

Columbia River Chum

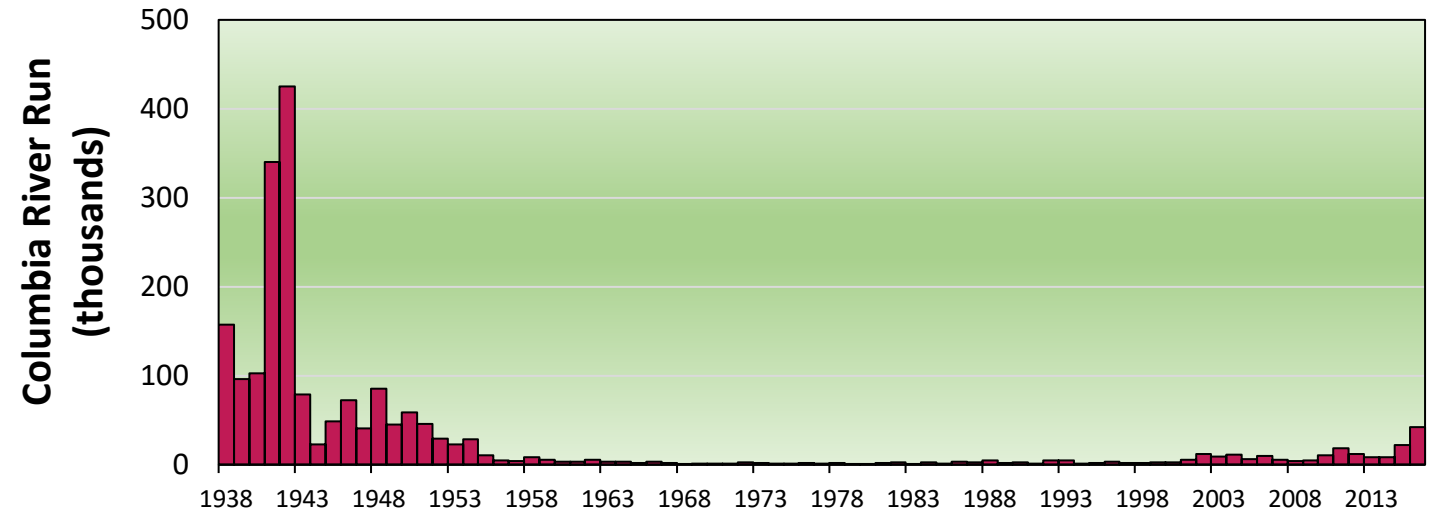
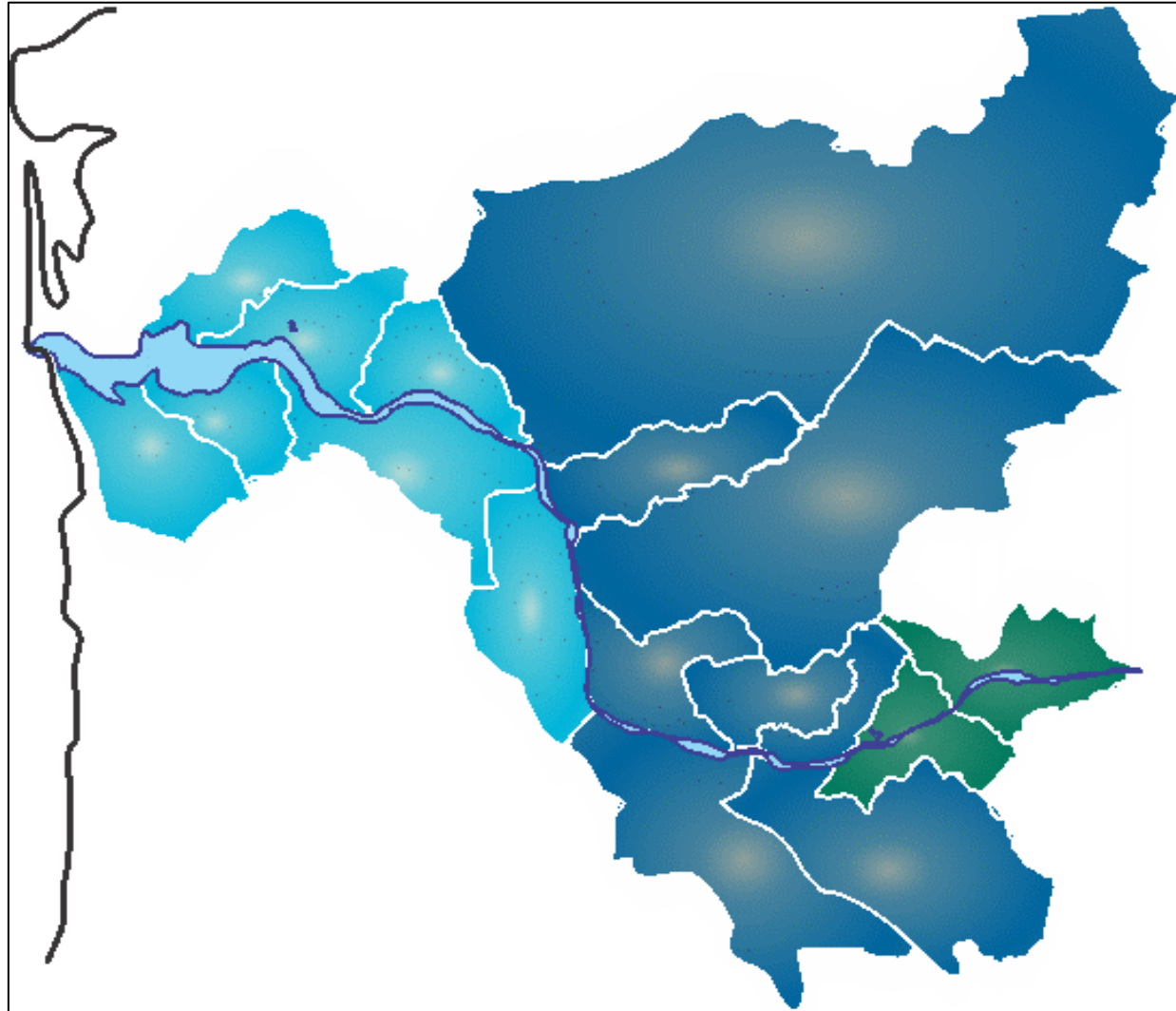
ESA: Threatened

Life History: Late Fall Run, Ocean-rearing

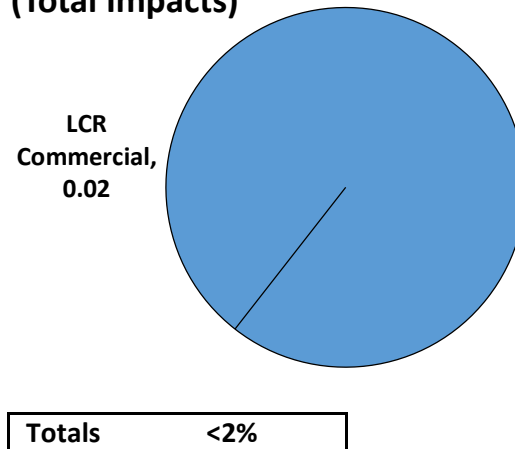
Life History: Late Fall Run, Ocean-rearing

- Historically spawned in lower reaches of streams and the mainstem downstream from Celilo Falls.
- Chum need clean gravel beds and intergravel flow or upwelling for successful spawning and incubation.
- Juveniles migrate seaward as fry soon after emergence from the gravel in late winter and early spring.
- Chum have declined to very low levels consisting of a few small remnant populations.
- Causes are loss of critical stream habitats due to watershed and stream alteration.

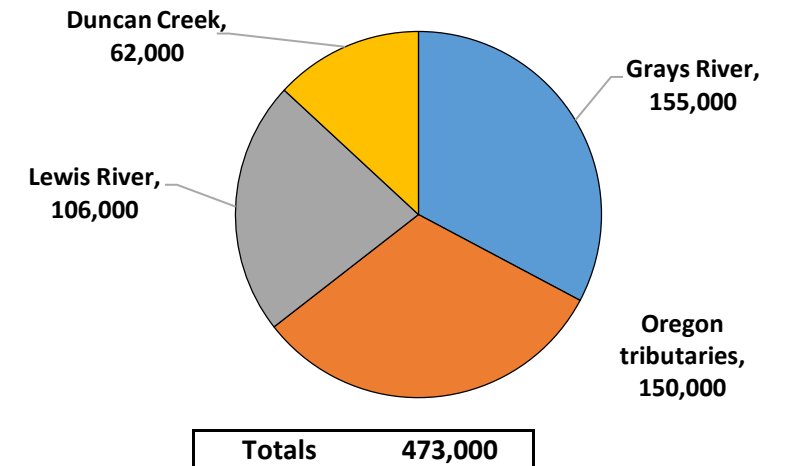
Run Summary (10-yr avg. adults)				
	Total	Wild/Natl	Hatchery	% Hatchery
@ Columbia R Mouth	14,500	14,200	300	2%
To Mid Col R (BON)	100	100	0	0%
Local return (tributary entry)	14,400	14,100	300	2%
Escapement ("spawners")	14,400	14,100	300	2%
Harvest (Col mainstem)	--	--	--	--



Current Fishery Distribution (Total Impacts)



Current Hatchery Production (fry)



Natural Production		Abundance (mean)		Potential Goal Range		
MPG	Population	Recent	Historical	Low	Med	High
Coast	Grays	6,928	10,000	1,600	2,400	3,200
	Eloch/Sam	50	16,000	1,300	1,950	2,600
	Mill/Aber/Germ	50	7,000	1,300	1,950	2,600
	Youngs	0		500	750	1,000
	Big	0		500	750	1,000
	Clatskanie	0		1,000	1,500	2,000
	Scappoose	0		1,000	1,500	2,000
Cascade	Cowlitz	50	195,000	900	1,350	1,800
	Kalama	50	21,000	900	1,350	1,800
	Lewis	50	125,000	1,300	1,950	2,600
	Salmon	50	4,000	50	75	100
	Washougal / I205	2,176	18,000	1,300	1,950	2,600
	Clackamas	0		500	750	1,000
	Sandy	0		1,000	1,500	2,000
Gorge	Lower	1,694	6,000	2,000	3,000	4,000
	Upper	80	11,000	900	1,350	1,800
Totals		11,178	900,000	16,050	24,075	32,100

Artificial Production		Current Production			Return		Future
Location (Program)		Brood	Smolts	Fry	Current	Goal	production
Grays River		178	0	155,000	215		300,000
Oregon tributaries		--	0	150,000			300,000
Lewis River		88	0	106,000	22		100,000
Duncan Creek		54	0	62,000	10		50,000
Totals		320	0	473,000	247		750,000

Fisheries / Harvest		Exploitation rate			Harvest	
Location		Avg.	Goal	Future	10 yr avg	Future
Natural	Ocean	--	--	--	--	--
	Freshwater	<2%	<5%	<5%	<200	1,690
	Total	<2%	<5%	<5%	--	1,690

Total Return		Abundance		@ Goals		
		Recent 10-yr avg	Historical	Low	Med	High
@ Columbia R Mouth		14,500	900,000	16,400	24,900	33,800
Wild/Natural		14,200	--	--	--	--
Hatchery		300	--	--	--	--
% hatchery		2%	--	--	--	--
To Mid Col R (BON)		100		900	1,400	1,900
Wild/Natural		100		--	--	--
Hatchery		0		--	--	--
% hatchery		0%		--	--	--
Local return (tributary entr)		14,400		15,500	23,500	31,900
Wild/Natural		14,100		--	--	--
Hatchery		300		--	--	--
% hatchery		2%		--	--	--
Harvest (Col mainstem)		<200		330	870	1,690
Wild/Natural		--		--	--	--
Hatchery		--		--	--	--
% hatchery		--		--	--	--