



The Columbia Snake River System

Moving U.S. Products That Feed the World

Kristin Meira, Executive Director
Pacific Northwest Waterways Association (PNWA)

Pacific Northwest Waterways Association (PNWA) is:

- Non-profit trade association that advocates for federal policies & funding in support of regional economic development

- Over 135 members in WA, OR, and ID:

Public ports
Utilities
Pilots

Agriculture & forest products producers
Towboaters & steamship operators
Union labor



Northwest federal navigation projects



Deep draft navigation

- Puget Sound
- Grays Harbor
- Lower Columbia River
- Oregon coast



Inland navigation

- Columbia Snake River System



Small & Recreational ports

- Columbia River
- Puget Sound
- Oregon coast



Advocating for federal navigation infrastructure



- **U.S. Army Corps of Engineers:**
 - Portland, Walla Walla, Seattle Districts
 - Northwestern Division
 - Headquarters in DC
 - Assistant Secretary of the Army (Civil Works) - Pentagon



- **Congress:**
 - Northwest House & Senate delegations (local and DC)
 - House & Senate Energy & Water Appropriations Subcommittees
 - House Transportation & Infrastructure Committee (T&I); Senate Environment & Public Works Committee (EPW)



- **White House:**
 - Office of Management & Budget (OMB)
 - CEQ



Columbia Snake River System

River system overview

Why does navigation matter?

River Issues Roundup – Highlight Reel

Columbia Basin Partnership Task Force

Columbia River Basin Restoration Act

FCRPS BiOp lawsuit, appeal, spill, H.R.3144 and more!

Jetties, dredging, and locks

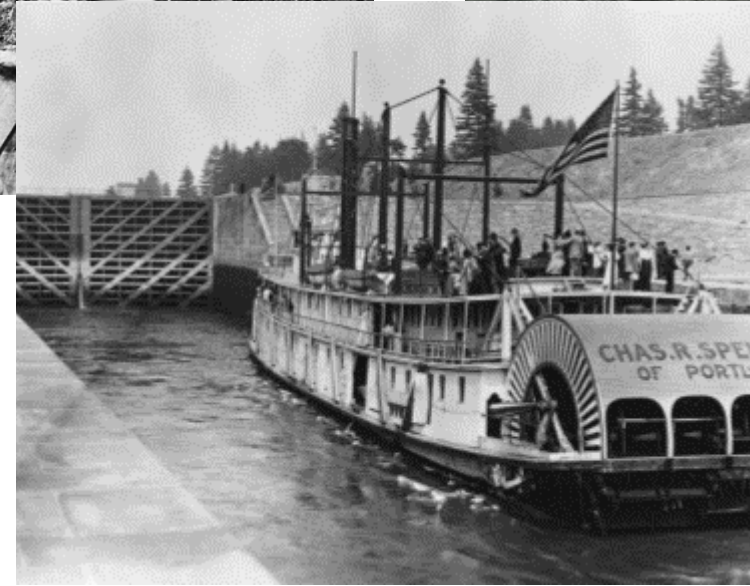
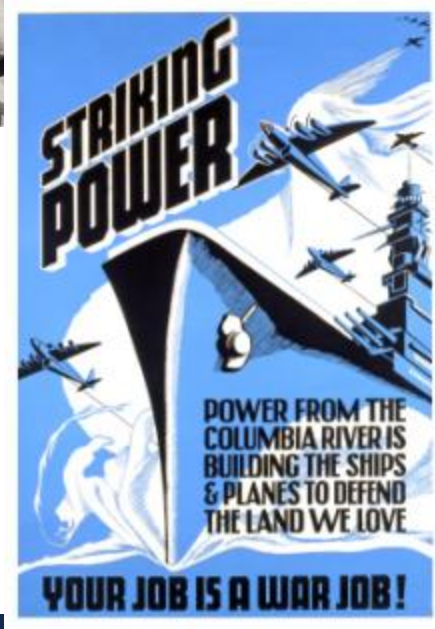
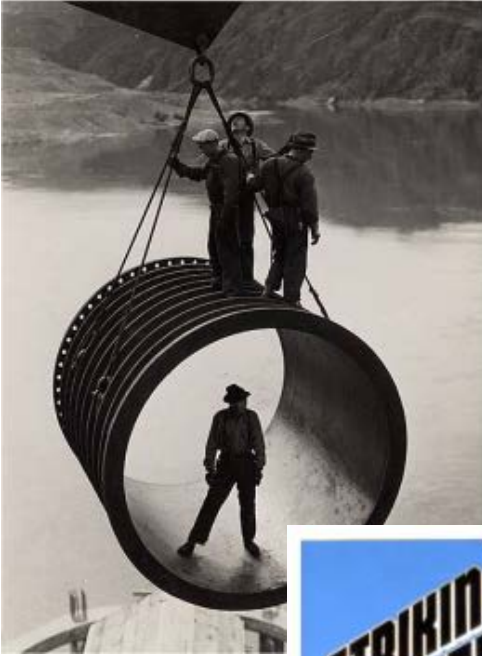
Snake River

Columbia River Treaty

PNWA's Regulatory Focus



Columbia Snake River System – The Vision

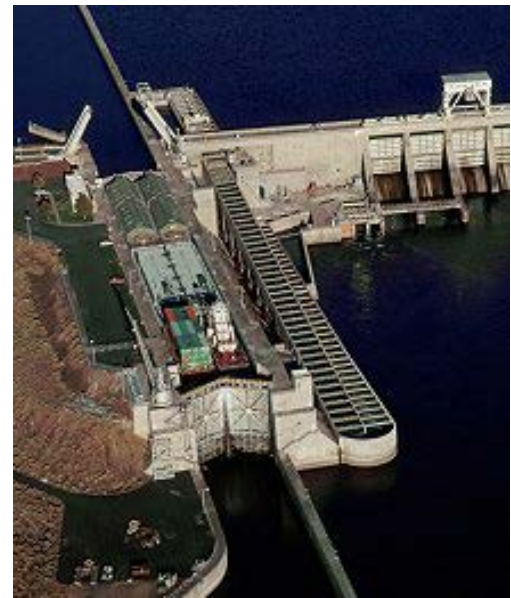
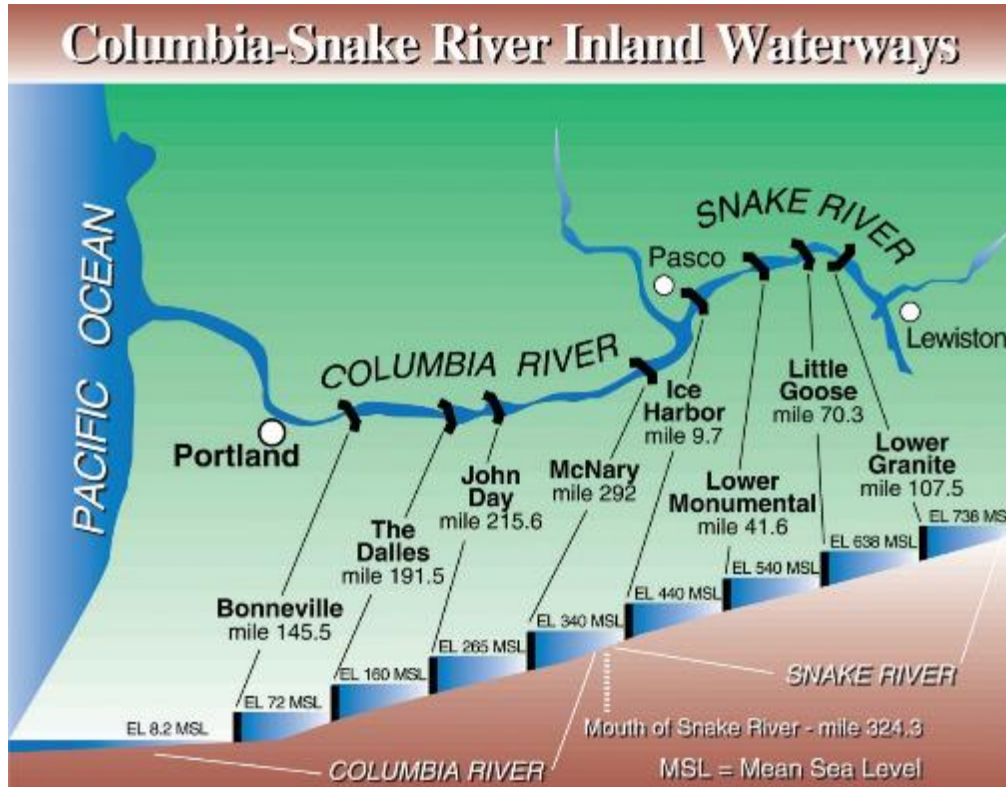


Lower Columbia River

- 43' channel extends 105 miles inland
- Over 50 million tons of cargo in 2017
- \$24 billion in cargo value
- 40,000 jobs depend on the channel



Inland Columbia/Snake River



- 14' channel depth
- Extends 365 miles inland
- Eight locks



Virtual tour - The Dalles navigation lock



navigation
lock





The Dalles navigation lock

- downstream gate -

The locks on the Columbia Snake River System have the highest lift in the United States



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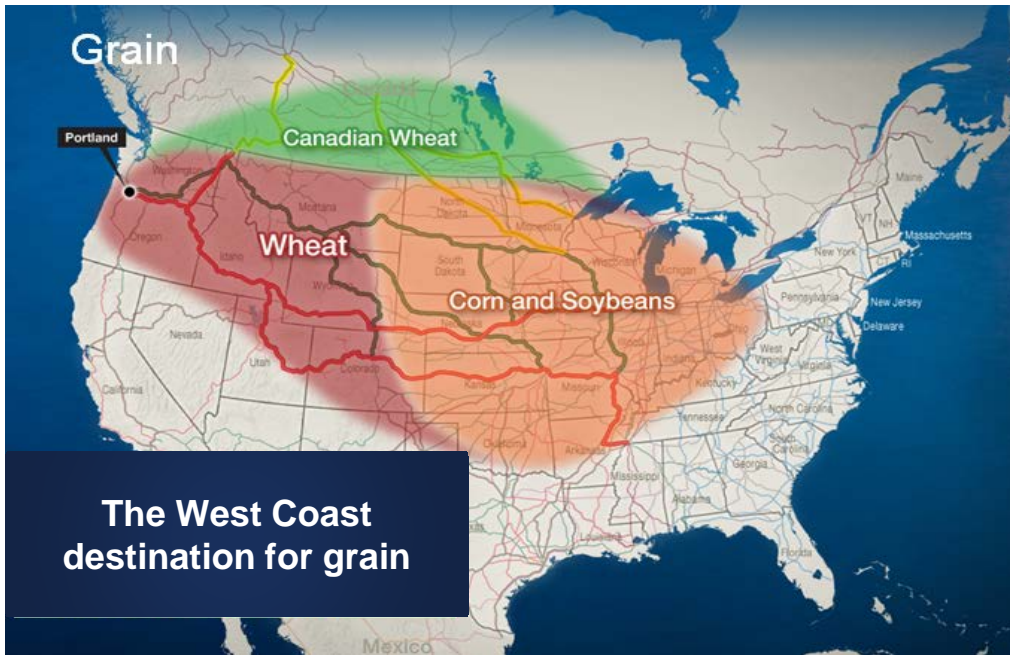
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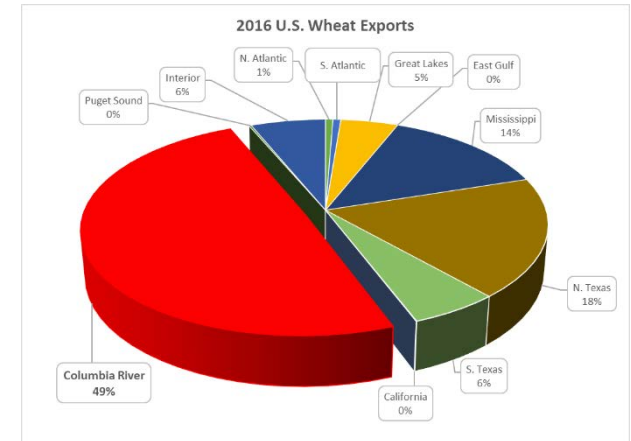
PNWA's Regulatory Focus



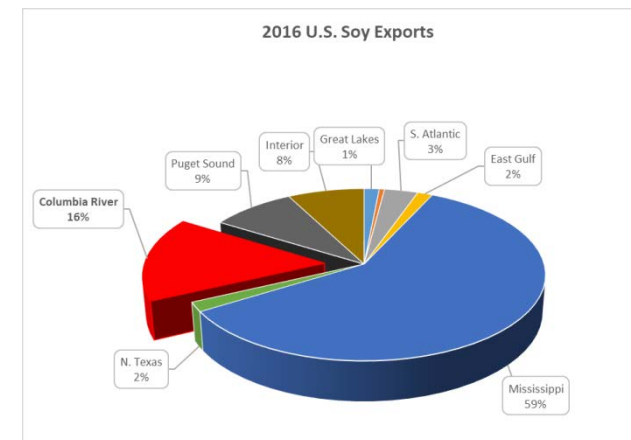
Third largest grain export gateway in the world



WHEAT #1 in U.S. exports



SOYBEANS #2 in U.S. exports





MINERAL BULKS #1 on West Coast



AUTO IMPORTS & EXPORTS Major West Coast gateway



WOOD EXPORTS #1 on West Coast



Other Columbia/Snake Cargo ...

INTRARIVER COMMODITIES

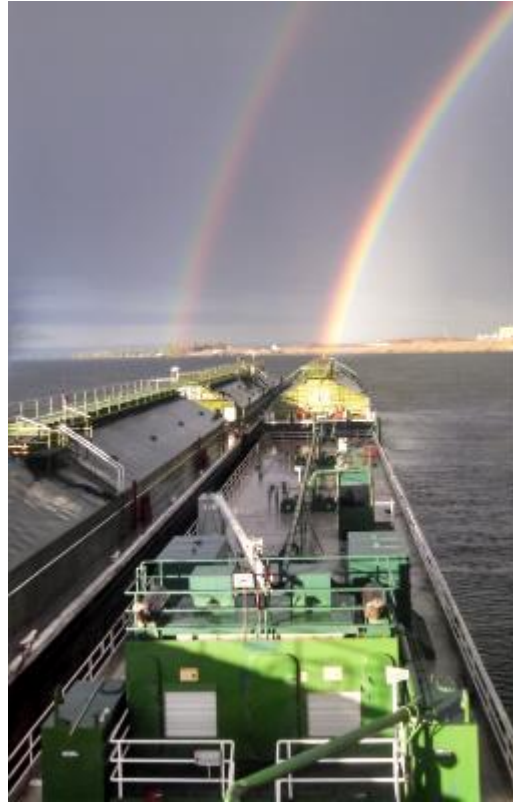
Petroleum products

Containerized
municipal solid
waste

Oversized project
cargo

Wood chips

Sand/gravel



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PNWA's Regulatory Focus



Columbia Basin Partnership Task Force

- NOAA Fisheries has ESA recovery plans, fisheries management plans, and mitigation plans. States and tribes also have management responsibilities and plans. Without common, shared goals, it is harder to achieve any of them.
- 2012 Situational Assessment by Ruckleshaus Center and Oregon Consensus found the need for more coherent, integrated, and efficient means of addressing the complexities of salmon recovery. It also called for NOAA Fisheries to convene regional effort to develop common, long-term goals for salmon and steelhead, including both sovereigns and stakeholders.
- CBP Task Force established in Fall 2016 and began January 2017
- 28 members from states, tribes and stakeholders



Columbia Basin Partnership Task Force

- Goals that address both conservation and harvest/fishing aspirations.
- Goals that are understandable and consider various users of Columbia Basin resources.
- Better coordination, more effective use of resources, and alignment of strategic priorities.
- Quantitative adult abundance goals for both listed and non-listed stocks.
- Enhanced relationships, trust and knowledge

The screenshot shows the NOAA Fisheries West Coast Region website. The main heading is "COLUMBIA BASIN" with a background image of a river and mountains. Below this is the "Columbia Basin Partnership Task Force" section, which includes a description of the task force's purpose and a list of meetings.

Columbia Basin Partnership Task Force

The Columbia Basin Partnership Task Force, a special task force organized under NOAA Fisheries' Marine Fisheries Advisory Committee, will be making recommendations on common goals and helping to define a shared path to long-term salmon recovery. The CEP Task Force will recommend a shared vision for Columbia Basin salmon and quantitative goals to meet conservation needs and provide harvest opportunities.

Protecting, restoring, and effectively managing our salmon and steelhead is one of the Northwest region's greatest responsibilities, and one of our greatest challenges. The challenge is so great, it warrants a more comprehensive and integrated approach to crafting common goals for both listed and non-listed Columbia Basin salmon and steelhead.

About the Task Force	Task Force Meetings	Background Meetings
Task Force members	January 24 - 25, 2017	Workshop #1 February 17, 2016
About MAFAC	April 18 - 19, 2017	Workshop #2 May 4, 2016
Situation Assessment	June 27 - 28, 2017	Workshop #3 June 7, 2016
Partnership brings new direction to Columbia Basin salmon - Coast Column, The Oregonian - Barry Thom, NOAA Fisheries Regional Administrator	September 26 - 27, 2017	
	December 5 - 6, 2017 - Spokane	
	February 20 - 21, 2018 - Boise	
	April 18 - 19, 2018 - Portland	
	June 19 - 20, 2018 - Hood River	
	August 22, 2018 - Tentative Webinar	
	October 2 - 3, 2018 - Portland	



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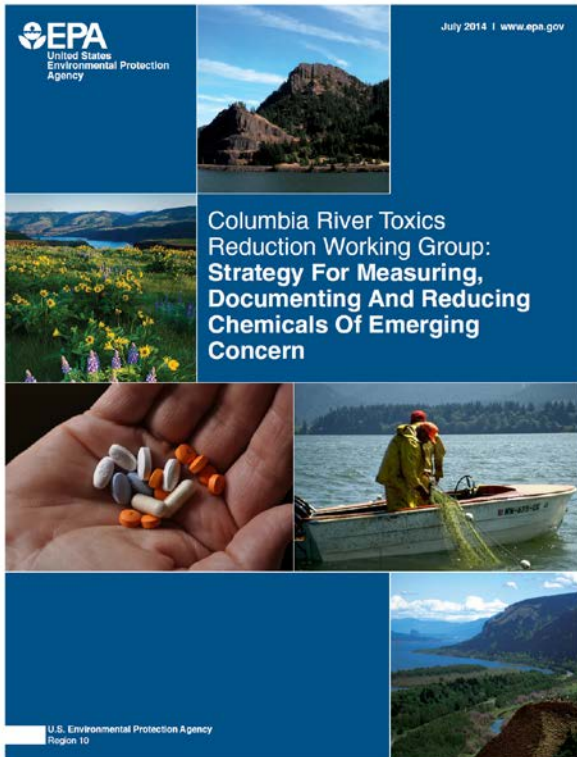
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PNWA's Regulatory Focus



Columbia River Basin Restoration Act



- Columbia River Basin is only major is the only major EPA designated “large aquatic ecosystem” to receive no funding for toxics
- Toxic pollutants, including mercury, DDT and PCBs, have been detected in the Columbia ecosystem, and have significant health, safety and economic impacts
- CRBRA creates a voluntary grant program in EPA; authorized at \$50M in WIIN 2016, with more specific language in Senate WRDA 2018
- Example of diverse stakeholders working together to achieve legislative success and attract program funding to our region



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Federal Columbia River Power System (FCRPS) Biological Opinion (“The BiOp”)

- 13 fish runs listed under ESA
- BiOps in 1995, 2000, 2005 - all remanded
- May 2008 – new collaborative BiOp released
- May 2010 - Supplemental BiOp w/AMIP released
- August 2011 - Judge Redden orders remand
- Jan. 2014 – Supplemental BiOp released - supported by Obama administration, three states, seven Tribes, many stakeholders



Federal Columbia River Power System (FCRPS) Biological Opinion (“The BiOp”)

- May 2016 – Judge Simon orders remand
- 2017 – Judge Simon rules in favor of plaintiffs for injunctive relief: spill
- 2017 – Spill modeling in Vicksburg – PNWA members present
- 2017 – H.R.3144 introduced by Rep. McMorris Rodgers and others
- 2018 – Judge Simon issues spill ruling
- 2018 – Feds lose appeal of Simon spill ruling; increased spill begins
- 2018 – H.R.3144 passes House

Note: PNWA’s “Inland Ports & Navigation Group” (IPNG) – intervener status

Note: New NEPA process underway ... www.crsso.info



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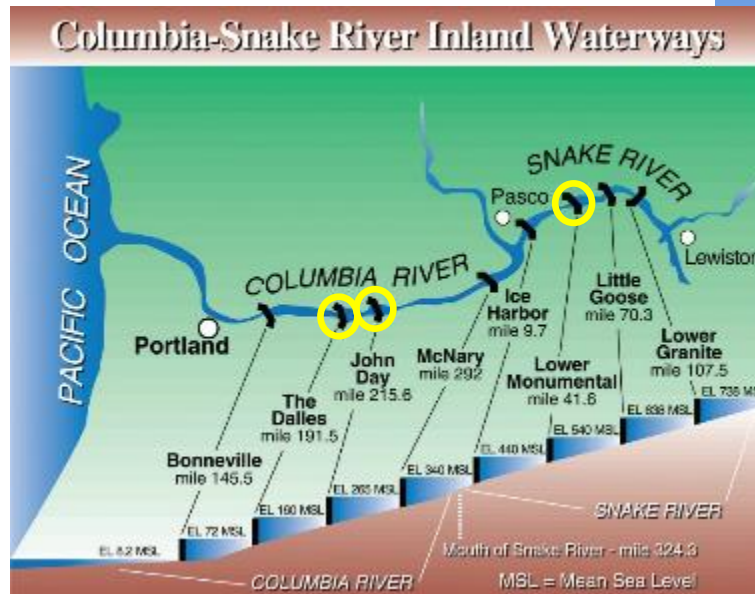
Columbia River Jetties MAJOR REHAB – ON SCHEDULE

- Help maintain depth & orientation of the navigation channel
- Provide protection for ships entering and leaving the river



Columbia Snake River Locks Major Repairs – 2010/11 COMPLETED

- Congress and each Administration has recognized the value of our inland system, including the Snake
- New gates at 3 locks, major repairs at 3 others in one closure
- Ensures safe operation

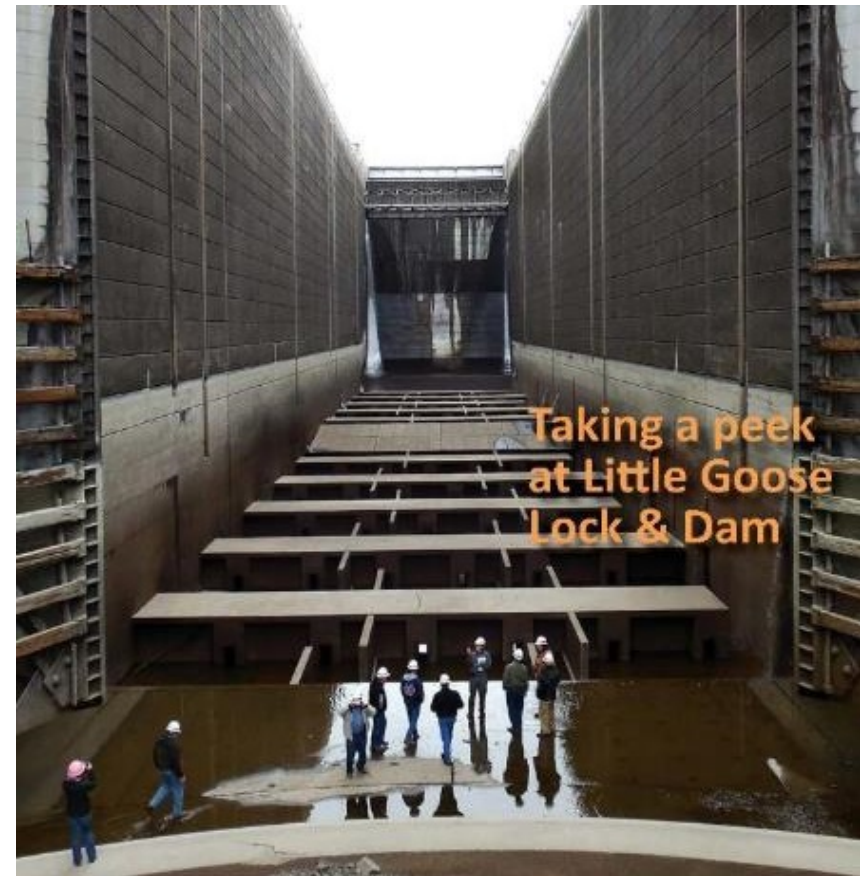
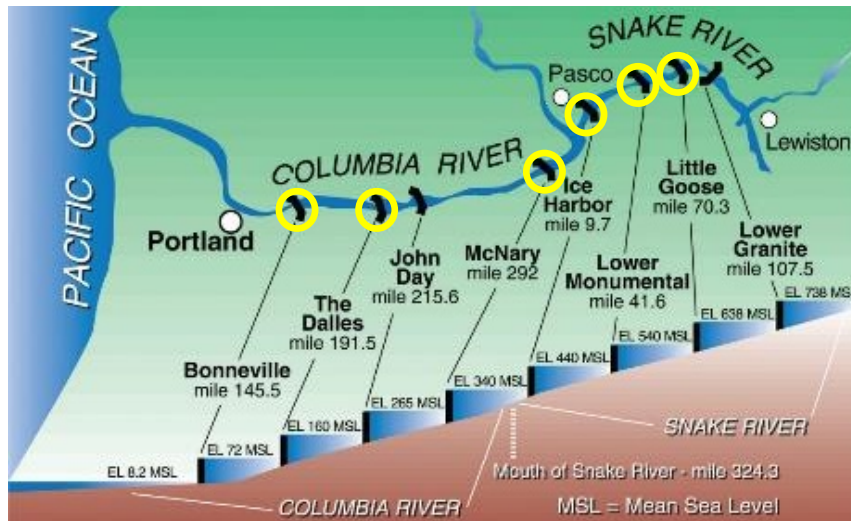


Lower Monumental lock
Snake River



Columbia Snake River Locks Major Repairs – 2016/17 COMPLETED

- Components and systems installed at six of the eight locks
- 14 weeks
- December 2016 – March 2017

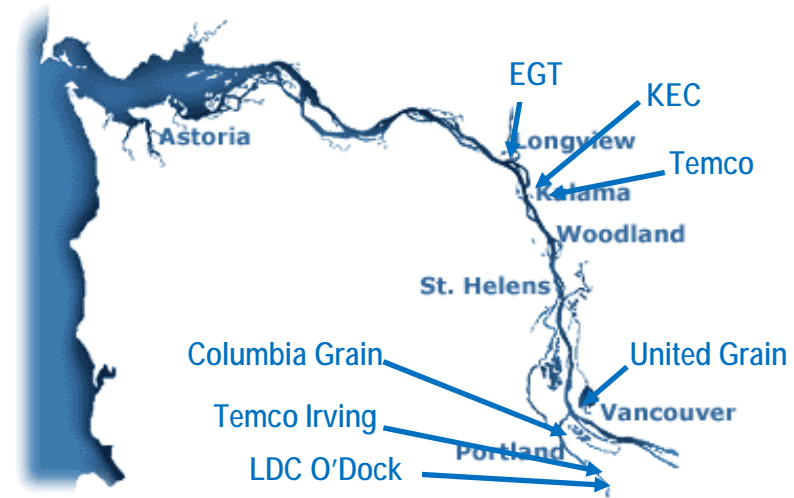


Little Goose lock
Snake River



Columbia River Channel Deepening COMPLETED

- 20 year project
- Completed November 2010
- 110 mile channel deepened to 43'
- 6K tons added capacity per ship
- \$1-2M worth of cargo added per ship call



RESULT:
Over \$1B in
new
investment



Columbia River – routine maintenance dredging

- Annual appropriated activity – four dredges
- Draft restrictions from 2011 to 2015
- 40' draft restriction = \$22M direct economic impact per year
- Cargo left on the dock, disruptions to supply chain



Port of
Portland
dredge
Oregon



Columbia River – routine maintenance dredging

- Channel Maintenance Plan – ports and Corps working together
- Planning for 20 years of routine dredging activity and material placement
- Sponsor ports: Longview, Kalama, Woodland, Vancouver, Portland
- Public involvement process has already begun
- Learn more: <http://www.nwp.usace.army.mil/lcrchannelmaintenance/>



Corps of
Engineers
dredge
Essayons



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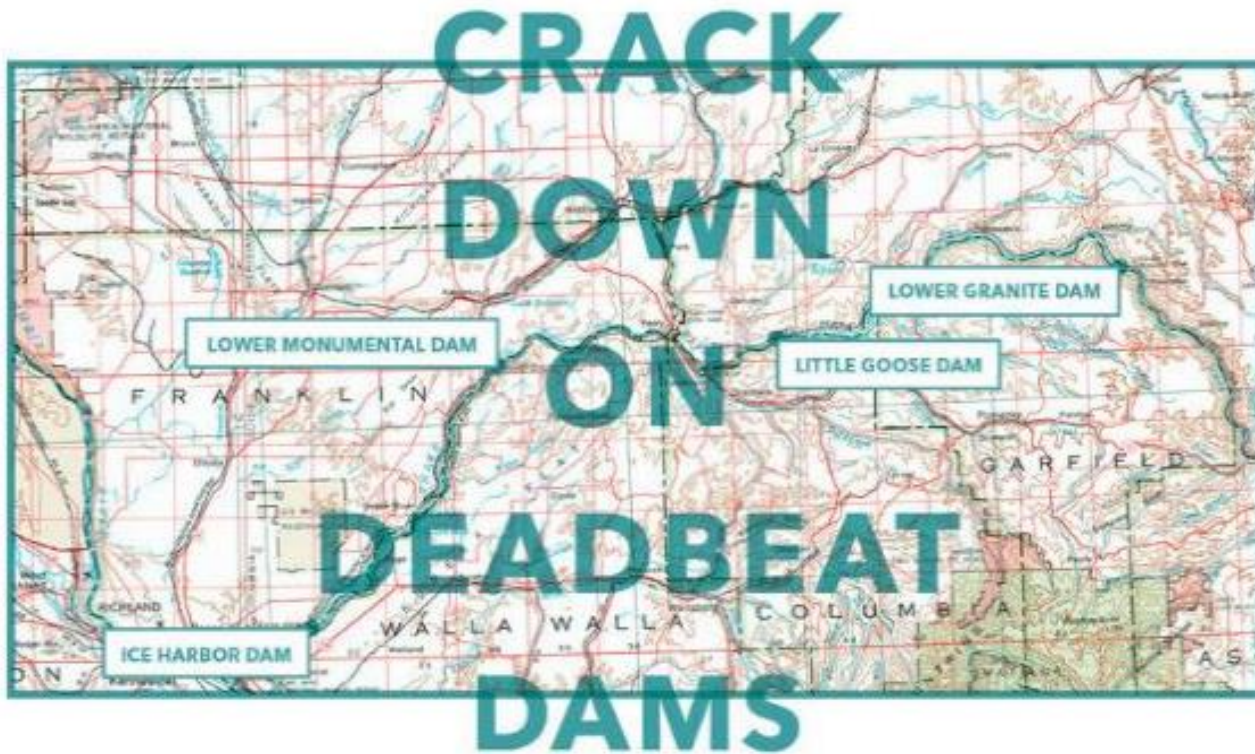


Navigation on the Snake River ...

... does it matter?



Snake River dams ... The Claims



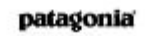
- Elwha Dam
- Glines Canyon Dam
- Condit Dam
- Lower Monumental Dam
- Lower Granite Dam
- Ice Harbor Dam
- Little Goose Dam

Don't Hold Back: Ask Senators Cantwell and Murray to help remove four deadbeat dams on the lower Snake River.

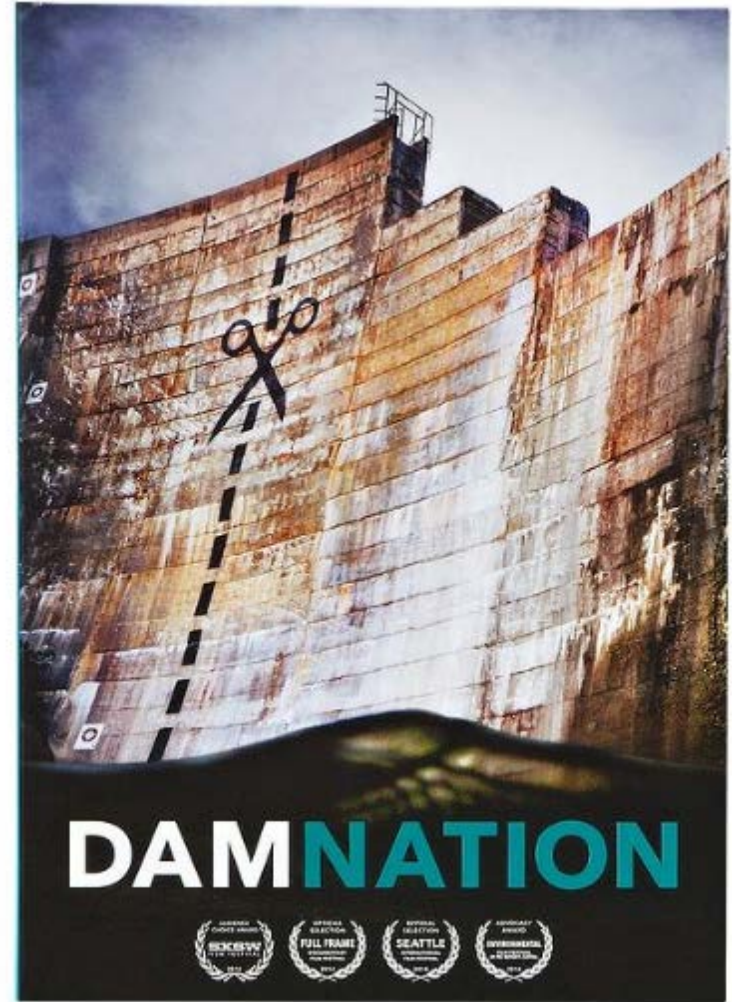
Let's make sure that the Snake River Basin remains a place where people can enjoy the outdoors. The Snake River Basin is a beautiful area with a rich history and a vibrant future. It's time to take action to protect the Snake River Basin and the people who live there.

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Snake River dams ... The Movie



Snake River dams ... The Flotillas



Snake River dams ... The Press

10/12 Dredging costs rise to top of meeting - The Lewiston Tribune (archive) | http://www.tribune.com

Dredging costs rise to top of meeting

By ERIC BARKER of the Tribune | Posted: Friday, January 25, 2013 12:00 am

Concerns about the high cost of maintaining the shipping channel of the lower Snake River dominated an information meeting on a sediment management plan hosted by the U.S. Army Corps of Engineers Thursday in Lewiston.

Many in the room continually keep

Does it make six dollars when barges facing multi-trill tons of millions?

The public debate the best way to Snake River and its high higher levees as breaching. But they appear intent on

But supporters of Lewiston-Clark

"We need the just need to get it

When normal river drops out of the recreation sites.

The Corps recent manage sediment and a width of 25 if future sediment sites or increase

The barge does no huge transport. Kootenai resident

http://www.tribune.com

10/12 Barging is all in the numbers - The Lewiston Tribune (archive) | http://www.tribune.com

Barging is all in the numbers

By ERIC BARKER of the Tribune | Posted: Saturday, January 26, 2013 12:00 am

Proponents of barging say river transportation affords efficiencies that provide benefits to shippers and the general public, but they are sometimes reluctant to provide detailed data to support their claims.

Because of their capacity to carry huge volumes of commodities both trucks and rail, according to industry representatives, a typical barge can carry the equivalent of 130 trucks. "Any way you slice it barging comes out on top," said Krist Northwest Waterways Association in Portland, Ore. "You especially bulk goods that would require numerous units to

However, the release of a draft U.S. Army Corps of Engineers for dredging next winter has some people asking if it's been maintaining the lower Snake River's shipping channel. Clark who would like the dams that make barging possible to be migrate to and from the ocean.

Linwood Laughly, a Kootenai-area resident who has recently put pen to paper and figured dredging will cost as or about \$18,000 for each barge that leaves the Port of Lewiston projections on past dredging costs and recent shipping high discussion of costs or benefits

Meins said Laughly's analysis failed to account for several

"There are avoided surface transportation maintenance cost other kinds of producers in the region who have access to land in foreign markets that would not exist," she said. "The best infrastructure project and I will say any federal infrastructure has normal maintenance."

Laughly didn't include the Port of Clarkston in his analysis wasn't shipping commodities. But the Lewis-Clark Terminus Wanda Keefer said 12,857 tons of grain, or a little more than half in 2012. She didn't know if that was in addition to the Port of Lewiston.

Kootenai also said the terminal set a record for grain shipped

http://www.tribune.com

10/12 Don't take Linwood Laughly's word for it - The Lewiston Tribune (archive) | http://www.tribune.com

Don't take Linwood Laughly's word for it

Marty Trillhouse | Posted: Thursday, January 31, 2013 12:00 am

Dredging the Port of Lewiston and Clarkston as well as the shipping channel of the lower Snake River may not be worth the money.

So says Linwood Laughly of Kootenai. The megafund opponent worked his way through the U.S. Army Corps of Engineers' 70-page plan to maintain shipping lanes to Lewiston and Clarkston and considered a "bridge to nowhere"

Including the \$16 Linwood says

That works out to

Not so, complain

http://www.tribune.com

10/12 Analysis questions economics of barging - The Lewiston Tribune (archive) | http://www.tribune.com

Analysis questions economics of barging

By ERIC BARKER of the Tribune | Posted: Monday, January 21, 2013 12:00 am

A critic of the Port of Lewiston says U.S. taxpayers are shelling out \$13,000 to \$18,000 for every barge that leaves the port and collectively subsidizing farmers who use the river transportation system about \$3 million per year.

Laughly, a Kootenai-area resident who was one of the leading opponents of megafund traffic way 12, said the cost of keeping the river's shipping channel clear of sand and other siltage compared to the amount of goods transported to downstream destinations like the Port

lawyer when it comes to economic analysis, Laughly nonetheless said his numbers are shocking.

"I was shocked when I first ran the data," he said. "I thought, 'Nah, there is a devil in it.' I kept coming up with the same answer and I thought, 'Okay, God, this is pretty damn

going on regarding his analysis, which neither has seen, Port of Lewiston manager David said U.S. Army Corps of Engineers spokesman Brian Hanrahan defended the river system.

arges each loaded with 190,000 bushels of wheat or barley leave the Lewis Clark to Port of Lewiston each year, 100,000 bushels of sand. Based on the current price of wheat, just a city of \$1 million per barge, he said.

\$3 million just in agriculture experts leaving the Port of Lewiston. "The cost of barging maybe one-third the cost of rail so that is a significant saving to the area's community because Columbia Snake system and that is just simple math."

and one barge is equal to about 55 railroad cars and 154 tractor-trailers, saving both wear and tear and reducing the number of fossil fuels burned and the amount of pollution into the atmosphere.

to serve the public and help goods move up and down the river, and the river system does have its efficiencies," Hanrahan said.

His analysis by looking at the recent release of the Corps' draft Programmatic Sediment Plan, a 20-year outline for dealing with sediment accumulation in lower Snake River to plan calls for long-term actions and for short-term measures such as dredging more cubic yards of sediment from the channel as soon as next winter.

http://www.tribune.com

10/12 Judging river dredging plan by the numbers - The Lewiston Tribune (archive) | http://www.tribune.com

Judging river dredging plan by the numbers

Marty Trillhouse | Posted: Thursday, January 24, 2013 12:00 am

There was no awful lot of numbers in the Army Corps of Engineers' plan to dredge the ports of Lewiston and Clarkston and the shipping channel of the lower Snake and Clearwater rivers

These numbers are coming at you at a fast clip. Can you keep up?

\$16 million - What the Army Corps spent preparing its response to the situation filtering from the Clearwater and collecting in the slackwater created by the four dams.

Five years - How long it took to prepare the plan.

More than 1,000 pages - The length of the Army Corps' plan.

10 years - How long environmental groups, including Idaho Rivers United, have been bickering the Army Corps about the dredging issue. Churning up a plume of silt from the riverbed can choke salmon, steelhead and bull trout in the river.

30 years - How long the Army Corps plans to dredge the river under this new plan. 14 feet - The depth required to handle traffic to easily navigate the river channel.

12 feet - The depth at some parts of the shipping lane. 3 feet - How much higher Lewiston's levee system might be raised as an alternative to dredging.

3,000 cubic yards - The amount of sediment the Corps will dredge from the Port of Lewiston. 10,000 cubic yards - The amount of sediment the Corps wants to dredge from the Port of Clarkston.

407,000 cubic yards - The amount of sediment the Corps expects to dredge from the shipping channel. \$2.3 million - The amount Lewiston port critic Linwood Laughly figures dredging will cost every year.

\$3.2 million - Laughly's yearly cost estimate once the report's \$16 million price tag is amortized. \$38 million - What Laughly says taxpayers will spend keeping the shipping lane open for the next 10 years.

587,177 tons - The amount of grain and other freight the Port of Lewiston shipped downstream in 2011. \$540 - The amount Laughly says taxpayer-subsidized dredging subsidizes each ton shipped out of the Port of Lewiston downstream.

A lot of numbers and most of them are huge. Now here are two smaller figures:

http://www.tribune.com



Snake River dams ... and the Orcas

- Claim breaching the Snake River dams will help the Southern Resident Killer Whale pods
- Catastrophic orca declines were due to now-outlawed live capture for aquariums in the 1960's and 1970's
- NOAA: salmon numbers are high enough to support Orca populations

change.org Start a petition Browse Search Log in

Following President Barack Obama and 4 others

Stand with us and support removing the four lower Snake River dams to save the Southern Resident Killer Whales from being dammed to extinction.

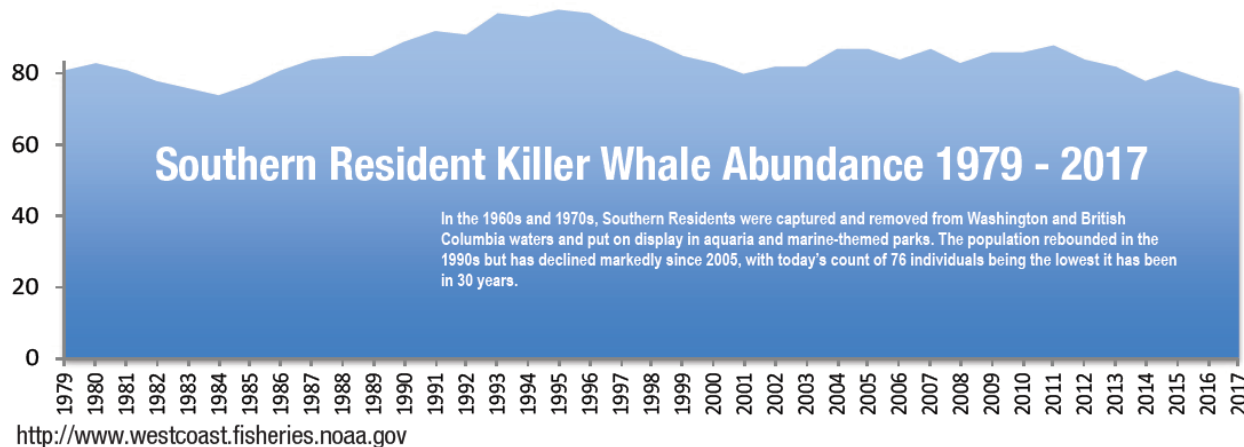
Southern Resident Killer Whale Salmon Initiative



Sign this petition

1,067 supporters
7,300 needed to reach 25,000

First name
Last name
Email
United States



Snake River dams ... The Facts



Elwha Dam



Glines Canyon Dam



Condit Dam

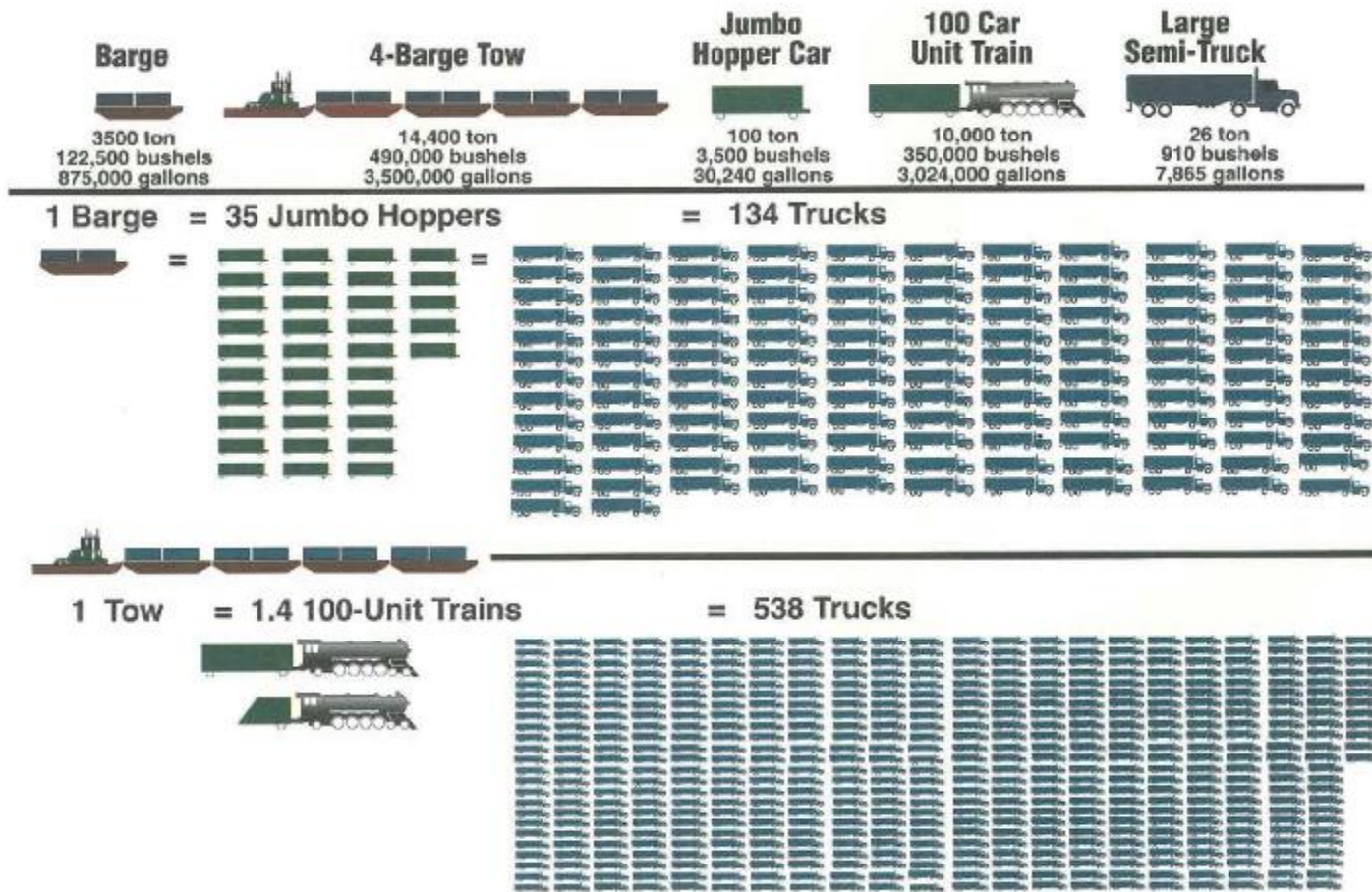
Dam Type	Removed Dams			Snake River Dams			
	Elwha	Glines	Condit Canyon	Lower Granite	Lower Monumental	Ice Harbor	Little Goose
Location	Elwha	Glines	Condit Canyon	Lower Granite	Lower Monumental	Ice Harbor	Little Goose
Power Generation (capacity)	19MW	6MW	14MW	810MW	810MW	603MW	810MW
Transmission Stability				x	x	x	x
Power Peaking/Emergency Outage Recovery				x	x	x	x
Commerce/Navigation				x	x	x	x
Salmon Passage				x	x	x	x
Wind Integration				x	x	x	x
Recreation	x	x	x	x	x	x	x

Snake River dams ... The Facts



Nearly 10% of all U.S. wheat exports move through the Snake River dams





4,361,000 tons of cargo moved on the Snake River in 2014 by barge

302 4-barge tows

- or -

43,610 rail cars

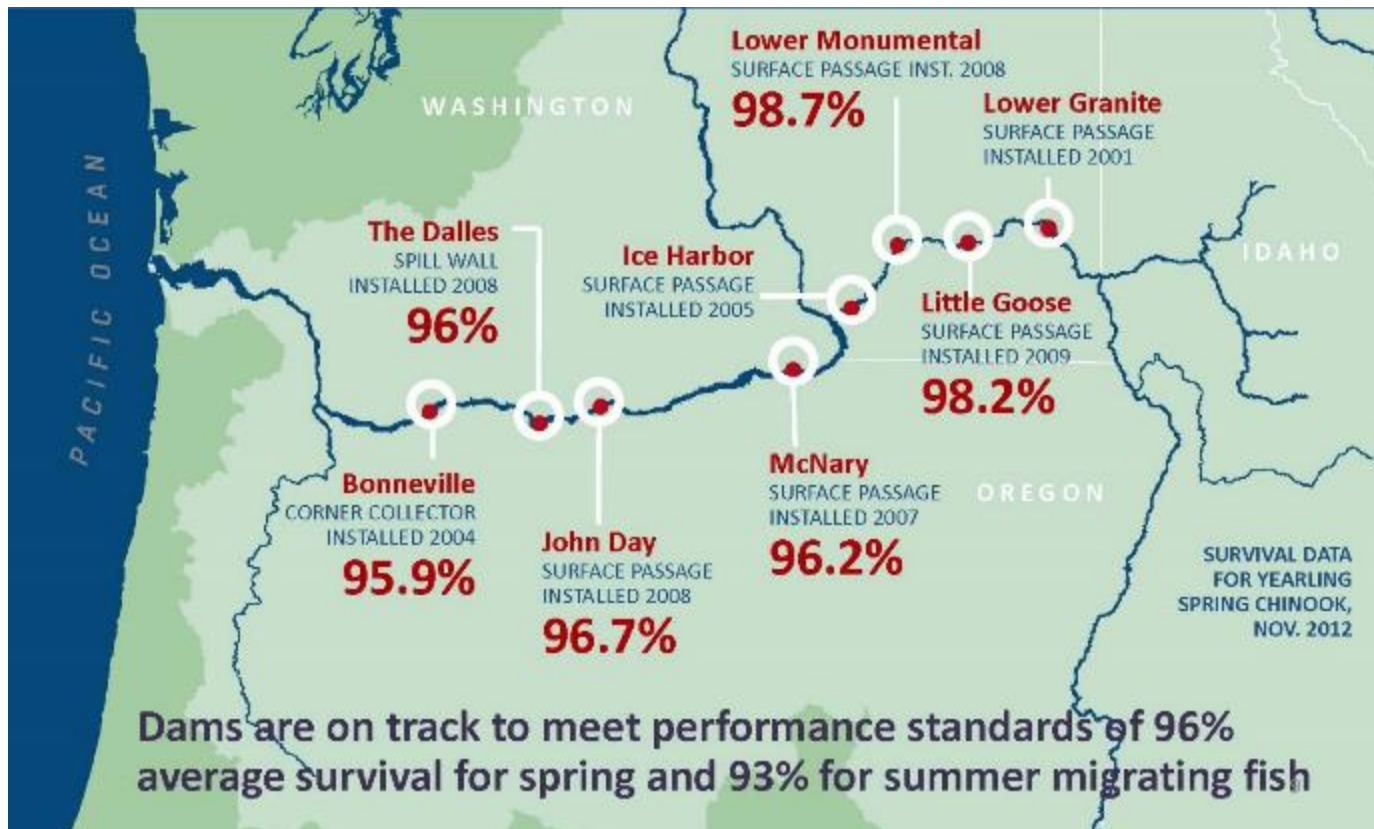
- or -

167,000 semi-trucks

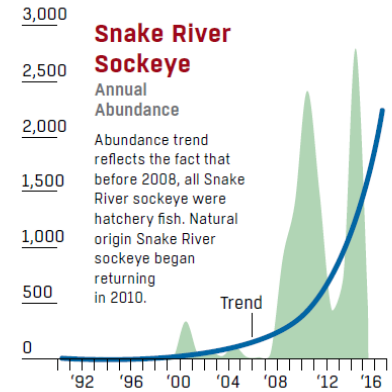
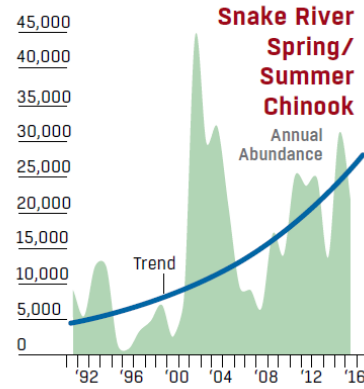
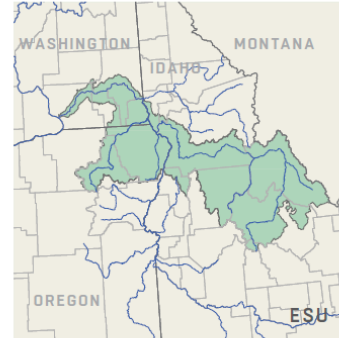
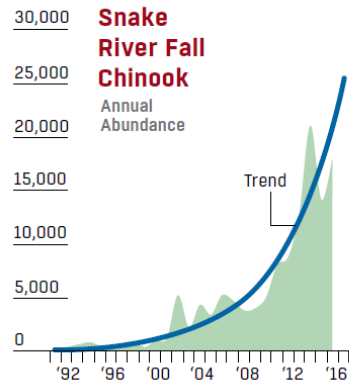
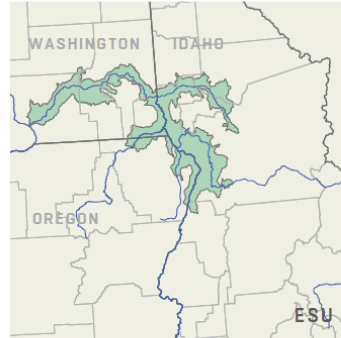
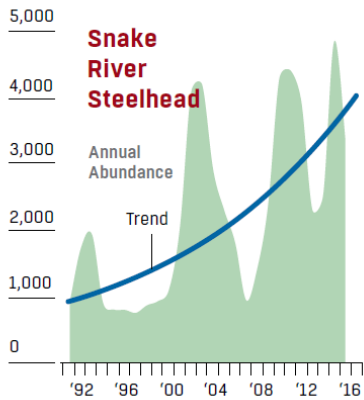
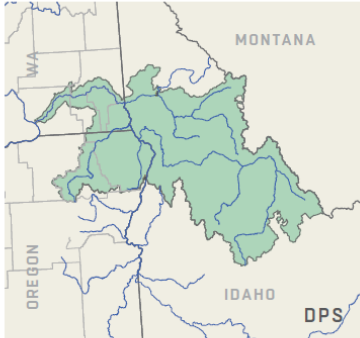


Snake River dams ... The Facts

- Juvenile survival at the dams now averages 97%
- NOAA: survival rates through the hydro system are approaching levels in rivers without dams



Snake River dams ... The Facts



Snake River – routine maintenance dredging

- Channel was dredged in 1999, 2006
- History of litigation ... navigation intervenes
- January 2015: injunction denied
- February 2015: dredging completed
- February 2016: Corps plan upheld



Port of
Lewiston

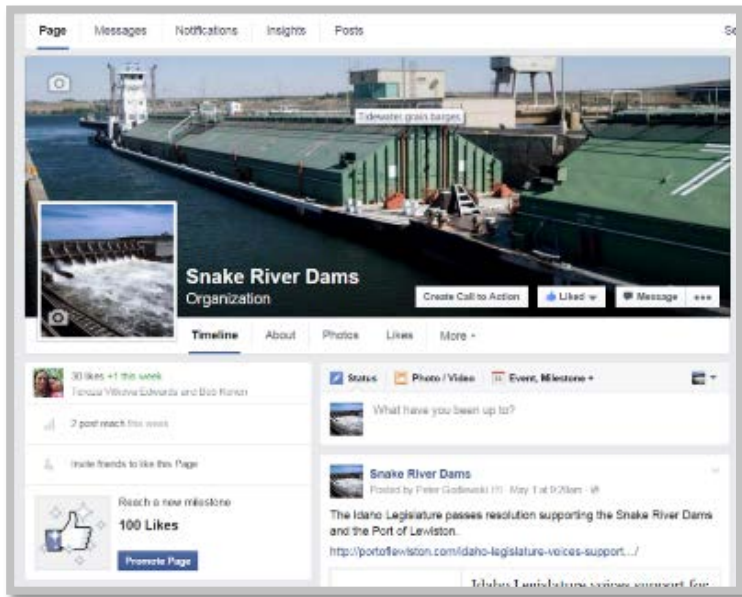
Lewis &
Clark
Terminal



Snake River Dams ... Resources

Facebook

www.facebook.com/snakeriverdams



Web

www.snakeriverdams.com



Columbia Snake River System

River system overview

Why does navigation matter?

River Issues Roundup – Highlight Reel

Columbia Basin Partnership Task Force

Columbia River Basin Restoration Act

FCRPS BiOp lawsuit, appeal, spill, H.R.3144 and more!

Jetties, dredging, and locks

Snake River

Columbia River Treaty

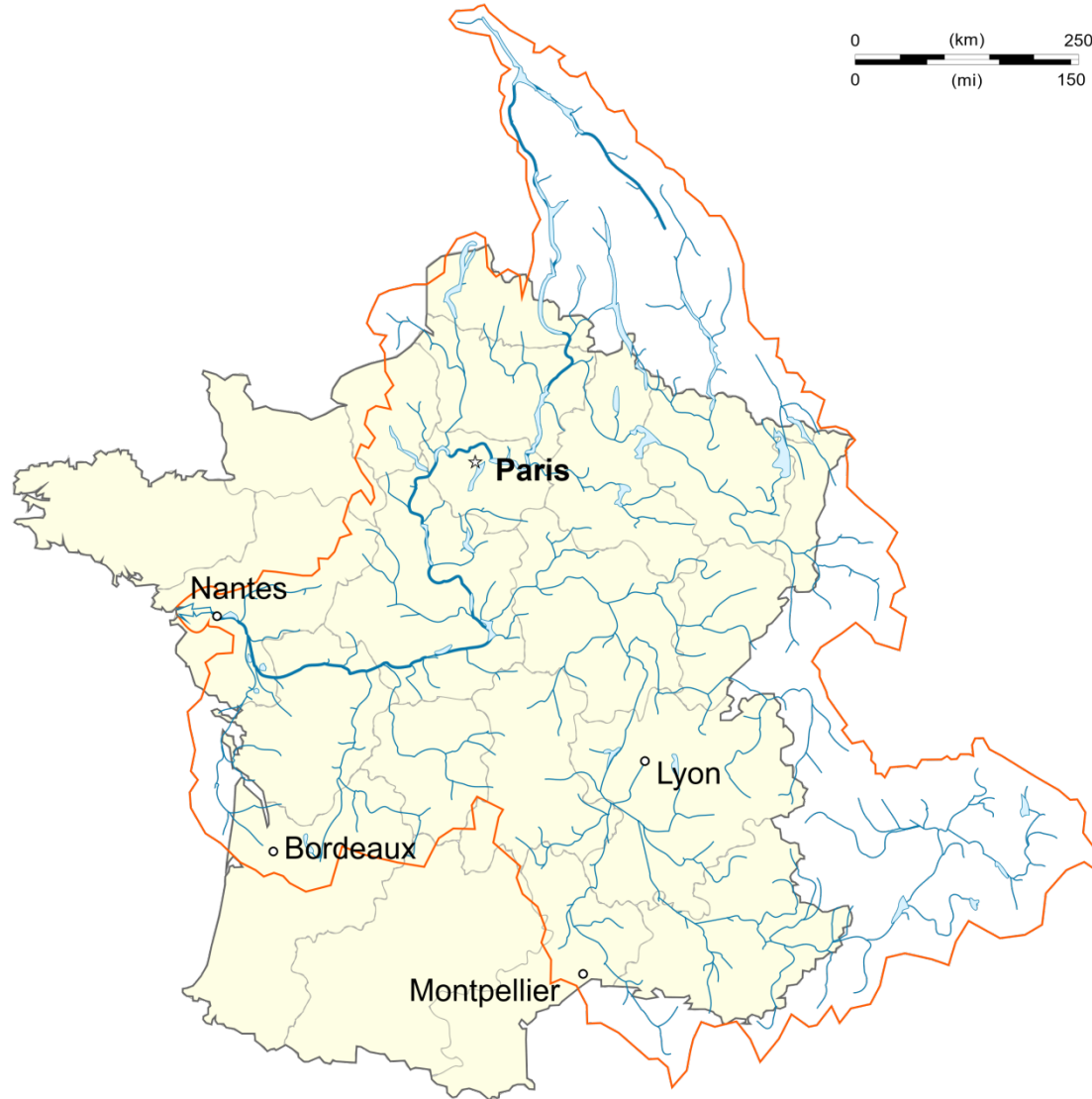
PNWA's Regulatory Focus



Columbia River Basin



Columbia River Basin



Columbia River Treaty

- US-Canada Treaty ratified in 1964 for:
 - Coordinate flood control
 - Optimize hydroelectric generation
- Constructed four dams
 - Duncan – 1967 – Canada
 - Arrow/Keenleyside – 1968 – Canada
 - Mica – 1973 – Canada
 - Libby – 1975 – U.S.
- Cost sharing
- Shared energy benefits
- Framework for cooperation
- Some flexibility, with “notes” exchanged



Columbia River Treaty

- New concerns since 1964:
 - Ecosystem health/fish access
 - Costs – Canadian Entitlement
 - Predictability – flood control
- December 2013 regional recommendation
- Ten year “notice”
 - Opened September 2014, for 2024
 - Neither country has issued notice yet

U.S. Entity Regional Recommendation
for the
Future of the Columbia River Treaty after 2024

December 13, 2013



Columbia River Treaty and Navigation



- **Higher spring/summer flows:**
 - Sedimentation and shoaling
 - Swift currents and challenges to ship handling



- **Lower fall/winter flows:**
 - Lower river height
 - Existing shoals reduce available draft = draft restrictions



Columbia River Treaty and Navigation



Levees

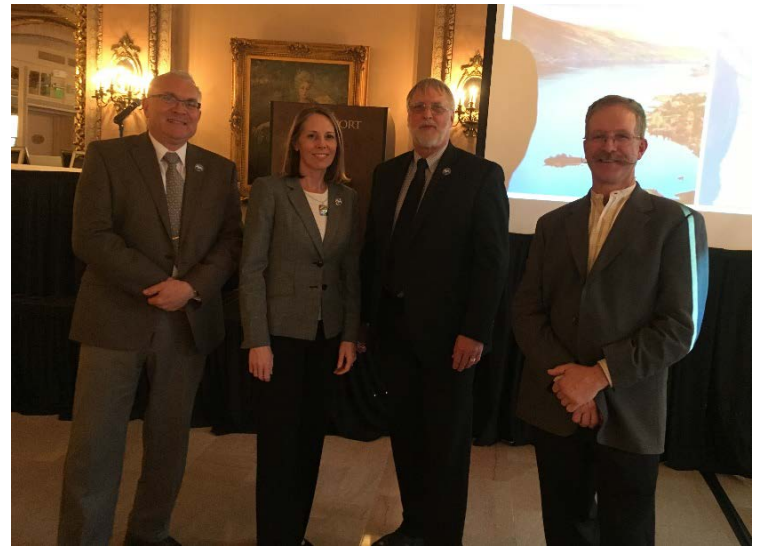
Port docks



Negotiations on the Horizon



- U.S announced in December 2017 that negotiations with Canada will begin in early 2018
- PNWA engaging with U.S. State Dept. and Corps
- April 25th Town Hall in Spokane



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PNWA's Regulatory Focus



PNWA's Regulatory Focus

- Easing stakeholder burden
- Strengthening relationships
- Creating partnerships
- Building solutions



Past Successes:

- Section 214 funding authority
- Seattle District regulatory funding
- Four agency elevation agreement



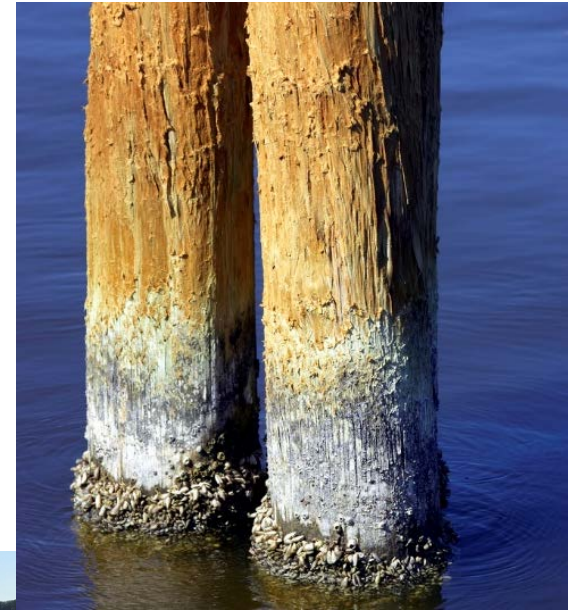
NOAA
FISHERIES



PNWA's Regulatory Focus

A look ahead...

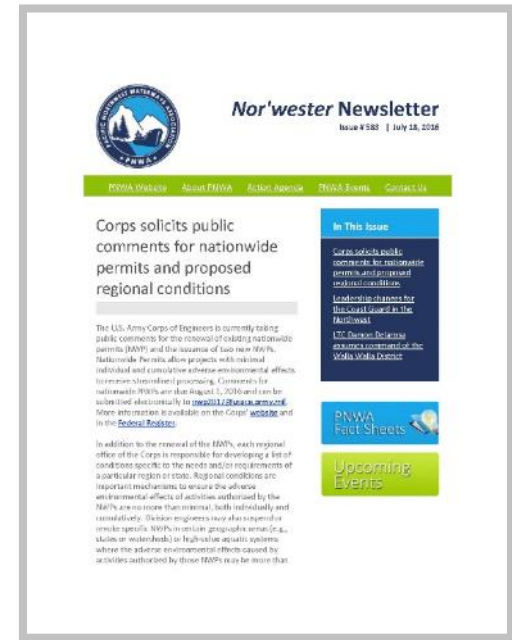
- NMFS review of maintenance activities
- Wake stranding
- Increased regulatory scope, vessel traffic
- Agency disagreement
- Administration efforts & how they translate in PNW



Opportunities to Stay Informed

Website:
www.pnwa.net

Nor'wester newsletter



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