

NOAA Columbia Basin Partnership Provisional Salmon and Steelhead Recovery Goals

Dan Rawding (WDFW)

Columbia River Salmon Recovery Policy

September 14, 2018

Washington Fish and Wildlife Commission



September 15, 2018

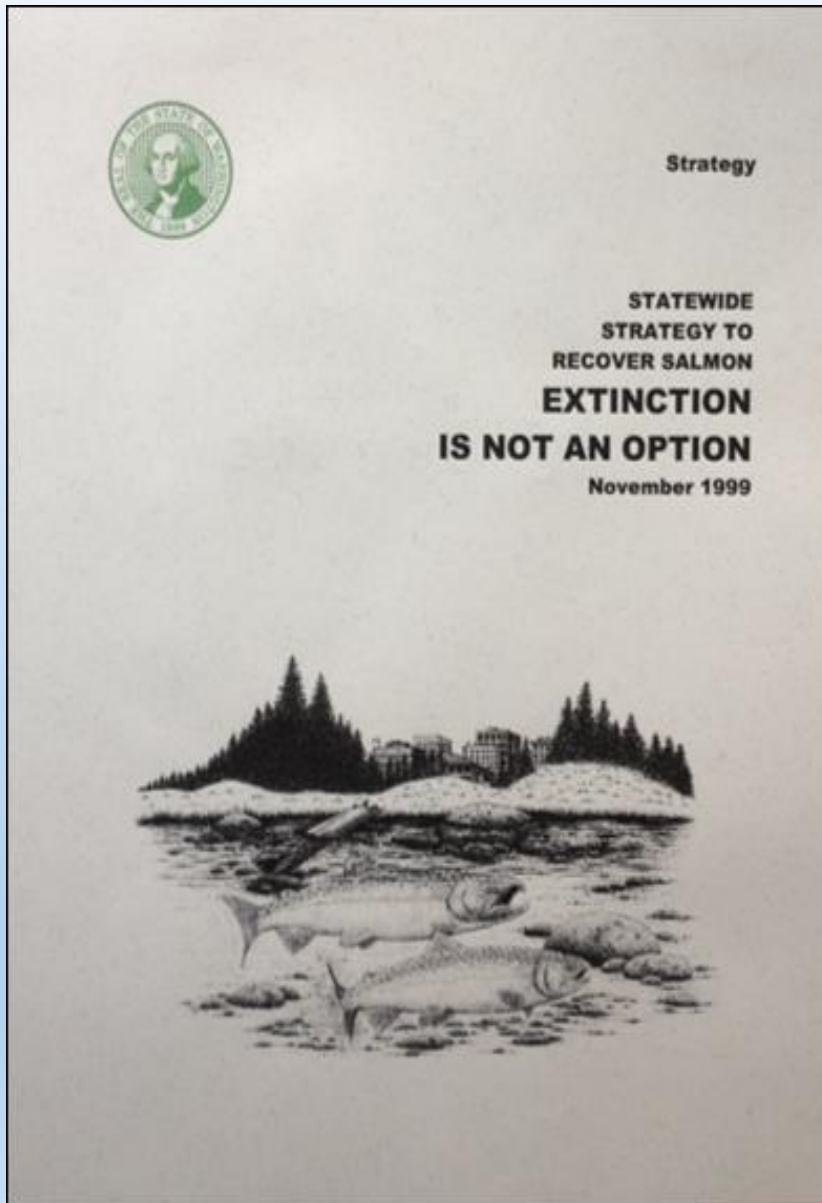
WA Dept. of Fish and Wildlife, information
subject to changes and amendments over time

Outline

- Overview - WA Approach to Salmon Recovery
- Rationale for Columbia Basin Partnership
- Partnership Purpose & Goals
- Provisional Qualitative and Quantitative Goals
- Summary
- Next Steps



Statewide Strategy to Recover Salmon



WA Joint Nat. Resources Cabinet
Northwest Power CC
Dept. Agriculture
Dept. of Fish & Wildlife
Dept. of Ecology
Dept. of Health
P.S. Water Quality Action Team
Conservation Commission
8 others agencies/members

Goal -Restore salmon populations to healthy and harvestable levels and improve the habitats on which they depend.

Extinction is not an Option

Key Points

- **Salmon are Culturally Significant.** Salmon are a critical part of Washington's history, culture, economy and recreational enjoyment.
- **Ecosystem Health.** Statewide strategy to recover salmon also addresses clean water and healthy ecosystems.
- **Locally Based Effort.** Salmon recovery is a statewide effort and must include diverse interest groups, economics, and recognize population growth in WA.

The Washington Way

- Salmon Recovery Act (RCW 77.85) passed by the WA legislature in 1999 to rebuild salmon populations.
 - Creation of local Salmon Recovery Boards (SRB) in the Columbia Basin (Lower, Middle, Upper Columbia & Snake).
 - Creation of the Salmon Funding Recovery Board (SFRB) to fund recovery actions.
- Columbia Basin SRB worked to develop local Salmon Recovery Plans with state agencies and local governments, which have been adopted by NOAA-Fisheries.
- The current state and federal recovery plans focus on ESA delisting not “broad sense recovery” or “healthy and harvestable” goals.

Major Columbia Basin Dams & ESA-Listed Fish

	Chum Salmon	Columbia River (threatened)
	Chinook Salmon	Snake River Fall (threatened) Snake River Spring/Summer (threatened) Lower Columbia River (threatened) Upper Columbia River Spring (endangered) Upper Willamette River (threatened)
	Steelhead	Snake River Basin (threatened) Lower Columbia River (threatened) Middle Columbia River (threatened) Upper Columbia River (endangered) Upper Willamette River (threatened)
	Sockeye Salmon	Snake River (endangered)
	Coho	Lower Columbia River (threatened)

13 of 24 ESUs are ESA listed



Columbia River Basin

Columbia Basin Salmon Landscape and “2012 Situational Assessment”

- **Litigation.** NOAA has faced ongoing litigation since the 1990’s for salmon recovery related topics including role of hatchery fish in salmon recovery, operation of the Columbia River hydro-system, harvest rates of ESA listed salmon populations, etc.
- 2012 Situational Assessment by Ruckelshaus Center and Oregon Consensus found the need for:
 - for a more coherent, integrated, and efficient means of addressing the complexities of salmon recovery; and
 - for identifying common goals for measuring progress and success for salmon recovery.

CBP Task Force Formation

- To Address the 2012 Situational Assessment, NOAA Fisheries convened a the Columbia Basin Partnership (CBP) Task Force under its Marine Fisheries Advisory Committee (MAFAC) to comply with Federal Advisory Committee Act.
- NOAA Fisheries solicited stakeholders through a formal process and requested state and tribal representatives from sovereigns for the CBP, began in January, 2017.

28 members from states, tribes as well as diverse interests:

- NGO/environmental representative(s);
- Commercial fishing representative(s);
- Recreational fishing representative(s);
- Utility representative(s);
- River industry representative(s);
- Agricultural/irrigation representative(s); and
- A local recovery group representative from each state
- WA State represented by Guy Norman of the Governor's Office

NOAA Columbia Basin Partnership

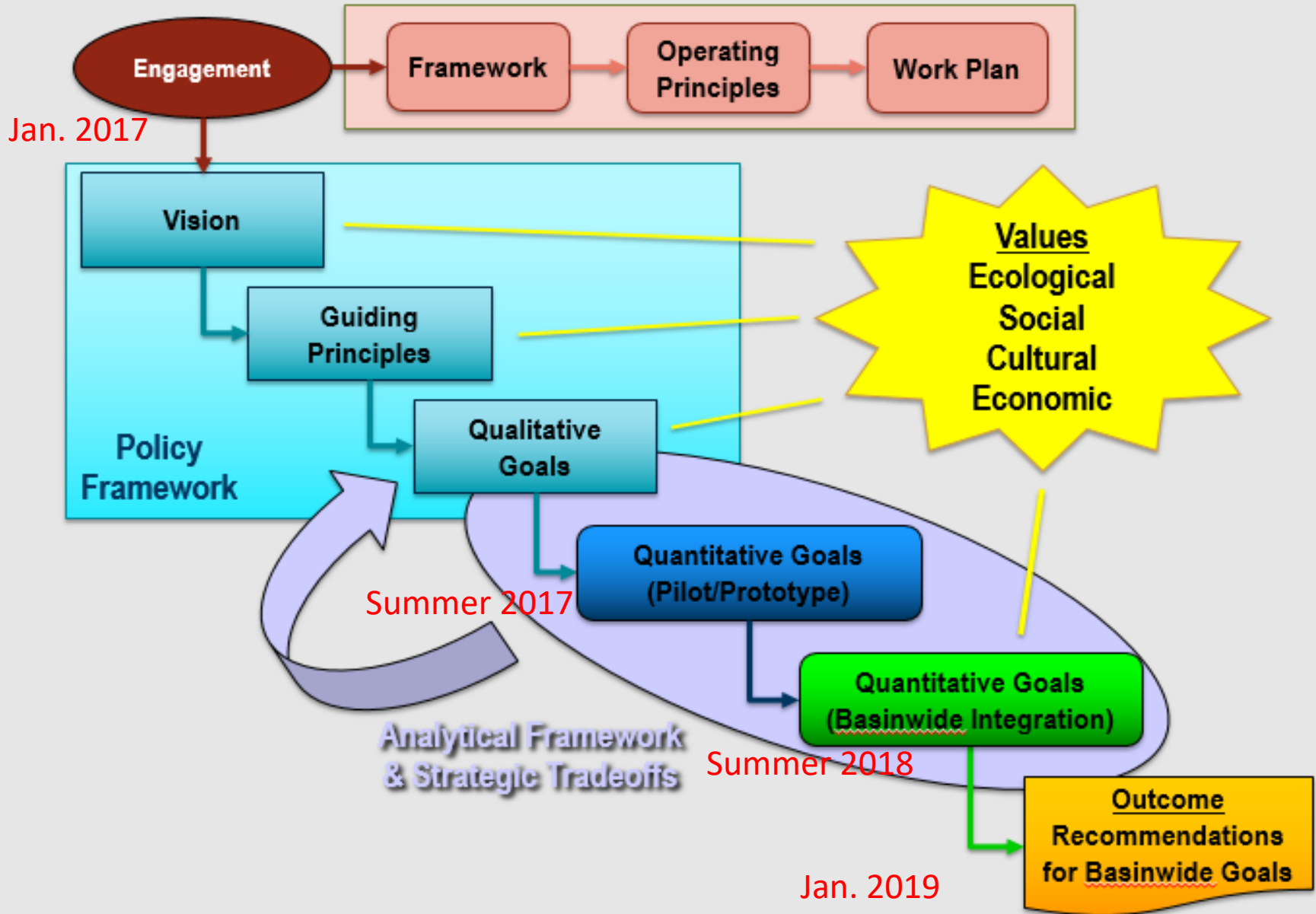
Purpose: to develop common and shared goals for all Columbia River Basin anadromous salmon and steelhead

- to facilitate achieving existing management, mitigation and recovery responsibilities,
- to implement a more coherent, integrated, and efficient means of addressing the complexities of salmon recovery, and
- to convene a regional process engaging regional sovereigns and stakeholders to develop healthy and harvestable goals for salmon and steelhead populations

Desired CBP Outcomes

- Goals to address both conservation and harvest/fishing aspirations.
- Goals that are understandable and consider various users of Columbia Basin resources.
- Qualitative and quantitative adult natural origin abundance, hatchery abundance, and harvest goals for both listed and non-listed stocks.
- Better coordination, more effective use of resources, and alignment of strategic priorities.
- Enhanced relationships, trust, and knowledge across the diverse user groups in the Columbia Basin.

CBP Work Flow Chart



CBP Progress



- Qualitative Goals
- Quantitative Wild/Natural Origin Goals
- Quantitative Harvest Goals
- Quantitative Hatchery Goals

Partnership Provisional Products Overview

Draft Vision Statement

Provisional Qualitative Goals

Natural
Production

Hatchery /
Mitigation

Harvest /
Fisheries

Social, Cultural,
Economic, and Ecological

Working Quantitative Goals for 242 Populations within 24 Stocks/ESU

Natural Production
Escapement to spawning sites

Hatchery / Mitigation

Harvest / Fisheries

Provisional Quantitative Goals for 24 Stocks/ESU

Natural Production
Escapement to spawning sites

Hatchery / Mitigation

Harvest / Fisheries

Goal 1. Restore salmon and steelhead in the Columbia Basin to healthy and harvestable/fishable levels.

[Add explanatory paragraph here. Include definition of “healthy” (i.e., implies that fish abundance, productivity, spatial structure and diversity are at high levels; addresses needs for dependent wildlife); address “fishable”; explain ESA recovery and broad-sense recovery, discuss time-frame issue – although some of these are long-term goals, strive to do them sooner (e.g., could achieve goal 1-Cb in a shorter timeframe, like 24 years, for some populations), take action as soon as practicable and move as fast as possible. Highlight the need for strategic prioritization in phase2, etc.]

Subgoals	Within 25 years	Within 50 years	Within 100 years
1-A. <u>Prevent Declines</u>: Reverse and prevent declines of both listed and unlisted salmon and steelhead.	a. Reverse and prevent declines of both listed and unlisted salmon and steelhead.		
1-B. <u>Achieve ESA Delisting</u>: Recover ESA-listed salmon and steelhead to a point where they are no longer threatened or endangered.	a. Achieve ESA delisting for at least some salmon ESUs and steelhead DPSs.	b. Achieve ESA delisting for additional salmon ESUs and steelhead DPSs.	c. Achieve ESA delisting for all listed salmon and steelhead.
1-C. <u>Achieve Broad Sense Recovery</u>: Restore listed and unlisted salmon and steelhead to healthy and harvestable levels.	a. Make significant, measurable progress toward broad sense recovery of all salmon and steelhead.	b. Achieve healthy and harvestable levels for some salmon and steelhead.	c. Achieve healthy and harvestable levels for all salmon and steelhead.
1-D. <u>Expand Spatial and Temporal Range</u>: Rebuild spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within the historical range.	a. Make significant, measurable progress toward rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including beginning to study, develop, and implement plans for restoring salmon and steelhead to currently inaccessible areas within their historical range.	b. Continue rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.	c. Complete rebuilding of spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.
1-E. <u>Expand Diversity and Resiliency</u>: Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.	a. Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.	b. Continue rebuilding adaptive and resilient salmon and steelhead runs and proactively and adaptively manage for a changing climate.	c. Ensure continued resiliency of salmon and steelhead runs and continue to adaptively manage for a changing climate.

Goal 2. Provide diverse, productive, and dependable tribal and non-tribal harvest and fishing opportunities for Columbia Basin salmon and steelhead in fresh and marine waters.

[Add explanatory paragraph – include explanation of “harvest,” “fisheries” – also still need to work on consistency of usage within this document]

Subgoals	Within 25 years	Within 50 years	Within 100 years
2-A. <u>Ensure Sustainability</u>: Manage harvest and fisheries at levels consistent with conserving natural salmon and steelhead populations	a. <i>Ensure that fishery impacts on weak and listed stocks allow rebuilding of natural stocks and do not impede recovery.</i>	b. <i>Manage fisheries based on annual abundance to promote rebuilding of natural production and share the recovery burden.</i>	c. <i>Manage for optimum sustainable harvest and fishing opportunity as healthy stocks are restored.</i>
2-B. <u>Optimize Harvest and Fishery Opportunity</u>: Optimize fishery opportunity and harvest of healthy natural and hatchery stocks based on availability.	a. <i>Optimize fishery opportunity and access to harvestable surpluses of unlisted and hatchery stocks consistent with conservation.</i>	b. <i>Expand fishery opportunity concurrent with progress toward ESA delisting and broad sense recovery.</i>	c. <i>Fully realize harvest potential with increasing opportunity throughout the range of salmon and steelhead stocks.</i>
2-C. <u>Share Benefits</u>: Realize all fishery obligations and share benefits among users.	a. <i>Meet fishery obligations and share available harvest within the constraints imposed by conservation.</i>	b. <i>As constraints are reduced, move into focusing fisheries on sharing the benefits of increasing numbers of harvestable stocks.</i>	c. <i>Realize all fishery obligations and share benefits among users.</i>

Goal 3. Produce hatchery salmon and steelhead to support conservation, mitigate for lost natural production, and support fisheries, in a manner that strategically aligns hatchery production with natural production recovery goals.

[Add explanatory paragraph, including explanation that supplementation is a tool. Also add supplementation to the definitions section. Mention broader uses of artificial production.]

Subgoals	Within 25 years	Within 50 years	Within 100 years
3-A. <u>Support Natural Production</u>: Utilize hatcheries to maintain, support and restore natural production where appropriate.	a. <i>As appropriate, continue to utilize hatcheries to maintain, support and restore at-risk populations, including those affected by climate change.</i>	b. <i>Use conservation hatchery strategies as needed to proactively address future threats, including climate change.</i>	c. <i>Achieve a future where conservation hatcheries are not necessary unless unforeseen natural events require an emergency response.</i>
3-B. <u>Mitigate for Lost Production and Support Fisheries</u>: Produce hatchery fish to support tribal treaty/trust responsibilities and meaningful fishery opportunities to mitigate for historical losses due to development and to enhance fisheries.	a. <i>Make progress in reducing reliance on hatchery production for mitigation consistent with improvements in natural production.</i>	b. <i>Consider changes in hatchery objectives and production levels as overall fishery opportunities are maintained through increased fish abundance.</i>	c. <i>Achieve a future where we rely less on hatchery production for mitigation and fishery enhancement only when natural production has increased.</i>
3-C. <u>Fish Protection</u>: Strategically align hatchery production with natural production recovery goals, consistent with tribal treaty/trust responsibilities, and with other legal and mitigation requirements.	a. <i>Continue to implement changes in hatchery practices and programs based on best available science (including, in some cases, changes in stocks or species produced) to minimize adverse effects of hatchery-origin salmon and steelhead on naturally produced salmon and steelhead.</i>	b. <i>Continue to refine hatchery production, strategies and practices based on assessments of effectiveness and technology advances to minimize hatchery impacts on natural salmon and steelhead.</i>	c. <i>Reduce long-term hatchery impacts by rebuilding abundance, productivity, diversity, and distribution of natural salmon and steelhead.</i>

Goal 4. Make decisions within a broader context that reflects, and considers effects to, the full range of social, cultural, economic, and ecosystem values and diversity in the Columbia Basin.

[Add explanatory paragraph, including the concept of inter-generational equity and considerations for future generations]

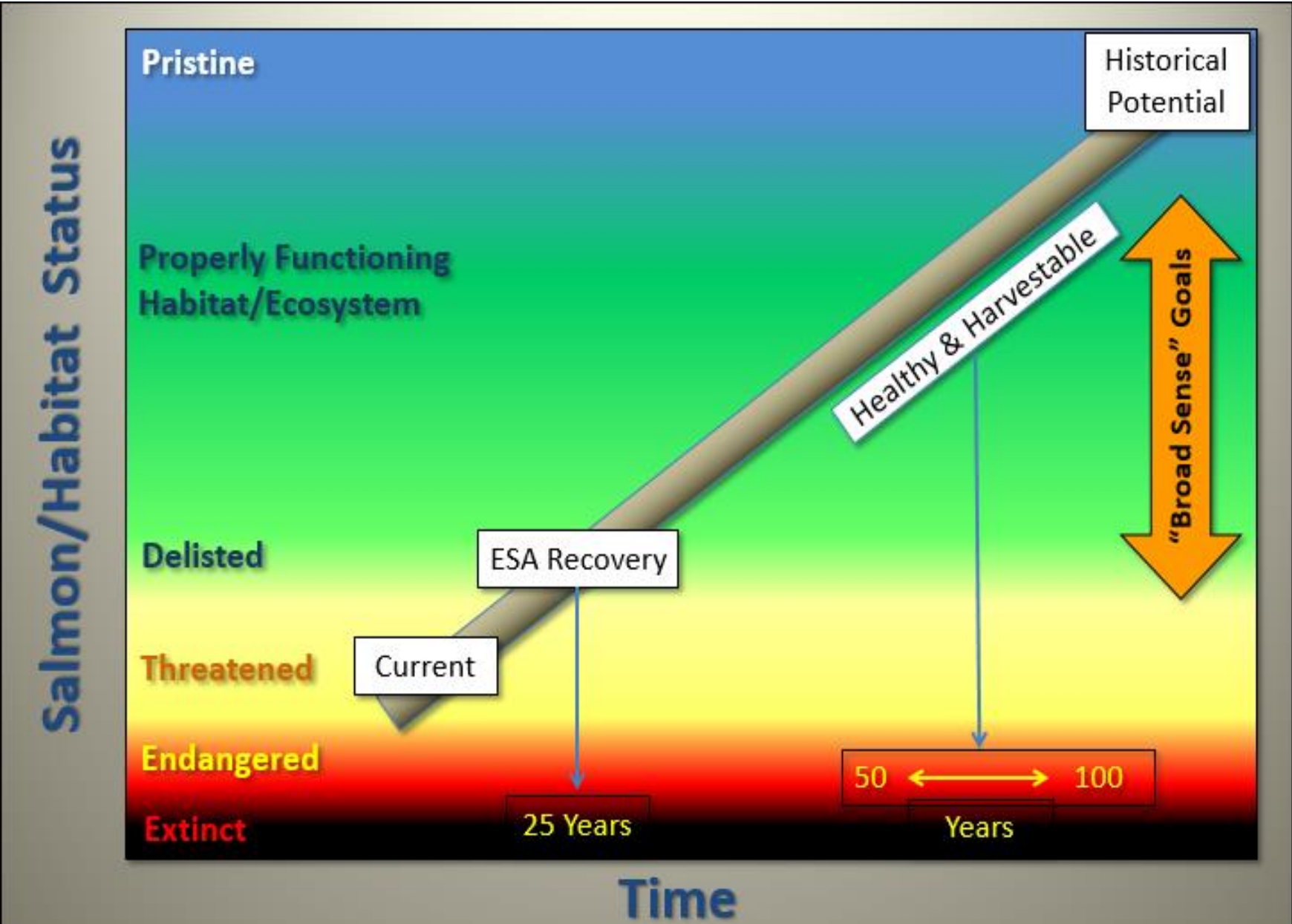
4-A. Social Goal: Make decisions that reflect the social importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of social diversity and values that are present.

4-B. Cultural Goal: Make decisions that reflect the cultural importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of cultural values that are present.

4-C. Economic Goal: Make decisions that are based on the principle of equitable sharing of costs and benefits across economic sectors. Also, make decisions that recognize the great economic value of the Columbia River and its tributaries, and the importance of this natural capital as a major driver of the present and future economy for all in the Pacific Northwest.

4-D. Ecosystem Goal: Make decisions that consider the role of salmon and steelhead in the ecosystem and that support a full range of ecological benefits, including the needs of dependent wildlife.

Graphical Display of Qualitative Goals



Provisional Quantitative Goals

Natural Production / Escapement to Spawning Sites

Low range escapement abundance goal

- represent the best scientific knowledge for the abundance necessary to avoid extinction or avoid being listed under ESA.

High range escapement abundance goal

- reflect aspirational “healthy and harvestable” levels that might potentially be achieved with aggressive improvements in habitat and other conditions currently limiting stocks.

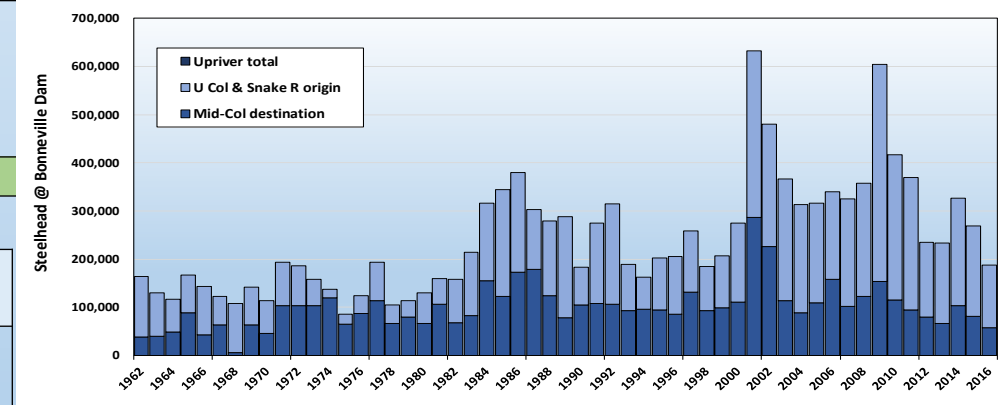
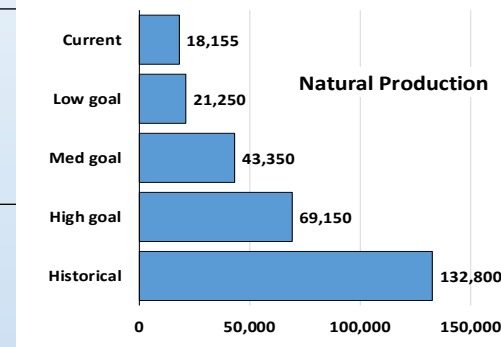
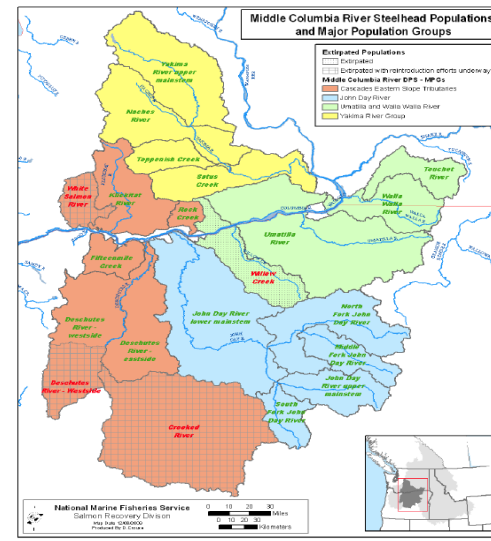
Mid-range escapement abundance goal

- are approximately half-way between the low-range goals and the high range goals.

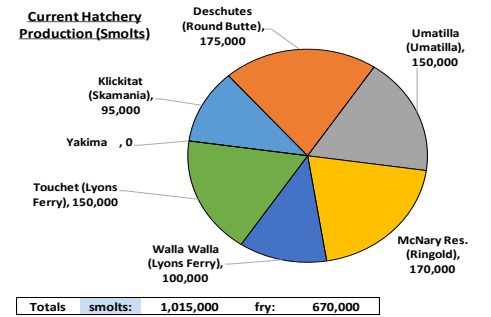
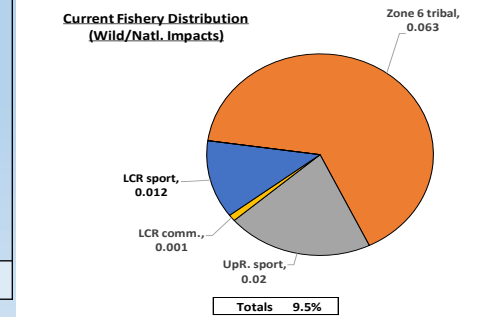
Natural Production		Abundance		Potential Goal Range		
MPG	Population	Recent	Historical	Low	Med	High
Cascade E Slope	White Salmon R.	200	1,100	500	750	1,100
	Klickitat R.	1,500	3,500	1,000	2,000	3,000
	Fifteenmile Cr.	400	2,000	500	1,000	1,500
	Deschutes R. east	1,700	14,700	1,000	2,000	3,400
	Deschutes R. west	600	6,900	1,500	3,000	2,800
	Crooked R.	0	14,800	2,250	4,500	4,900
	Rock Cr.	455	600	500	550	600
John Day	L. mainstem	1,600	10,100	2,250	4,500	6,750
	North Fork	2,000	14,700	1,500	3,000	4,500
	Middle Fork	1,700	5,900	1,000	2,100	3,900
	South Fork	800	2,900	500	1000	1500
	U. mainstem	700	5,900	1,000	2,000	3,000
Umatilla - Walla Walla	Willow Cr.	0	--	1,000	2,000	3,000
	Umatilla R.	2,400	7,000	1,500	4,000	7,000
	Walla Walla R.	900	16,500	1,000	2,000	3,400
	Touchet R.	200		1,000	2,000	2,200
Yakima	Satus Cr.	1,100	4,000	1,000	1,500	2,000
	Toppenish Cr.	500	3,400	250	500	1,500
	Naches R.	1,200	8,400	1,500	3,450	5,400
	U. mainstem	200	10,400	500	1,500	7,700
Totals		18,155	132,800	21,250	43,350	69,150

Mid Columbia River Steelhead ESA: Threatened Life History: Mostly Summer Run / Some Winters, Stream-rearing

- This stock inhabits low to mid-elevation streams draining the eastern Cascades and west Blue mountains.
- It includes viable and moderately viable populations and is among the listed species that are closest to recovery.
- Hatchery production is limited to a few systems.
- Key limiting factors in some subbasins include blocked or limited access at tributary dams, water use and diversion, and hatchery fish influences. Also pinniped and avian predation in the Columbia River mainstem.
- Several populations that were historically extirpated by tributary dams, are being reintroduced.



Artificial Production Location (Program)	Current Production			Return goal	Future production
	Brood	Smolts	Fry		
Bon/L. White Salmon*		25,000	0		25,000
Hood*		150,000	0		150,000
Klickitat (Skamania)	144	95,000	0	4,000	95,000
Deschutes (Round Butte)	1,100	175,000	670,000	4,300	175,000
Umatilla (Umatilla)	110	150,000	0	750	150,000
McNary Res. (Ringold)	300	170,000	0	3,200	170,000
Walla Walla (Lyons Ferry)	35	100,000	0	1,200	100,000
Touchet (Lyons Ferry)	88	150,000	0	1,800	150,000
Yakima	0	0	0	0	0
Totals	1,777	1,015,000	670,000	15,250	1,015,000



Provisional Natural Origin Escapement Goals Salmon and Steelhead

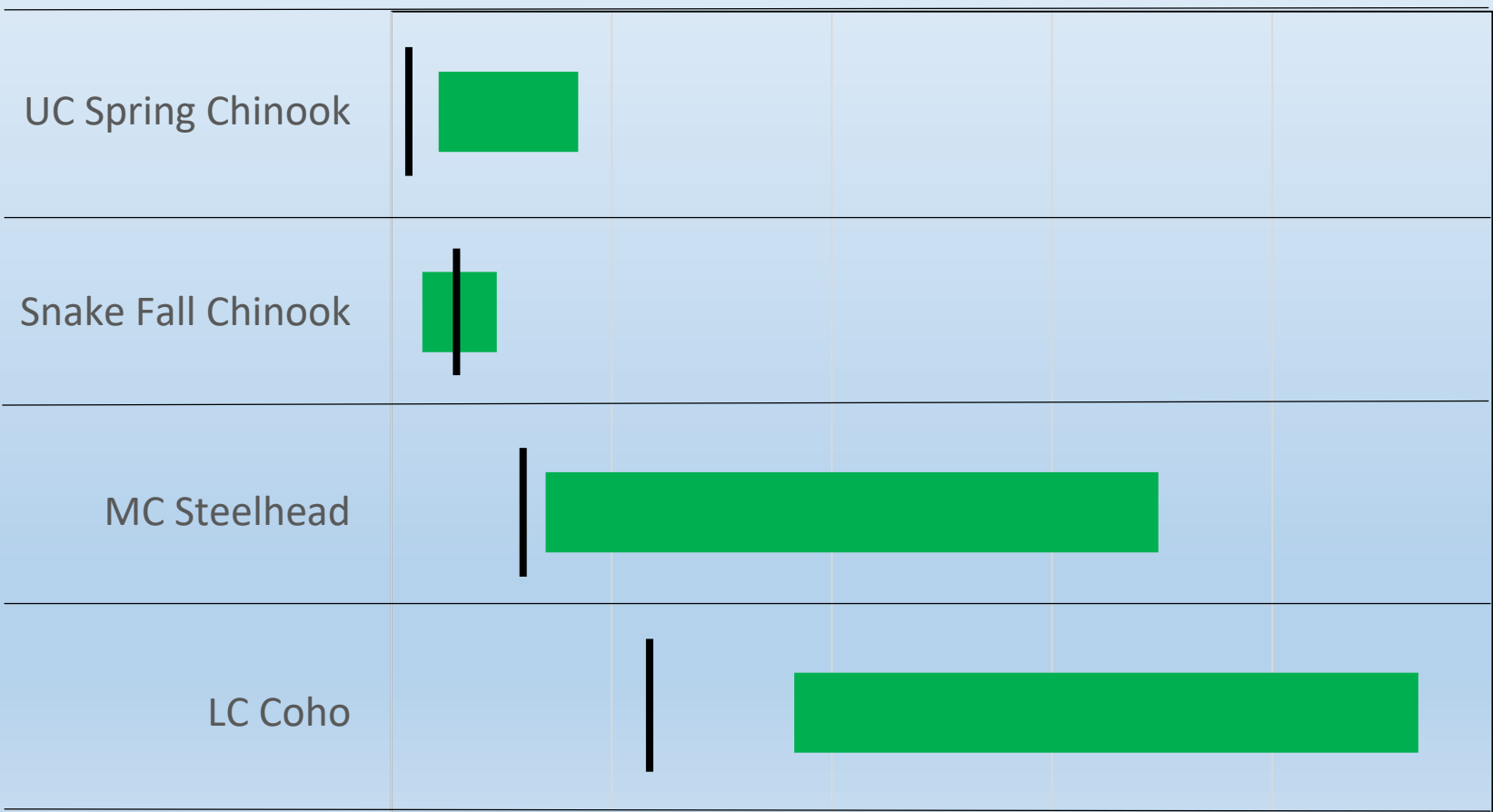
Species/Race	10-year Avg.	Lo Goal	Mid Goal	Hi Goal	Historic	% Historic
Spring Chinook	29,616	68,458	160,030	249,550	1,448,005	17%
Summer Chinook	18,771	22,704	81,398	123,841	693,952	18%
Fall Chinook	134,629	80,700	130,968	177,485	1,250,000	14%
Chum	11,178	16,050	24,075	32,100	900,000	4%
Coho*	31,401	54,900	98,150	140,400	288,200	49%
Sockeye	228,139	287,000	693,750	1,874,000	2,050,000	91%
Summer Steelhead	52,766	53,363	160,252	259,128	890,100	29%
Winter Steelhead	24,920	28,250	62,475	96,400	209,900	46%
Total	531,420	611,425	1,411,098	2,952,904	7,730,157	38%

*Coho Salmon 10-year average only includes populations below BON

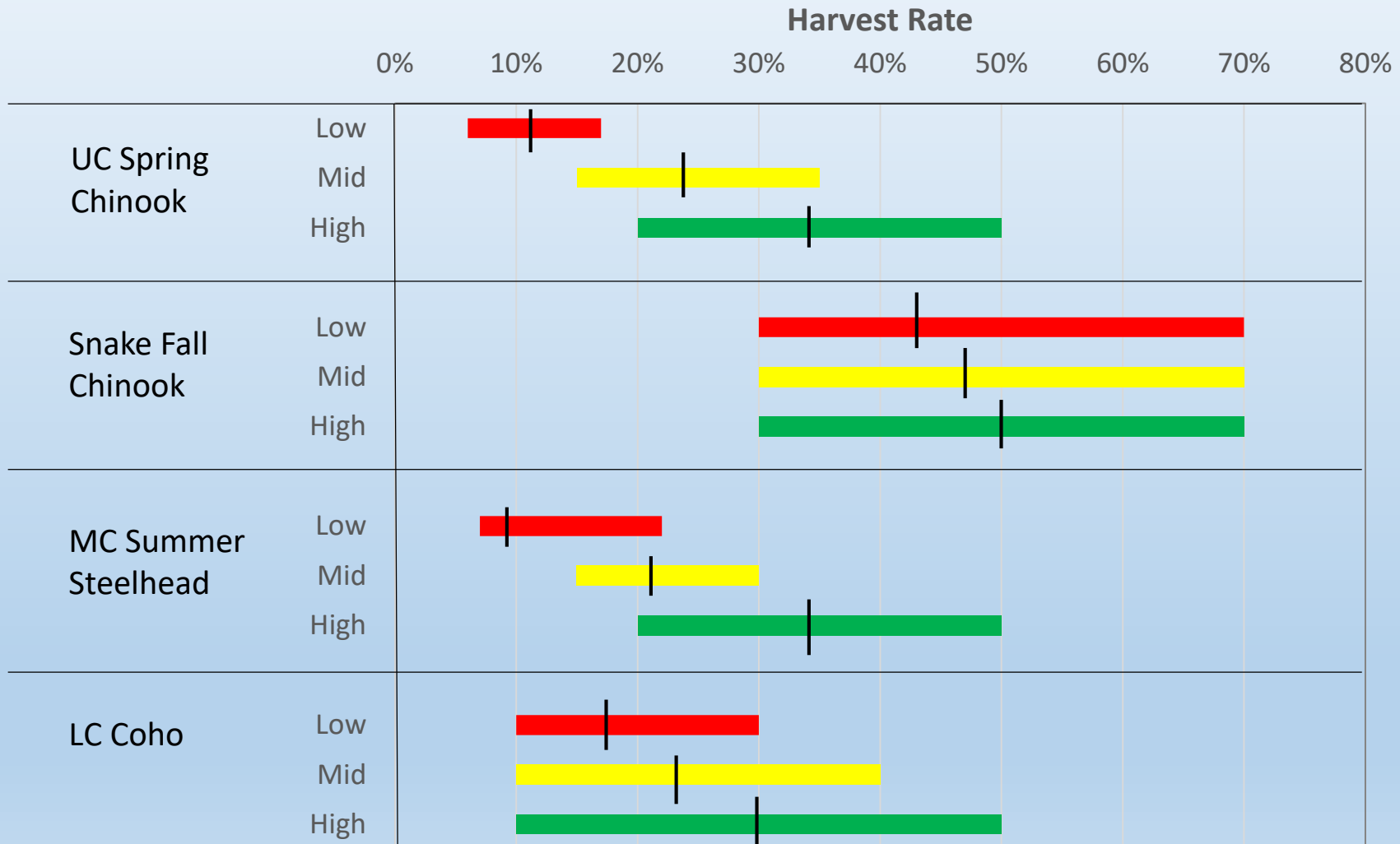
Provisional Natural Origin Goals for Selected Stocks/ESU

Spawning Escapement Goal

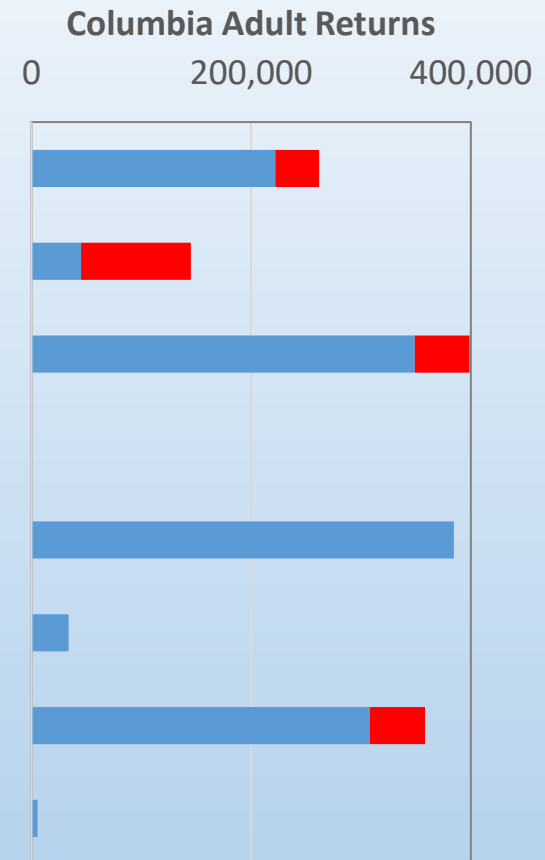
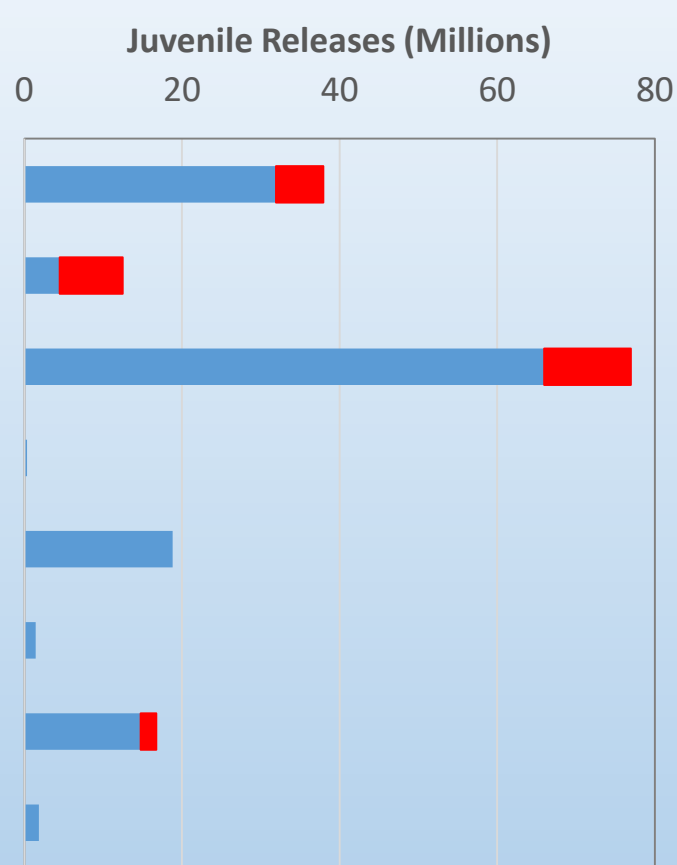
0 30,000 60,000 90,000 120,000 150,000



Provisional Fishery Impacts for Selected Stocks/ESU



Provisional Hatchery Release & Adults Return Goals



- Current total hatchery returns to the mouth of the Columbia total 1.4 million adults
- Planned hatchery releases are for the Upper Columbia above Grand Coulee
- Juvenile releases do not include recent discussion regarding Southern Resident Killer Whales

Columbia Basin Partnership Summary

Successful Thus Far

- Agreement across a diverse group of Columbia Basin interests and sovereigns (4 states and tribes)
 - “Healthy and Harvestable”
- Regional adoption of these goals will hopefully change the Columbia River landscape
 - Shift away from litigation to a coherent, integrated, and efficient partnership
- NOAA-Fisheries will use the goals recommended by the CBP Task Force to guide its future management decisions
- “Healthy & Harvestable” keeps the region focused beyond ESA recovery on meaningful fishing opportunity and a healthy ecosystems
- CBP Next Steps
 - Submit Partnership Report to NOAA’s Marine Fisheries Advisory Committee (MAFAC) by January 2019.
 - The CBP has proposed a phase two, which would look at the feasibility of achieving the provisional quantitative goals.

Questions?



More information Available at:

http://www.westcoast.fisheries.noaa.gov/columbia_river/CBP_TF_OReach_Sum_2018.html