitat forming processes and functions, without direct regard to improving habitat conditions for a particular species." SOURCE ODFW

"Assuming scenario projections in climate change and human population growth are generally correct, it is hypothesized that *maintenance* of fish population status will require rehabilitated³⁵ and restored³⁶ habitat conditions to support *current* levels of life-stage survival in freshwater and estuarine zones. " ³⁷

Yet ODFW claims that

"Prey sources for freshwater salmonid life stages **will not be** tracked. However, carcass placement (conducted to address unidentified limiting factors associated with nutrient availability) will be tracked, as it has traditionally been, through STEP. Disease occurrence is tracked within the hatchery system; any concerns over disease in wild populations will be addressed as they arise." SOURCE Pg 183 ODFW near shore strategy.

ODFW opts to track predators instead of salmon sustenance

"The tracking of several relatively simple metrics for predators is proposed to provide a better understanding of the effects or abundance of these predators through time. Metrics include pinniped injury marks (at hatcheries), cumulative spring maximum daily number of double-crested cormorants, and smallmouth bass abundance." Source ODFW

So it is in my opinion to say that there appears to be problems with the many contradictions as stated above with the direction that ODFW is charting to help save the wild salmon.

After reading it is evident that there are concerns about the internal functioning and disconnect between departments within ODFW as one agency that so far by what I have reviewed in the ODFW documents provided on the Conservation strategy . There are different priorities for conservation strategies within different ODFW departments that do not seem cohesive enough to fulfill and honor the promise being made to protect the iconic fish. And yet perfectly capable of pumping out hatchery fish, scapegoating sea lions for their sustenance needs while maximizing the harvest and continuing to ignore the bigger impacts facing the wild salmon which is not cost effective --will not provide measurable results for the money spent nor will this business plan help "recover" or protect the wild fish for future generations.

ODFW has a chance to be more successful in moving towards WILD salmon recovery if such heavy emphasis is NOT placed on hatchery production and predator scapegoating. And instead focus is placed on the bigger impacts facing the wild salmon . For example: Does the wild salmon even have any food to eat throughout their various life stages --in their various habitats to boost their chance for survival on earth under ODFW's management?

However “Prey sources for freshwater salmonid life stages **will not be tracked.**” Source: ODFW’s Near Shore Strategy

I am sure that there are ODFW biologists who will like to help answer this question for the public. I am so glad to read that some ODFW biologists actually like to help the wild salmon by fixing culverts and water diversions and fill in the big data gaps of relationships that support a functioning web of life on the North Coast to aid the wild salmon and many other animals that need this sacred fish for their very sustenance not sport.

And to them I say thank you for all your hard work.

Obviously there is a huge disconnect between regulatory agencies that govern lands, water, and atmosphere health, as well when it comes to aiding the wild salmon towards so called recovery. The wildlife ought not to have to suffer and die under the crushing weight of global mass extraction required by the “status quo” that of course seeks to blame important predators and not address the real issues facing us all in regards to surviving on the Planet. The sea lions and a myriad of species rely on this sacred fish’s survival for their very survival. Currently under ODFW’s jurisdiction marine mammals and wild salmon are facing severe threats from within ODFW and this is not what I want to see or support in funding a State agency beholden to protect and are entrusted to care about the sea lions and the wild salmon not just the hatchery fish.

Mother Nature has gifted us with an amazing web of life in the Pacific Northwest Bio Region that has functioned and supported salmon, sea lion & seabird sustenance for millions of years.

It is NOT the sea lions or seabirds causing any collapse for fish species in Oregon. It is that ODFW does not want to protect the threatened species and their food sources over the status quo. It seems that way to me anyway.

It is the exponential growth of human extraction from our oceans and rivers combined with our heavy carbon footprint that is choking out the life on this planet as we know it. Growing the global economy and quests for more profits no matter the costs is very expensive for the public and very destructive to our environment that we rely so much on. The current business model proposed by ODFW can cause many species to become extinct.

The Global market and its consumptive business model may be successful in reaping in the profits. Yet for sowing support for sustaining biological beings on earth—it has not been so profitable—actually this consumptive model of mass extraction creates a huge deficit in our eco system currency.

And we must not forget that Wall Street has played a huge part in devastating Main Street and the unscrupulous business practices of Multi national corporations that have impacted, altered and severely harmed a myriad of life on this planet that has caused many species to collapse.

Census: Oregon, Washington populations climb more than 1 percent <http://tinyurl.com/pkt4nza>

How can there be any salmon recovery if ODFW does not track the food source for the salmon’s life stages in the estuary and on the North Coast? How many salmon can the habitat support? It is a fact of life that we all need to eat.

1. Currently, there are no funds, including Oregon Plan funding, available to routinely collect macroinvertebrate or aquatic vertebrate community information in the North Coast. Future biological assessments in the North Coast are in jeopardy and will yield a “**data gap**” without some investment in this form of monitoring.” (Pg 16). **SOURCE :**
<http://tinyurl.com/nuk896u>

“Estuarine habitats provide diverse rearing habitat and high growth opportunities for outmigrating juvenile salmonids and also provide protection from predators (NMFS 2011; Roegner et al. 2012). The estuary is also an important staging area where juvenile and adult

salmon, steelhead, and trout undergo significant physiological changes that allow transition to and from saltwater.”

Source: Richard N. Williams, PhD Clear Creek Consulting

ODFW is doing a great disservice to the animals in their care by advocating for the removal of marine mammals and seabirds for eating in their coastal home. This is overstepping ODFW's jurisdiction and extending the sport industry's long arm of greed.

ODFW needs to either represent wildlife or industry-- because both have very different priorities, goals, and outcomes that will directly affect the coastal communities, ecosystems and wildlife in the region.

“The Oregon Department of Fish and Wildlife out-plants hatchery fish to net pens in Youngs Bay to increase salmon fishing opportunities. Of the four terminal fisheries sites in the Columbia River Estuary, the Youngs Bay site has the highest five-year average for Chinook harvest”. Source : Columbia River Keeper YES, EVEN with sea lions in the estuary!

Yes, a lot of people come to the Oregon Coast and they do NOT want to KILL anything on vacation.—

ODFW ought to be highly scrutinized for their marine mammal extraction and condemning of sea lions, & seabirds for their sustenance. It is in my opinion that it is the threat of profit loss, and not good science that seeks to vilify the sea lion as only a nuisance predator thus fueling the fire of sea lion scapegoating hysteria .

Sea Lions are important to the Pacific Northwest ecology and they assist the salmon in a myriad of ways. <http://islandpress.org/trophic-cascades>

- Sea Lions Have an Ancient Predator Prey Relationship with the Wild Salmon that the Hatchery fish do not (Pg 3 & 5) <http://tinyurl.com/q7yf8mf>

Humans have many food and habitat choices that the Sea Lions do not. <http://tinyurl.com/oe7hxm>

- **ODFW driver is charged with drunken and reckless driving** after wrecking the state salmon delivery truck killing 11,000 juvenile Chinook salmon on the Highway. <http://tinyurl.com/ogftssz>

Sea lion sustenance is not crime human poaching is!

- **Felony racketeering charges filed against Trade Winds Charter:** <http://tinyurl.com/o64dwa8>
- Oregon State Police (OSP) Fish & Wildlife troopers cited an Astoria man on several commercial fish-related charges after seizing 748 pounds of illegally caught Chinook salmon on the Columbia River near the Willamette River. Troopers also seized an illegal 1,200 foot gillnet used to catch the fish.

SOURCE: <http://tinyurl.com/osyntqu>

Field reports: Banks Lake poachers get 'light' sentence

SOURCE: <http://tinyurl.com/neor3jj>

- As Caviar Prices Skyrocket, Sturgeon Poachers Invade Pacific Northwest. SOURCE: <http://tinyurl.com/pmsqsvy>
- Wildlife Detectives: Sturgeon Poachers Angling For Caviar On The Columbia <http://tinyurl.com/mttqmzt>

- **The felony warrants were due to their previous violations and history of illegal commercialization of sturgeon.** <http://tinyurl.com/p59jk7c>
- Human Smelt-limit violators net about 100 citations in a single dipping day
<http://tinyurl.com/o69e7xq>
- WDFW advertises "Surplus" Salmon for sale while condemning sea lions for eating.
<http://tinyurl.com/nrs45hm>
- **ODFW donates 175 tons of Hatchery Chinook Salmon** to food banks across the county and state of Oregon in 2015. Yet ODFW does not want to share any fish with the sea lions . **Humans have many other food and habitat choices that the sea lions do not.**
<http://www.dfw.state.or.us/news/2015/january/011215.asp>
- **400,000 Chinook Salmon Die** when a water pipe clogs at a ODFW hatchery-- July 2015.
<http://tinyurl.com/pne9oyy>

ODFW is a state agency that seems to cater exclusively to private sports clubs and industry that seek to remove any competition for fish off the river and this ought to change. ODFW ought to facilitate for the good of the wildlife in the region, not just private sport groups.

ODFW represents approximately 10 percent of the Oregon Population (hunter and fishers) and that reflects about 90 % of Oregon residents and wildlife that are NOT being represented and compassionately protected by ODFW.

The Sea Lions are starving, the star fish are melting & oysters can not form a shell.

<http://tinyurl.com/lvdguvw>

- It is time to fund projects that will actually help save the salmon. The Orca, sea lions, star fish, & the oysters all need help too. It is time to protect our oceans because our lives depend on it.

The oceans are the life source for all biological beings on our planet, so the oceans, forest and fish must not be looked at as merely natural resources for mass human extraction.
Planet Ocean: <https://youtu.be/eH1s9GCqPKo>
- If sea lions do not get enough to eat they can become very cold and are susceptible of catching hypothermia, pneumonia and dying. <http://tinyurl.com/l3br63t>
- These numbers only represent those animals that have been brought into a rescue or have received assistance and that many more animals remain uncounted and suffering on the beaches waiting for help. <http://tinyurl.com/nqlxqdh>
- **Over four months 185 CSL were observed and 161 of these animals were never observed before at the dam, so it is far from being "only" the "worst" & "repeat" offenders that are being targeted and killed as some have suggested.** <http://tinyurl.com/nvk9kxn>
- ODFW & WDFW killed thirty CSL at the Bonneville Dam in 2015. All for consuming some fish out of the Columbia River. **Example: C092** trapped and branded 04/21/15 and killed 05/19/15 at the Bonneville Dam. He was observed at the dam for 6 days and observed consuming two salmon. Many sea lions have cruelly suffered his same fate and the lethal of take of sea lions at the Bonneville Dam needs to end.

We Have Met the Enemy and He is Us –Walt Kelly's Pogo Earth Day Poster, 1970
COUNCIL FUKUSHIMA STATEMENT OCT 2013

Sea lions are what scientists' call an Indicator species, and their health is a direct reflection of the over all health of our environment. <http://tinyurl.com/phw9yse>

- When all of the resident fish in Oregon are labeled with a consumption warning that NOBODY is supposed to be eating them unfortunately, sea lions can not read fish consumption warnings. So they are dying from cancers and from other health related issues from hypothermia, & starvation along the west coast. <http://tinyurl.com/nqlxqdh>

BIOP

It has been said that there can be no "salmon recovery " in the Columbia Basin if fish managers lack any control over the habitat-damaging activities of the Bonneville Power Administration (BPA). The BPA is a federal agency that effectively controls river flows through its hydropower sales. 1

NMFS is a department under NOAA and that NOAA is under the Department of Commerce. NMFS is currently being sued by environmental and fishing groups for their failure to produce and salmon recovery plan that actually protects fish in 2015.

NMFS is charged with being negligent and by law they are required to develop the recovery plan, which would set federal standards and give the state direction for taking action across the region.

Many fishing and environmental groups are demanding for increased flows over the dams to aid smolts in getting to the sea and that four dams on the lower Snake River be removed to increase fish passage. They claim this will be a huge step towards protecting these iconic fish.

The reality of it is though just what kind of actual salmon "recovery" plan can the tax payer & the wild salmon really expect to receive from NMFS high atop their Corporate driven headquarters sheltered by their federal mandates to increase profits at any cost that does not include scapegoating wild salmon and sea lions?

Jim Lichatowich's new book, *Salmon, People, and Place: A Biologist's Search for Salmon Recovery*,³ a sequel to his influential 1999 work, *Salmon Without Rivers*,⁴ claims that the listing of several stocks of Pacific salmon during the last two decades has led to spending billions of dollars on recovery efforts, despite making no discernable effect on the fact that salmon have fully lost 40 percent of their historic range. (SJL forgetting the lessons of Leopold)).

"The ODFW strategy aims to restore habitat conditions for several anadromous salmonid species that are representative of overall aquatic ecosystem function; therefore an effective priority process would identify the best projects as those that can most improve population performance of all focal species, through improving the function of habitat formation and increasing habitat diversity." SOURCE ODFW Pg 80.

" The overarching goal of the Strategy is to "maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats, prevent declines of at-risk species, and reverse declines in these resources where possible." ODFW pg 80.

It has been said though that there can be no "salmon recovery" in the Columbia Basin if fish managers lack any control over the habitat-damaging activities of the Bonneville Power Administration (BPA). (Blume).

WHAT CAN WE DO?

There are many things that ODFW can do to help the wild fish.

"Monitoring wildlife habitats and seeking opportunities to maintain or enhance habitat value, connectivity, linking natural landscapes, and providing refugia are primary management strategies to help balance species viability and distribution in response to a fluctuating climate." SOURCE: ODFW Pg 44

The Importance of Lamprey friendly FISH SCREENS

Obstructions to fish passage can cause migratory fish populations to become genetically isolated and therefore more vulnerable to disturbances that cause mortality to populations or individuals. Currently, many miles of stream habitat in Oregon are not producing fish because of passage barriers. Source ODFW Near shore strategy (Pg 38).

WDFW working in conjunction with the U.S. NAVY discovered that there are 30,000 blocked fish passages in Washington State alone, and that left unaddressed they are a huge detriment to successful salmon recovery. <https://youtu.be/BsAaNn2OZsA>

- The salmon need to be able to reach their spawning grounds, and sufficient escapement goals need to be met to help feed the ecosystem. With 30,000 blocked fish passages in Washington State alone there is a lot of work to be done.

"Although there are currently no requirements to ensure passage for wildlife, ongoing efforts to replace culverts present opportunities for developing, testing and implementing methods to maximize benefit for a variety of species." ODFW Pg 42

Fish passage restoration is a key to helping native fish adapt to more extreme weather: Habitat connectivity for aquatic species means removing artificial barriers to migration, such as dams and poorly placed culverts. Restoring fish passage ensures that all life stages of all native migratory fish species, as well as aquatic wildlife, are able to move to habitat that meets their needs within a watershed. SOURCE : Near Shore Strategy ODFW Pg 39.

In 1989, the Oregon Legislature passed Senate Bill 148 (ORS §498.326) which required the Oregon Department of Fish and Wildlife (ODFW) to determine the needs for and location of potential fish screening projects.

Further direction in ORS §498.306 requires ODFW to identify 3,500 priority unscreened diversions.

An initial report of priority unscreened diversion was released in 1990 (*An Inventory of Water Diversions in Oregon Needing Fish Screens* – prepared by David Nichols, ODFW, 1990).

Source:<http://tinyurl.com/nfs7s4>

DO the MATH : 3,500 x 3 salmon per culvert = 10,500 salmon killed and that is more salmon consumed by all the sea lion's combined at the Bonneville Dam in 2015. — Fish screens that meet lamprey criteria are needed as well with a full time crew employed to maintain them in watersheds across Oregon /Washington. This will actually help save the salmon that scapegoating sea lions for their sustenance needs will not
<http://tinyurl.com/qbu4q9k>

"Several monitored fish screening/trap designs in Oregon and elsewhere in the Pacific Northwest have shown that **thousands of young salmonids can be lost in a single unscreened diversion in one season.**(Baki, Pete (Pg 6, 1).

<http://tinyurl.com/ogu84mp>

Thousands of water diversions remain unscreened in Oregon, placing fish at risk." (Pg. 2, 5) Curt Melcher, Interim ODFW 2013 -15 fish screen report. Source: <http://tinyurl.com/ojsybay>

"Thousands of water diversions remain unscreened in Oregon, placing fish at risk." Curt Melcher (Pg. 2, 5) (11).

Barriers are frequently associated with irrigation, municipal, industrial and hydroelectric water diversions that can cause fish loss in the millions. ODFW Pg 42

Similarly, improperly sized culverts can impair passage of amphibians, small and large mammals and other terrestrial species, forcing wildlife to cross roads where they are vulnerable to vehicles and predators. Providing passage at these artificial obstructions is vital to recovering Oregon's native migratory fish populations. Source: ODFW Pg 38

Many unscreened diversions current result in fish being lost in irrigation systems. ODFW Pg 39

"Identifying additional funding sources and incentivizing voluntary landowner passage and screening would be greatly beneficial. A further recommended step is increased data collection in support of the statewide barrier inventory, which will better define "unknown" barrier types and improve our ability to prioritize artificial obstructions for fish passage." ODFW Pg 42

POLLUTION IS WREAKING HAVOK

On Washington's Long Beach Peninsula, a recently spotted sea lion wracked by seizures typical of domoic-acid poisoning. 06/15/2015 NOAA Fisheries mobilizes to gauge West Coast toxic algal bloom

- The animal arched its neck repeatedly, then collapsed into a fetal position and quivered. "Clearly something neurological was going on." Source : <http://tinyurl.com/oo38y2x>

National ocean acidification study finds Northwest among hardest-hit regions. SOURCE: <http://tinyurl.com/onqvz7>

The proposed bill to strip all oversight and prevent the public from suing and directing outright violence to be unleashed upon sea lions by some congressional leaders being and supported by ODFW's Robin Brown and Curt Melcher which is very alarming, sets a bad example, leads to bad behavior that can lead to violent acts to be inflicted upon sea lions by those inclined to do so, and has no place in a humane society nor within an agency such as ODFW.

- **Sea lions also are the victims of many horrible menacing and violent hate crimes.** <http://tinyurl.com/ns5je32> <http://tinyurl.com/p2foqmf>
- **Violent acts against animals are considered recognized as indicators of a disease of the psyche that is not limited to animals.** Source: <http://tinyurl.com/n7mwq7v>
- **The Link: Cruelty to Animals and Violence Towards People** <http://tinyurl.com/ph89zje>
- "It is brazen that these people will shoot these animals that are federally protected," said Rice. "It's really alarming." He also suspects the controversy over the sea lions at the Bonneville Dam may be contributing to the shootings. **"The fact that it is something the state authorities are doing may give people the idea that is OK for them to shoot them, too,"** said Rice. **"It is not OK."** Source: <http://tinyurl.com/7xkya9v>
- In the end it is the Science that is quicker to change than bad policy. Unfortunately, such as with Oregon still participating in the "lethal" take program which has been documented can lead to "vigilante" type behavior which has led to abuse & violence to be inflicted upon the sea lions by those inclined to do so. <http://tinyurl.com/qhn4vn5>

- **And this is another reason out of many as to why ODFW needs to stop scapegoating and participating in the “Lethal Take” of sea lions for consuming some fish below the Bonneville Dam.**
- **It is not in the public’s interest and absolutely unacceptable for ODFW to work to expand hazing and killing of sea lions to the coast. If the sea lion’s do not have the coast. What do they have? What do any of us have?**
- We have seen a steep increase in the number of sea lions washing up shot on the Oregon/Washington coast. It is SLDB’s position that some of this violence can be quelled if only the States will agree to no longer participate in such austerity, & sea lion hate slinging and rightfully share fish with the sea lions because humans have many other food and habitat choices that they do not. <http://tinyurl.com/ohvjy5r>
 - It will do great harm to establish a five year bypass of all oversight regarding sea lions on the Columbia River. The sea lions need more protection not less.

NIS SPECIES : The Columbia River was intentionally stocked with bass, walleye, and other non-native fish to benefit sport fishermen and the states limit what fishermen can catch in order to keep these non-native fish abundant. These fish eat up to 2 million young salmon each year. and compete for habitat. Finally catch limits have been lifted to reduce this impact. Read the study at the link below .

“A biological invasion is underway across the United States and on every other continent. In Oregon, non-native organisms are arriving and thriving, sometimes at the expense of native fish and wildlife, their habitats, and the state’s economy.” SOURCE ODFW Pg 17.

Although , we can not blame over fishing for creating all of the wild salmon's woes because there have been many contributors and many causes that have contributed to the decline of the wild salmon that have far bigger and devastating impacts on the wild fish than the sea lions

- The study found that these non native fish kill more baby salmon than all of the 4 Hs (Hydro, Habitat loss, Hatchery and non native fish inundation and the Harvest) combined.---**Beth L. SANDERSON, KATIE A. BARNAS, AND A. MICHELLE WARGO RUB 2009 Nonindigenous Species of the Pacific Northwest: An Over looked Risk to Endangered Salmon**
The full article: Can be read at the link below.

<http://bioscience.oxfordjournals.org/content/59/3/245.full>

- International shipping (including its ballast water component), followed by aquaculture, have been identified as the two greatest sources of introductions of marine and estuarine invasive species worldwide (Molnar et al. 2008).

“Additionally, bass and other warmwater species which **may** prey upon juvenile salmon and trout are valued sportfish for a large number of anglers.” SOURCE ODFW

“We’re not interested in taking on the recreational fishing industry,” says NOAA’s Beth Sanderson.

Many of the introduced stocks, such as bass and walleye in the Columbia and Snake rivers, are **prized fisheries** regulated by the states.

- SOURCE: Posted in Regional News Saturday, March 7th, 2009 Non-native fish pose substantial threat to salmonids The Columbia Basin Bulletin March 6, 2009
<https://youtu.be/eDtdrpYEvH4>

ODFW provides angling for some of these species by transplanting fish from one waterbody to another, by stocking hatchery-produced fish in locations where impacts to native fish are believed to be acceptable, or by transplanting fish to ponds more accessible for angling. SOURCE ODFW Pg 18

Unfortunately, the ecological and food web effects of non-native invertebrates have received limited attention, and their potential effects on the Basin's native fishes are still poorly described. Given that aquatic invertebrates constitute much of the food of native fish and wildlife (McCabe et al. 1997).

Source: <http://tinyurl.com/oprru9g>

- In Columbia River reservoirs, large channel catfish (> 67 centimeters) consume thousands of juvenile salmon, which comprise 50% to 100% of their diets ([Vigg et al. 1991](#)).

Future increases in temperature, due to ongoing climate change, will favor further expansion of warmwater piscivores, particularly largemouth bass and channel catfish (Poe et al. 1991).

In addition, smallmouth bass have changed the size-based predation dynamics in some areas where they have largely displaced the native predator, northern pikeminnow (*Ptychocheilus oregonensis* [Fritts and Pearsons 2006](#))

- The presence of nonindigenous fishes poses one of the greatest threats to the persistence of healthy native fish populations ([Lassuy 1995](#), [Richter et al. 1997](#), [Rahel 2002](#)).
- The northern pikeminnow is clearly the most abundant and significant fish predator of juvenile salmonids in the lower Columbia River above Astoria (Friesen and Ward 1999).

PIKE MINNOW BOUNTY PAID to anglers in 2014. **GRAND TOTAL = \$572,185.00**
<http://tinyurl.com/okhfrl2>

- Results from studies to date indicate that juvenile shad prey heavily on zooplankton taxa, which are also a primary prey resource for juvenile Chinook in the same habitats ([Haskell et al. 2006a](#)).
- Non-native riparian plants have been shown to change nutrient dynamics of riparian soils and associated streams. It is also well known that riparian vegetation has large effects on aquatic food webs ([Naiman et al. 2005](#)).
- For instance, there has been a dramatic decrease in the native fish biota between 1984-85 ([Palmer et al. 1986](#)) and 1995 ([Barfoot et al. 2002](#)).

"Oregon's rivers and lakes are vulnerable to aquatic invasive species such as the highly invasive zebra and quagga mussels." ODFW Pg 18

- Quagga/ Zebra Mussel inspection, detection, education, and enforcement is needed because approximately 50,000 boats a year can launch at some sites throughout Oregon and Washington. <http://tinyurl.com/ogjvxt7> More attention & funding ought to be placed to help stop this invasive species from entering our waterways. <http://tinyurl.com/ot4xmt> **and stop spending so much money & time monitoring, hazing , trapping, branding and killing sea lions for their sustenance needs which are minimal compared to the bigger impacts facing salmon recovery that ODFW does have the power to change —The Silent Invasion**
- **Sea Lion Defense Brigade can support that having Sea lions on the Columbia River actually aids the State in salmon recovery not hinders it.**
 1. National Marine Fisheries congressional reports to congress state that these salmon runs are listed as recovering and stable. (Pg 10). <http://tinyurl.com/nnyyc5t>

- Most listings cite non-native fishes as the cause of endangerment, typically involving changes in the food web, increases in predation and competition, and infection by non-native pathogens or parasites (Mack et al. 2000, Simberloff et al. 2005)
- At least **54%** of the resident fish species in Washington, **50%** in Oregon, and **60%** in Idaho are non-natives (Sanderson, et al. 2009).
- **The sea lions are opportunistic eaters and they consume a variety of prey.** Their diets tend to fluctuate by location and prey available and in the most abundance the Sea Lion's aid the state in salmon recovery by consuming some of these NIS & hatchery fish.

“Very small fry that enter the Columbia River estuary appear to be surviving and recruiting to later life stages ...,” he said. **“This is relevant because the prevailing thought has been these small fish, once departed from their natal stream do not survive.”** Source: <http://www.cbbulletin.com/433280.aspx>

- “Also, food-web models have been developed (Harvey and Karieva 2005) that indicate that juvenile shad may act as a prey subsidy to larger predators of salmonids.” <http://tinyurl.com/oprru9g>
 - Over **2 MILLION** American **Shad** crossed the Bonneville Dam in 2014. Source: Bonneville Dam Fish count
 - Over one million Chinook salmon crossed the Bonneville Dam in 2014 even with all the sea lions which is more evidence that sea lions have an ancient relationship with this amazing fish that ODFW ought to support.
 - A more ecological friendly management style is preferred by ODFW biologists that does not place the importance on one protected species above the other, and as an agency seek to embrace a holistic approach to eco system recovery that can not be obtained by scapegoating sea lions.
- **“This system perfectly demonstrates the need for eco-system-based management,”** says Dawn Noren. The NOAA physiologist. I wonder why NOAA does not follow this principle with sea lions and salmon at the Bonneville Dam.

Instead they just slaughter the sea lions.

- **Could the Big Money and Politicians who benefit from recreational fishing industry have something to do with the different management by NOAA? From ACS: Orcas and Salmon Management**

It is time for ODFW to stop killing sea lions at the Bonneville Dam for consuming some fish out of the Columbia River.

2. **Sea Lions are important to the Pacific Northwest ecology and they assist the salmon in a myriad of ways.** <http://islandpress.org/trophic-cascades>

- Sea Lions Have an Ancient Predator Prey Relationship with the Wild Salmon that the Hatchery fish do not (Pg 3 & 5) <http://tinyurl.com/q7yf8mf>

When Sea Lions eat the whole eco system gets to eat. Humans just extract fish and other resources and the eco system is starving. Sea lions only consume some fish. They do not allocate it ALL for themselves. Any conservation plan ought to begin with ODFW sharing fish with the sea lions and seabirds.

In my opinion ODFW is relying way too much on hatchery fish production if they have not deemed it important to monitor to see if the wild salmon even have any prey available to them.

How does ODFW know whether they are dropping in too many hatchery fish? What if ODFW causes species collapse of the wild salmon due to the fact that too many hatchery fish were released and this was more than the habitat can support? This can cause a huge die off—salmon populations can hit their proverbial life support system ceiling causing species collapse. ODFW can not blame the sea lions.

The fact that no focus is placed on whether or not the habitat can even actually even sustain and support wild salmon through their various life stages is concerning considering the money being spent on so called salmon recovery. This is not a business model of success to help the wild fish personally speaking.

Because once again this implies that the industrial model of making salmon does not need a functioning habitat for ODFW's factory production of salmon. (Lichatowich). Yet for ODFW to actually help the wild salmon the biological model of survival and to sustain these iconic wild fish for future generations the reality of all life is that we all need to eat. So that takes a healthy functioning food web in the estuary and along the Pacific Coast. It is in my opinion that biologists ought to focus on habitat health and whether they Bio Region can even support ODFW's hatchery fish as well as wild salmon. And how much food and habitat space is needed for all those fish? It seems like a good place to start if they really want to help save the wild salmon.

3. The sea lions have an important job to do.

- The Columbia River Estuary has always been home to sea lions and seals. The Columbia River Estuary extends 146 miles from the mouth of the Columbia River to the Bonneville Dam (pg 3 & 5) **Source:** <http://tinyurl.com/q7yf8mf>
- The sea lions help keep the genetic strength of the wild fish strong and they aid in bio diversity of the Columbia River habitat. The sea lions help create the lushness of phytoplankton which are the cornerstone of the food chains for all life in the ocean. Sea lions and seals help feed and assist with fish distribution throughout the basin. The science supports the importance of key stone species in our region and that removing them causes a great detriment to the ecology. <http://tinyurl.com/nmr77v9>
- **"Maybe it's more accurate to describe pinniped poop as the nearshore fertilizer equivalent to a gardener's Miracle-Gro because it promotes the well-being and lushness of phytoplankton populations, from giant kelp beds to microscopic marine algae."**
Source: <http://tidelines.org/columns/scoop-pinniped-poop-0>

"The volume of plant plankton has declined across much of the world over the past century, probably as a result of rising global temperatures. **But the decline appears to have been steepest where whales and seals have been most heavily hunted.** The fishermen who have insisted that predators such as seals should be killed might have been reducing, **not** enhancing, their catch." **Source:** <http://tinyurl.com/pnem8jn>

Marine mammals reside in the area year round and they will be greatly affected by the increased marine vessel traffic.

In 1998, NMFS identified ship strikes as one of the primary threats to the endangered blue whale in the Pacific. (NMFS, 1998).

At least 18 fin whale mortalities and injuries due to ship strikes were conclusively documented off the coasts of California, Oregon, and Washington between 1993 and 2008. (NMFS 2010).

- "The word salmon comes from the Latin salire, to leap, which clearly captures the return of salmon to rivers and their upstream migration to spawn. Salmon the leaper creates in my mind a picture of a salmon jumping over falls, log jams, and beaver dams on its journey to close the cycle and start a new generation. Salmon may be a product to some, but when I look inside the word "product" I see no trace of the leaper" Jim Lichatowich (99).

According to the Oregon Values project where a number of surveys were taken to gage the pulse of Oregonians about what they value. Here are a few examples of their findings and another reason to stop scapegoating sea lions for their sustenance needs.

Excerpts: from the link below

Environmental Quality and Protection Are Important:

Oregonians value the state's natural beauty, outdoor recreation opportunities, and relatively clean air and water. They also value a good economy, but they want an approach to economic development that recognizes the importance of the state's natural environment to its quality of life.

Asked to choose: **A. Economic growth should be given priority even if the environment suffers to some extent or B. Protection of the environment should be given more priority even at the risk of slowing economic growth**, 57% of Oregonians favor environmental protection and 35% choose economic growth (S1.27).

This finding is validated through all three surveys using a number of different question styles, levels of detail, and relationships with other cultural values. When asked qualitatively what they value about Oregon (as an open response in their own words), fully 78% of the responses include environmentally positive terms, 17% refer to the friendliness of the people and Oregon's climate, and 5% touch broadly on other topics. "Natural landscapes," "cleanness of air and water," "green landscape," "forests and mountains," and "open spaces" are the kinds of spontaneous replies we encountered again and again, demonstrating that values related to environmental quality are paramount to Oregon's citizens.

Natural Resources : **protection of clean air and water**, was judged important by 74%, just below **K-12 education services** and **public safety like fire and police protection** (S1.15,8,7).

Climate Concern Comes of Age:

Public opinion appears to be crystallizing on this issue after several decades of skepticism and uncertainty. Given a choice between statement A (**Climate change requires us to change our way of life such as driving less or living more simply**) and statement B (**if climate change becomes a problem we can deal with it later**) 72% opt for "change way of life" vs. 21% who say "deal with it later"—more than a 3:1 ratio (S1.32). This result was consistent across all five geographic regions, with Portland's metro counties going over 4:1 in favor of statement "A" and Eastern Oregon lowest but still higher than 2:1.

SOURCE: <http://oregonvaluesproject.org/findings/top-findings/>

A. Warming waters of the region wreak havoc on migrating fish <http://tinyurl.com/nvhr7xl> <http://tinyurl.com/orqmq4w>

- Extreme Water Temperatures & Low Flows in Pacific Northwest Rivers Creating Lethal Conditions for Salmon - <http://tinyurl.com/ph9uyfw>
 - All of the mainstem Columbia sites and the John Day and Umatilla Rivers exceeded Oregon's Columbia Basin 20 C temperature criterion intended to protect salmonids (State of Oregon, OAR 340-041-0101) **Salmon are cold water fish.** <http://tinyurl.com/p7nh6d3>

- Bioenergetics simulations of juvenile shad during their July-September feeding period in John Day Reservoir during years of warmer (1994) and cooler (1996) reservoir temperatures show **that juvenile shad grow faster** and consume more food **during warmer conditions** than during the cooler conditions (data from Haskell et al. 2006).

The warming polluted waters of the Pacific Northwest will no longer be life sustaining for salmon whether there are sea lions on Columbia/ Willamette Rivers or not if we do not take action today to mitigate the past errors of our ways. <http://wildfishconservancy.org/.../extreme-water-temperatures...>

_____ Atmospheric carbon dioxide absorbed by ocean waters has resulted in more acidic ocean waters in Oregon (Feely et al. 2008). SOURCE ODFW Pg 4

“The ocean isn’t just the water, it’s the entire environment,” says DiMaggio.
Source: <http://tinyurl.com/lqyg5ey>

b. Drought devastates counties in Oregon+ Washington + California <http://tinyurl.com/q2jh5m3>
<http://tinyurl.com/q2m8cwr>

- **06/17/2015 Drought Conditions Force Difficult Management Decisions for Sacramento River Temperatures**

c. Hydro Power dams. : NMFS 2008

The Biological Opinion (BiOp) <http://tinyurl.com/njcntc8>

- 2014 Biological Opinion (BiOp): Read SOS’s factsheet on the 2014 Federal Salmon Plan [here](#). Hydrological changes associated with dams significantly change freshwater fish assemblages, both above and below dams in the Columbia River Basin (Paragamian 2002) and elsewhere (Quinn and Kwak 2003, Greathouse et al. 2006, Propst et al. 2008). <http://tinyurl.com/nujhx8x>

Aquatic insects require a series of temperature cues to produce eggs, hatch, and develop into nymphs. Over time, dammed rivers behave more like lake ecosystems, losing their capacity to support riverine fish species. ODFW Near shore strategy Pg 36.

Puget Sound orcas need salmon to survive. Dammed to Extinction calls for lower Snake River dam removal to save our killer whales. <http://tinyurl.com/odfahe4>

Sea Lion Defense Brigade (SLDB) is in support of the removal of the four lower dams on the Snake River <http://tinyurl.com/qxocbqu> to save the salmon, the orca and the many other species that rely on cold flowing water not slack water lakes the temperature of hot tubs caused by the dams’. Salmon are cold water fish. <http://tinyurl.com/qxocbqu>

Habitat Losses—over 50% of the original salmon spawning grounds have been removed from production on the Columbia River. SOURCE: DEQ REMAP 2009

- Studies conducted by DEQ and ODFW showed poor condition for fish (15% of stream miles) and macro-invertebrates (40% of stream miles) in the North Coast [1]. Temperature, sediment (bedded, total solids and turbidity) and dissolved oxygen have been identified as pollutant stressors that affect these fish and aquatic life throughout North Coast subbasin in part due to inadequate streamside shading and vegetation, and in the case of temperature, warm water discharges. (pg 7) NCP. Source : please see the link below
- At the broader Coastal Coho ESU scale (results were not summarized specifically for the North Coast), the most extensive stressors were temperature, sediments (total solids and fines), and nutrients (phosphorus and nitrogen). Stressors that

posed the greatest risk to the aquatic life were total solids, fine sediment, dissolved oxygen, the presence of non-native fish, an dpH (pg16).
Source: <http://tinyurl.com/nuk896u>

- Habitat disturbance grew worse with increasing land use intensity, declining from forestry through range, agriculture, and urban areas. Roughly 40% of the riparian area was characterized as having 25% or more bare ground, with some sites nearly barren. Large and small woody debris was absent or sparse in 90% or more of the LMC. Invasive Himalayan Blackberry (17% of the LMC) and English Ivy (4% of the LMC) appeared to be held in check by rip rap and basalt. The limited extent and fair condition of off-channel habitat and aquatic vegetation reflect the loss of salmonid rearing habitat due to anthropogenic activities. SOURCE:DEQ REMAP 2009 <http://tinyurl.com/pzrmvt9>

5

Oceans Are Losing Oxygen—and Becoming More Hostile to Life

<http://tinyurl.com/pu4734o>

e. The Hatchery fish : In 2009, an independent blue-ribbon science panel reported to Congress that it was concerned about the impacts wild fish faced from competition with hatchery raised fish. The panel recommended reforming hatchery management, yet the federal government admitted in a 2012 report that no changes have been made.

90% of the salmon caught in the Columbia River originate from hatcheries, as do 88% of all steelhead. Source <http://tinyurl.com/7bfauys>

- “Every major peer-reviewed scientific study confirms the presence of hatchery fish causes an often-rapid decline in wild population.” The federal government makes the connection too, Tomine said, “citing genetic pollution from hatchery programs as the main factor in Oregon wild-steelhead decline.” Source :<http://tinyurl.com/ncmqgvz>

This fish should be shared with predators because ODFW's hatcheries have caused harm to the wild fish and to the native food web in the many rivers in the Pacific Northwest River. Case No. 3:12-cv-00431-HA (D. Or. Jan. 16, 2014). [\[back\]](#)- Outcompete wild fish for food

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3464026/>

The general finding of low relative fitness of hatchery fish combined with studies that have found broad scale negative associations between the presence of hatchery fish and wild population performance, should give fisheries managers pause as they consider whether to include hatchery production in their conservation toolbox.”

“Accumulating data indicate that hatchery fish have lower fitness in natural environments than wild fish. This fitness decline can occur very quickly, sometimes following only one or two generations of captive rearing.” Araki, Hitoshi, Becky Cooper, and Michael S. Blouin. 2009. Carry-over effect of captive breeding reduces reproductive fitness of wild-born descendants in the wild. *Biological Letters* 5: (5) 621-624.

f. The Harvest / extinction wild salmon are scapgoated for the maximization of the harvest.

<http://tinyurl.com/qafckl4>

- In 2008 Columbia River fisheries incidentally killed 16% of ESA fish, well over a quota of 11%. In 2009 10.2% of ESA were killed, under quota, and in 2010 17% were killed, over the quota of 13%” -- HSUS Sharon Young's testimony on June 10, 2011.
- In 2014 according to the 2014 ACOE field report stated that the California sea lions consumed 1.6% of the run at the Bonneville Dam and this is deemed significant. While Humans took

upwards of 12% of this very same ESA fish and yet, this is considered insignificant.

<http://tinyurl.com/og4yri3>

- There is Extra fish for humans yet, why not any for the sea lions? <http://tinyurl.com/nfpoyh>
- Recreational watercraft can disturb wildlife, and fuel runoff can pollute water. ODFW Pg 27
- The sin of salmon farming <http://tinyurl.com/qx4quoj>
 - Cancer rates are 50 % higher in human populations that eat fish weekly out of the Columbia River than once a month. SOURCE: <http://tinyurl.com/oad2cdc>
<http://tinyurl.com/q6gbnd7>

Bioaccumulation and biomagnifications of chemical contaminants can reduce or eliminate critical components of the food web, leading to food shortages for higher trophic levels. Further, it can reduce the ability of species and individuals to cope with normal environmental stresses due to behavioral deficiencies, slower somatic growth rates and increased disease susceptibility. **This problem is rapidly expanding and could negate many of the restoration efforts.** Further, fish migrating from the oceans to fresh water transport persistent industrial pollutants acquired at sea (Pg 3). Source:

<http://tinyurl.com/qavrsaq>

- For example, the U.S. Department of Energy Hanford Site near Richland, Washington, produced radioactive materials until the early 1990s; high concentrations of PCBs and other organic chemicals have been measured for several decades in fish collected downstream from the facility (USEPA 2002). <http://tinyurl.com/q8l5fac>
- The more persistent organochlorine pesticides widely used in previous years were largely replaced in the 1970s by less persistent, but often more toxic organophosphates (OP), carbamates (CB) and pyrethroids. The OPs and CBs are anticholinesterase inhibitors which affect the central nervous system and have been shown to alter salmon swimming behavior (Sandahl et al. 2005, Brewer et al. 2001), predator avoidance behavior (Scholz et al. 2000), and foraging behavior (Morgan and Kiceniuk 1990).
 - The full extent of glyphosate's eco-toxicity has emerged in new experiments. At concentrations of several parts per million, Roundup is lethal to the neotropical fish *Piaractus mesopotamicus*, a native to Brazil and Paraguay of considerable ecological and commercial value (Shiogiri). Exposure of the freshwater fish *Channa punctatus* to similar concentrations of Roundup caused oxidative stress, lipid peroxidation and DNA damage in blood and gill cells (Nwani). <http://tinyurl.com/nm2y97y>
 - US EPA forced to study impacts of Roundup on endangered species <http://tinyurl.com/o9ognhg> <http://tinyurl.com/parvc6f>
 - Once applied, glyphosate and its break down products are transported throughout the plant into the leaves, grains or fruit [5]. **They cannot be removed by washing, and they are not broken down by cooking** [6]. Glyphosate residues can remain stable in foods for a year or more, even if the foods are frozen, dried or processed [7]. Some processing may even concentrate the residues; for example, during production of wheat bran the glyphosate residues may be concentrated by a factor of four [8]. <http://tinyurl.com/ogdxy5s>
- In order to improve controls over nonpoint sources of pollution, Oregon rules encourage land management agencies to implement programs to regulate or control runoff, erosion, and turbidity on a basin-wide scale. The narrative rules prohibit,

“The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to

public health, recreation, or industry..." (OAR 340-041-0007 (12)).
SOURCE: DEQ REMAP 2009 : <http://tinyurl.com/qdvounb>

8.8 million tons of plastic dumped into ocean annually, study estimates

Excerpt: The amount of plastics estimated going into the water is equal to how much tuna is fished year, so "we are taking out tuna and putting in plastic," study co-author Kara Lavendar Law said in a news conference at the American Association for the Advancement of Science conference.

Yakama Nation Sues Army Corps of Engineers in Columbia River Superfund Site Cleanup source:
<http://tinyurl.com/o983nq9>

TOURISM is the life blood for the iconic OREGON COAST

Most coastal counties are experiencing steady growth in tourism. Visitation is increasing at state parks (White et al. 2012), and employment at motels/hotels and food service industries continues to increase.2

There are many benefits to retain and gain by embracing & protecting wild salmon & sea lions.
<http://tinyurl.com/pzkmta2>

- The salmon need cold water to be able to survive in the region. The sea lions need sustenance, & safe haul out sites where they can seek respite on the Oregon coast and along the Columbia River route.

ODFW, & WDFW's survey data reflects that there ought to be more opportunities to access non violent and non invasive activities like wildlife viewing. <http://tinyurl.com/klwqvf>

The majority of people in Oregon are no longer being represented by ODFW nor is our wildlife being protected by those beholden to do so.

- ODFW and WDFW own numbers reflect that --Hunting and fishing are in decline while **wildlife watching is number #1** in the US and a favorite activity for visitors and locals across Oregon and Washington State. **Source**
<http://wdfw.wa.gov/viewing/tourism>
- 2011 Washington Department of Fish and Wildlife (WDFW) compared hunting, fishing and wild life watching. The survey shows that **non lethal-- non invasive activities brought in more money than hunting and fishing** and that more people participate in a myriad of hugely popular wildlife watching & other non violent outdoor related activities yearly. <http://tinyurl.com/qgwh94m>
- **In Portland, crowds gather nightly every autumn to watch 35,000 migrating Vaux's swifts swirl and funnel into an old chimney at Chapman School; the largest known Vaux's swift roost in the world. Source ODFW Pg 3**

Embracing sea lions and creating wildlife watching opportunities for folks in the Pacific Northwest will be good for tourism which creates new business opportunities. Most tourists' dollars stay in the state & are the vital life blood for so many of our coastal communities. <http://tinyurl.com/o4equry>

"People have long appreciated the spectacle of thousands or millions of animals gathered in one area." (ODFW)

“Oregonians enjoy wildlife viewing at several popular festivals that celebrate seasonal animal gatherings, including wintering bald eagles and migrating songbirds, shorebirds, or waterfowl.”

SOURCE ODFW Pg 3 -----

And the Public Loves SEA Lions Too!

- **‘This year was similar to 2010 and 2013 in that record numbers of CSL (over 1,400) were seen at the East Mooring Basin in Astoria, “ ---Matt Tennis, personal comm. (pg 16). ACOE 2014 Field Report**
 - **Sea Lions are voted as a favorite attraction in Astoria, in 2014.**
<http://tinyurl.com/pdvil4b> <http://tinyurl.com/nswsfvy>
 - **Sea lions are the favorite attraction at San Francisco at Pier 39.**
 - **“68% of our visitors visit the sea lions during a visit to PIER 39, making the sea lions are most popular attraction at the PIER.”**

Source: PIER 39 2012 Visitor Intercept Study conducted by Rigney & Associates and Destination Analysts.

<http://tinyurl.com/o3qj7zt>

Whale Watching Spoken Here <http://onlinelibrary.wiley.com/doi/10.1111/mms.12108/abstract>
<http://tinyurl.com/ppfvnxa>

“In addition to regulating species abundance, distribution and diversity, top predators provide essential food sources for scavengers (Sergio, et al. (2006) and remove the sick and weak individuals from prey populations. (Temple, S.A. (1987).

- Our results imply that marine top predators play a critical role in maintaining both ocean health and global climate. <https://youtu.be/M18HxXve3CM>
- **The benefits of re-wilding-** <http://tinyurl.com/qgevreu>

The U.S. Environmental Protection Agency’s (USEPA) Science Advisory Board has listed loss of biodiversity as one of the four greatest risks to natural ecology and human wellbeing (USEPA1990).

<http://tinyurl.com/pkvudrc>

The data shows us that it is better to not fund the killing sea lions for consuming as little as one fish at the Bonneville Dam in the name of saving the salmon.

- Our study reflects that there are many projects worthy of our time and investment to “aid” in salmon “recovery” and science shows us that it is paramount for the wild salmon’s sake that scapegoating and killing sea lions ought not to be part of any progressive wild salmon “recovery” program.

“Cycles and renewal are a fundamental part of the miracle of life and of the biophysical process that support it. Look inside the word *product* and you will see no ecological cycles.” Jim Lichatowich (99).

The bigger impacts facing the wild fish ought not to be overlooked if we truly want to save the wild salmon.

Human Predation on Salmon: <http://tinyurl.com/ph67292>

- Progressive overfishing that leads to serial depletion of the highest trophic levels is called “fishing down the food web” (Pauly et al. 1998), <http://tinyurl.com/ofa9h7c>

1917 Purse seines are prohibited in the Columbia

<http://tinyurl.com/qafckl4>

2014 Purse seines are back on the Columbia River. The government killed 6,000 ESA salmon in just one seine test <http://tinyurl.com/nbk26cn>

Commercial fishermen unhappy with Columbia River reforms

Excerpt: Robert Sudar, a fish buyer from Longview, said all the talk about growth in sport fishing is simply not true. "The trend on angler license sales is down," he said. "There isn't a growth in that industry."

<http://tinyurl.com/pb6ktv7>

a. Tac Mortality Rates 2014: <http://tinyurl.com/ndo3hdy>

- Chinook: Beach 35% Purse 22%
- Coho: Beach 38.3 % Purse 28.9 %
- Steelhead: Beach 8.35 Purse 3.3%

b. The Human take is 12% on the same ESA salmon that the sea lions are being killed for consuming 1.6 %. Source <http://tinyurl.com/ph67292>

- "On a regular basis, NMFS deems takes well in excess of sea lion predation levels, which peaked at 4.2%, to be insignificant to fish recovery (PG12).
<http://tinyurl.com/qbu4q9k>

Overfishing began centuries ago but accelerated dramatically after World War II, when new technologies armed industrial fleets with sonar, satellite data and global positioning systems, allowing them to track schools of fish and find their most remote habitats. The result is that the population of big fish has declined by 90% over the last 50 years. Source: <http://tinyurl.com/pu3wslj>

- Increasing evidence shows that, far from enhancing global food security, salmon farming is hastening the collapse of the world's fisheries, starting with the Pacific Northwest's remaining populations of wild salmon. In other words, by opting for farmed salmon today, we could be guaranteeing ourselves a future in which wild fish will forever be off the menu. SOURCE: <http://tinyurl.com/p9upzro>
- In 2015 strong run returns has the sport fishing season extended for humans and this abundant harvest has been easily obtainable with sea lions in the Columbia River. Over one million Chinook salmon returned to cross the Bonneville Dam in 2014 which has the ACOE calling it a "record" year. <http://tinyurl.com/qy4xnpb>.
- BY Catch Report 2014 Oceana <http://tinyurl.com/p95bw75>

11. There is a lot of important work that can be done that will actually help save the Salmon that does not involve blaming sea lions.

The following are examples of specific on-the-ground actions that could be done to meet temperature WQS, protect salmonid populations and also aid in the recovery of threatened and endangered salmonid species.

- Replant native riparian vegetation
- Install fencing to keep livestock away from streams
- Establish protective buffer zones to protect and restore riparian vegetation
- Reconnect portions of the river channel with its floodplain
- Re-contour streams to follow their natural meandering pattern

- Increase flow in the river derived from more efficient use of water withdrawals
 - Discharge cold water from stratified reservoirs behind dams
 - Lower reservoirs to reduce the amount of shallow water in “overbank” zones
 - Restore more natural flow regimes to allow alluvial river reaches to function
 - Restore more natural flow regimes so that river temperatures exhibit a more natural diurnal and seasonal temperature regime. SOURCE: <http://tinyurl.com/puhnn35>
- Although temperature is highlighted here as a factor in the decline of native salmonid populations, it by no means is the only factor in their decline. Certainly, degradation of habitat unrelated to temperature (e.g., impassable barriers to spawning and rearing areas and physical destruction or inundation of spawning grounds), fishing harvest, and hatchery operations have all played a role in their decline. However, as described above, elevated temperatures are an important factor in the decline of salmonids and restoring suitable temperature regimes for salmonids is a critical element protecting salmonid populations” (Pg 10). Source: <http://tinyurl.com/puhnn35>
 - “One specific study worth noting is by Theurer et al. (1985) in the Tucannon River in southeastern Washington. This study shows how human-caused changes in riparian shade and channel morphology contributed to increased water temperatures, reduced available spawning and rearing space, and diminished production of steelhead and chinook salmon.” Source: <http://tinyurl.com/puhnn35>

Now is the time more than ever to come together for the wild salmon and many other species of the Bio Region. It is crucial for all species that we humans foster a culture of tolerance & respect and work to build communities of peace and non violence on our rivers, in our homes and in our hearts which will attract and unite us and will help to sustain us into the future.

It is important that we protect the web of life support for all key stone species in the Bio- Region which means embracing and honoring essential relationships amongst the flora & fauna of the Pacific Northwest. It is through these actions and the above mentioned suggestions that we can actually make positive improvements towards saving the wild salmon as well as many other species, and maybe even ourselves?

In Closing Sea lions and salmon are both important key stone species in the Pacific Northwest Bio Region. They are both native to the Columbia River estuary ecology and the presence of sea lions helps support the food web in the estuary. They do not hinder it.

“Similarly descriptions of estuarine habitats may include the various substrate components. These components include geologic origin substrates like bedrock, gravel, sand and mud, for example as well as anthropogenic substrates such as the rock of jetties or the construction materials of pilings, and the biogenic substrates such as large fallen trees. “ ODFW Pg 14

Sea Lion and salmon species need food and habitat space to survive and in the ever warming waters of Cascadia, unfortunately, now the pike minnow and the shad populations have the native fish out numbered.

There are a lot of important steps that we can take to aid the salmon that does not involve wasting tax dollars to scapegoat and kill sea lions for consuming some fish out of the Columbia River below the Bonneville Dam.

Sea Lion Defense Brigade (SLDB) invites various user groups to gather to engage in meaningful, measurable, peaceful, tolerant, generous conversations about what really constitutes wild salmon recovery, bio diversity, and supports genetic strength that has allowed the salmon and the sea lions to co exist just fine for thousands of years without human intervention.

Our research revealed that the Columbia River Sea Lion's impacts are minimal compared to ONE intoxicated ODFW employee who crashed the state's salmon delivery tanker spilling and killing **11,000 juvenile Chinook salmon** out onto the highway.

Further research revealed the sea lion's impacts are minimal compared to the impacts on ESA wild salmon from: Dams, Habitat loss, Harvest, NIS fish & plants, Hatchery Fish, Warm Water, Drought, Unscreened Culverts & water diversions, Deforestation, poisonous road run off compounded with a myriad of endocrine disrupting chemicals and heavy metals that industry has leached into the Columbia /Willamette Rivers that are known to cause cancer and kill fish. These persistent pollutants have been found in the, sand, , water, fish, sea lions, orcas, & human populations throughout the Pacific Northwest Bio-Region.

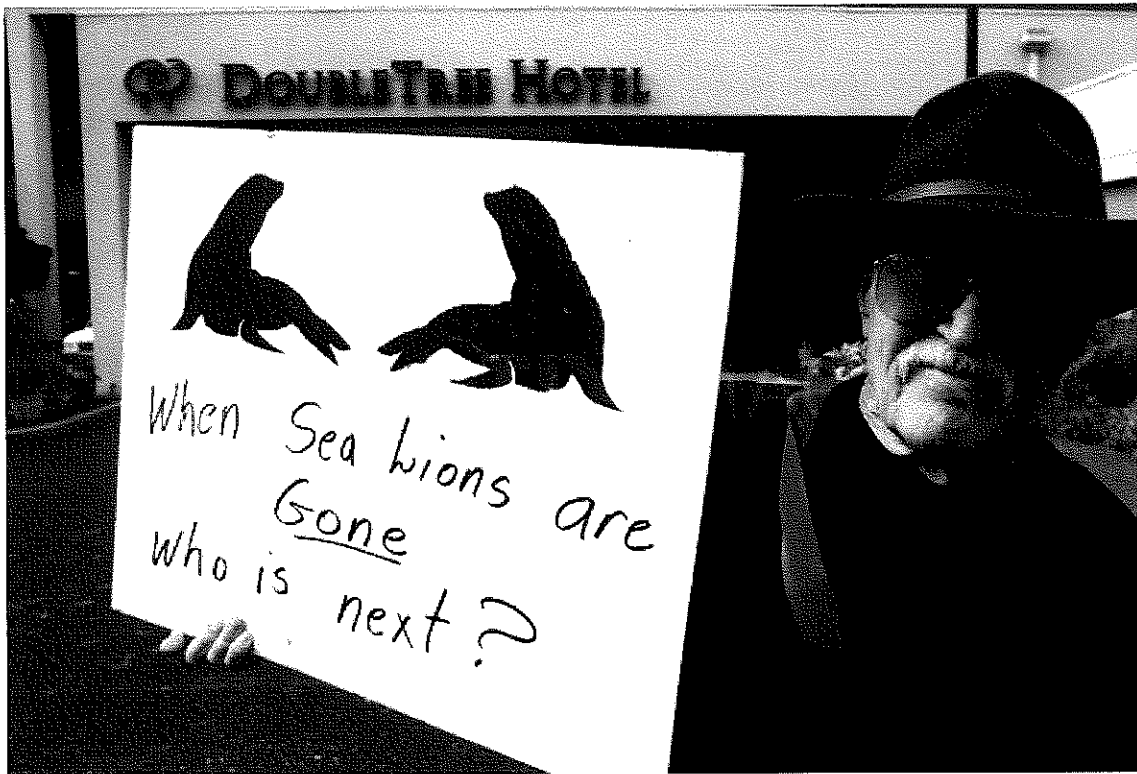
It is cost effective and will provide measurable outcomes to invest in the above mentioned steps to aid in wild salmon recovery. It is clear from this research & the data reflects that to aid the wild salmon for future generations that it is crucial that big business extractors are not allowed to continue to scapegoat sea lions & other wildlife under the name of so called salmon recovery.

It is a great disservice to these amazing fish, the sea lions and future generations of Cascadians not to acknowledge that there are many impacts facing the wild salmon that we have not yet addressed. And that there are many other steps that we have not yet taken to help, the wild salmon that does not include removing important native predators from their native environment.

It is SLDB's belief that we can help save the wild salmon without scapegoating and killing sea lions for consuming some fish below the Bonneville Dam. And by doing so we will also assist the Orca, the eagle, the bear, and the myriad of other species that rely on this sacred "Gift" of salmon & cold flowing water for their very life sustenance not sport.

For the Sea lions, the Salmon, and the Columbia River

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References Cited :

Baki , Pete Oregon Department of Fish and Wildlife Fish Screening and Passage Program Priority Unscreened Diversion Inventory February, 2013.

Blumm, Michael C. Hydropower vs. Salmon: The Struggle of the Pacific Northwest's Anadromous Fish for a Peaceful Coexistence with the Columbia River Power System, 11 *Envtl. L.* 211, 249-56 (1981) (explaining the mechanics of how hydropower demand affects river flows, through agreements between BPA and the U.S. Army Corps of Engineers which operates the federal dams on the Lower Columbia). [\[back\]](#)

DEQ Columbia River Re Map Study of 2009: <http://tinyurl.com/qdvounb>

Dose, Jeffery "Commitment, Strategy, Action: The Three Pillars of Salmon Recovery." In *Salmon2100: The Future of Wild Pacific Salmon*. Edited by R Lackey, D Lach and S Duncan, 253-59. Bethesda , MD: American Fisheries Society 2006

European Food Safety Authority (2009) Opinion on the modification of the residue definition of glyphosate in genetically modified maize grain and soybeans, and in products of animal origin *EFSA Journal* 7(9):1310 p 17

Epitomizing the challenges ahead is the Obama Administration's proposal to reduce spill in its latest proposed biological opinion, despite the fact that previous opinions have failed to past judicial muster, and the reviewing court's repeated injunctions ordering spill. See Federal Agencies Squander Chance for Progress on Salmon, *Save Our Wild Salmon* (Sept. 9, 2013), <http://www.wildsalmon.org/press-releases/policy-and-government/> (citing a 16-year study showing that spill from mainstream dams is the most effective means of increasing salmon survival in the Columbia River and judicial injunctions since 2006 ordering spill over the objections of the federal government). See also Blumm & Paulsen, *supra* note 19, at 115-45 (discussing the judicial injunctions). Idaho Rivers United claimed that the draft plan "ignores the best science, sidesteps the court's explicit instructions to do more for salmon, curtails the proven benefits of spill, perpetuates uncertainty and fails to address the impacts of climate change." Currently, *Id. Rivers United* 5 (Dec. 2013), available at http://www.idahorivers.org/images/news/IRU_DEC_2013_final.pdf. [\[back\]](#)

Factors Affecting Strategy Species and Habitats ODFW

Feely, R.A., C.L. Sabine, J.M. Herndandez-Ayon, D. lanson, and B. Hales. 2008. Evidence for upwelling of corrosive "acidified" water onto the continental shelf. *Science*, 320: 1490-1492.

Friesen, T. A., and D. L. Ward. 1999. Management of northern pikeminnow and implications for juvenile salmonid survival in the Lower Columbia and Snake Rivers. *North American Journal of Fisheries Management* 19:406-420.

Fritts AL, Pearsons TN 2006. Effects of predation by nonnative smallmouth bass on native salmonid prey: The role of predator and prey size. *Transactions of the American Fisheries Society* 135: 853–860.

Getting to Know the Nearshore Marine Ecoregion Oregon ODFW

Harvey C, Karieva P. 2005. Community context and the influence of non-indigenous species on juvenile salmon survival in a Columbia River reservoir. *Biological Invasions* 7: 651–663.

Haskell CA, Tiffan KF, Rondorf DW. 2006a. Food habits of juvenile American shad and dynamics of zooplankton in the lower Columbia River. *Northwest Science* 80: 47–64.

Lassuy D. 1995. Introduced species as a factor in extinction and endangerment of native fish species. *American Fisheries Society Symposium* 15: 391–396.

Lichatowich, Jim "Salmon People, & Place : A Biologist's Search for Salmon Recovery." Corvallis, Oregon State University Press 2013

Lichatowich, Jim *Salmon, People, and Place: A Biologist's Search For Salmon Recovery* 22 (Oregon St. U. Press, 2013) (quoting Timothy Egan, *The Good Rain: Across Time and Terrain in the Pacific Northwest* (Vintage Books, 1990). [\[back\]](#))

Lichatowich, Jim *Salmon, People, and Place: A Biologist's Search For Salmon Recovery* 22 (Oregon St. U. Press, 2013) (quoting Timothy Egan, *The Good Rain: Across Time and Terrain in the Pacific Northwest* (Vintage Books, 1990). [\[back\]](#))

Melcher, Curt ODFW 2013 -15 fish screen report. Source

Molnar, J. L., Gamboa, R. L., Revenga, C., and Spalding, M. D. 2008. Assessing the global threat of invasive species to marine biodiversity. *Frontiers in Ecology and the Environment* 6: 485–492

Monbiot, George. "Everything Is Connected" on line article 12th December 2014

Morgan, M. J., and J. W. Kiceniuk. 1990. Effect of fenitrothion on the foraging behavior of juvenile Atlantic salmon. *Environmental Toxicology and Chemistry* 9:489-495. (C7)

. Nonetheless, Lichatowich's criticisms have begun to resonate. The Oregon District Court recently enjoined the continued operation of a state-run, federally-funded hatchery on the Sandy River in Oregon because it failed to properly assess the adverse effects of flooding the river with hatchery fish on wild stock listed on the ESA, violating both the ESA and the National Environmental Policy Act. *Native Fish Society v. Nat'l Marine Fisheries Serv.*, Case No. 3:12-cv-00431-HA (D. Or. Jan. 16, 2014). [\[back\]](#)

National Marine Fisheries Service. 1998. Recovery plan for the blue whale (*Balaenoptera musculus*). Prepared by Reeves R.R., P.J. Clapham, R.L. Brownell, Jr., and G.K. Silber for the National Marine Fisheries Service, Silver Spring, MD.

National Marine Fisheries Service. 2010. Recovery plan for the fin whale (*Balaenoptera physalus*). National Marine Fisheries Service, Silver Spring, MD.

Nichols, David ODFW, 1990 An Inventory of Water Diversions in Oregon Needing Fish Screens – prepared

Nwani CD, Nagpure NS, Kumar R, Kushwaha B and Lakra WS. DNA damage and oxidative stress modulatory effects of glyphosate-based herbicide in freshwater fish, *Channa punctatus*. *Environ Toxicol Pharmacol* 2013, 36, 539-47.

Oregon Nearshore Strategy - Public Review Draft June 19, 2015

Poe, T. P., R. S. Shively, and R. Tabor. 1994. Ecological consequences of introduced piscivorous fishes in the lower Columbia and Snake rivers. Pages 347-360, in Stouder, D. J., K. L. Fresh, and R. J. Feller, editors.

Salmon Hatcheries as Fish Factories: Forgetting the Lessons of Leopold SJEL : *Seattle Journal of Environmental Law*.

Sandahl, J. F., D. H. Baldwin, J. J. Jenkins, and N. L. Scholz. 2005. Comparative thresholds for acetylcholinesterase inhibition and behavior impairment in coho salmon exposed to chlorpyrifos. *Environmental Toxicology and Chemistry* 24:136-145. (C7)

Sanderson, L Beth KATIE A. BARNAS, AND A. MICHELLE WARGO RUB Nonindigenous Species of the Pacific Northwest: An Overlooked Risk to Endangered Salmon 2009.

Sanderson L Beth, Posted in Regional News Saturday, March 7th, 2009 Non-native fish pose substantial threat to salmonids The Columbia Basin Bulletin March 6, 2009" <http://tinyurl.com/oprru9g>

Save Our Wild Salmon, "Why do scientists support partial removal of the 4 lower Snake River dams?"

Scholz, N. L., and 6 others. 2000. Diazinon disrupts antipredator and homing behavior in Chinook salmon (*Ocorhynchustshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 57:1911-1918. (C7)
 Rahel FJ 2002. *Homogenization of freshwater faunas. Annual Review of Ecology and Systematics*33: 291–315.

See generally, Jim Lichatowich, *Salmon Without Rivers* (Island Press, 2001)

See Lichatowich, supra note 1, at 85-86 (assuming that references to the "Lords of Yesterday" equates to status quo operations). The phrase "Lords of Yesterday" is from Charles Wilkinson's reference to nineteenth century laws that often control modern public land management; see Charles F. Wilkinson, *Crossing the Next Meridian: Land, Water, and the Future of the West* (Island Press, 1992).
[\[back\]](#)

See generally Michael C. Blumm, *Sacrificing the Salmon: A Legal and Policy History of the Decline of Columbia Basin Salmon* (Vandeplas Publishing, 2013). [\[back\]](#)

Seattle Journal of Environmental Law: Salmon Hatcheries as Fish Factories: Forgetting the Lessons of Leopold 2015

Sergio, F., Newton, I., Marchesi, L., and Pedrini, P. (2006). Ecological justified charisma: preservation of top predators delivers biodiversity conservation. *Journal of Applied Ecology* 43: 1049-1055

Shiogiri NS, Paulino MG, Carraschi SP, Baradi FG, da Cruz C, Fernandes MN. Acute exposure of a glyphosate-based herbicide affects the gills and liver of the Neotropical fish *Piaractus mesopotamicus*. *Environ Toxicolo Pharmacol* 2012, 34, 388-96.

Stansell, J Robert, Bjorn K. van der Leeuw, Karrie M. Gibbons, and William T. Nagy 2014 FIELD REPORT: EVALUATION OF PINNIPED PREDATION ON ADULT SALMONIDS AND OTHER FISH IN THE BONNEVILLE DAM TAILRACE,2014

Richter B, Braun D, Mendelson M, Master L. 1997. Threats to imperiled freshwater fauna. *Conservation Biology*11: 1081–1093.

The idea that actions can be symbolic in nature came from steel, "Saving Wild Salmon: Moving From Symbolic Politics to Effective Policy".

USEPA (United States Environmental Protection Agency). 2002. Columbia River Basin fish contaminant survey, 1996-1998. EPA 910-R-02-006, Seattle, Washington, USA. 284pp. (C7)

Ward, D. L., J. H. Petersen, and J. J. Loch. 1995. Index of predation on juvenile salmonids by northern squawfish in the lower and middle Columbia River and in the lower Snake River. *Transactions of the American Fisheries Society* 124:321–334. (C3)

Williams, Richard N. PhD Clear Creek Consulting 524 W. Two Rivers Dr. Eagle, ID 83616 Review of the draft Biological Assessment and Essential Fish Habitat Assessment for Proposed Oregon LNG Terminal Project

White, E.M., D. Goodding, and R.S. Rosenberger. 2012. Spending and Economic Activity From Recreation at Oregon State Parks - Coastal Region and Milo McIver State Park. Oregon State University.

(8) WHO/FAO (1994) *Report of the 1994 Joint Meeting of the FAO Panel Of Experts On Pesticide Residues In Food And The Environment And The WHO Expert Group On Pesticide Residues, Rome*. Section 4.2.6

Zemanek, S.L. 2014. U.S. Travel and Tourism Satellite Accounts for 2010-2013. Via Internet: http://www.bea.gov/scb/pdf/2014/06%20June/0614_travel_and_tourism_satellite_accounts.pdf. Survey of Current Business.

Young, S. "Written Testimony on H. R. 946."

51 Plaintiff-Appellant's Reply Brief, USCOA for the 9th Circuit, No. 08-36038. Pp. 1