Option: A

Primary Chinook Population: Willapa

Chinook Production Level: Increased

Chinook Spawning Capacity met in: 10-15 Years

Basin	Chinook			Coho		
	Population Designation	Program Type	HSRG Requirements	Population Designation	Program Type	HSRG Requirements
North/Smith	Contributing	--	--	Primary	--	--
Willapa	Primary	Integrated	PNI ≥0.67; pHOS ≤30%	Primary	Integrated	PNI ≥0.67; pHOS ≤30%
Palix	Stabilizing	--	--	Contributing	--	--
Nemah	N/A	Segregated	Current Condition	Contributing	Integrated	PNI ≥0.50; pHOS ≤30%
Naselle	Stabilizing	Segregated	Current Condition	Stabilizing	Integrated	Current Condition
Bear	Stabilizing	--	--	Contributing	--	--

Hatchery production:

Species	Forks					Nemah					Naselle				
	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI
Chinook	0.35M	194	35%	17%	0.67	3.3M	1,836	--	55%	--	6.0M	3,500	--	65%	--
Coho	0.65M	555	47%	23%	0.67	0.3M	255	50%	30%	0.63	0.5M	680	10%	51%	0.16

indicates HSRG requirements are met

Estimated escapements: averaged from 50 replicates of AHA model in 10-15 years.

Species	Willapa		North		Nemah		Palix		Naselle		Bear		Willapa Bay Basin	
	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Total	Capacity
Chinook	1,182	1,181	704	991	202	224	55	104	1,725	1,547	141	306	4,009	4,353
Coho	13,794	4,030	18,343	5,286	2,572	994	358	251	2,915	2,091	135	438	38,117	13,090

Preliminary Data and is subject to change 01/16/2015

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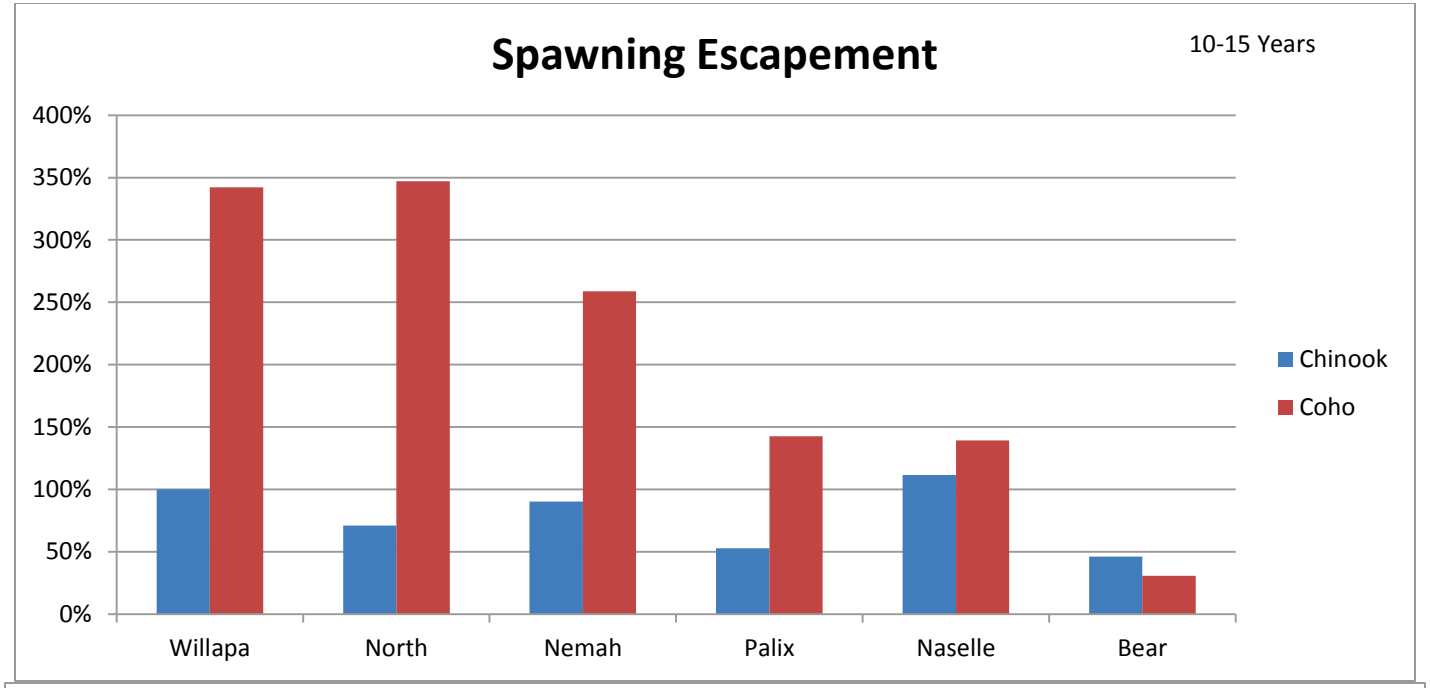

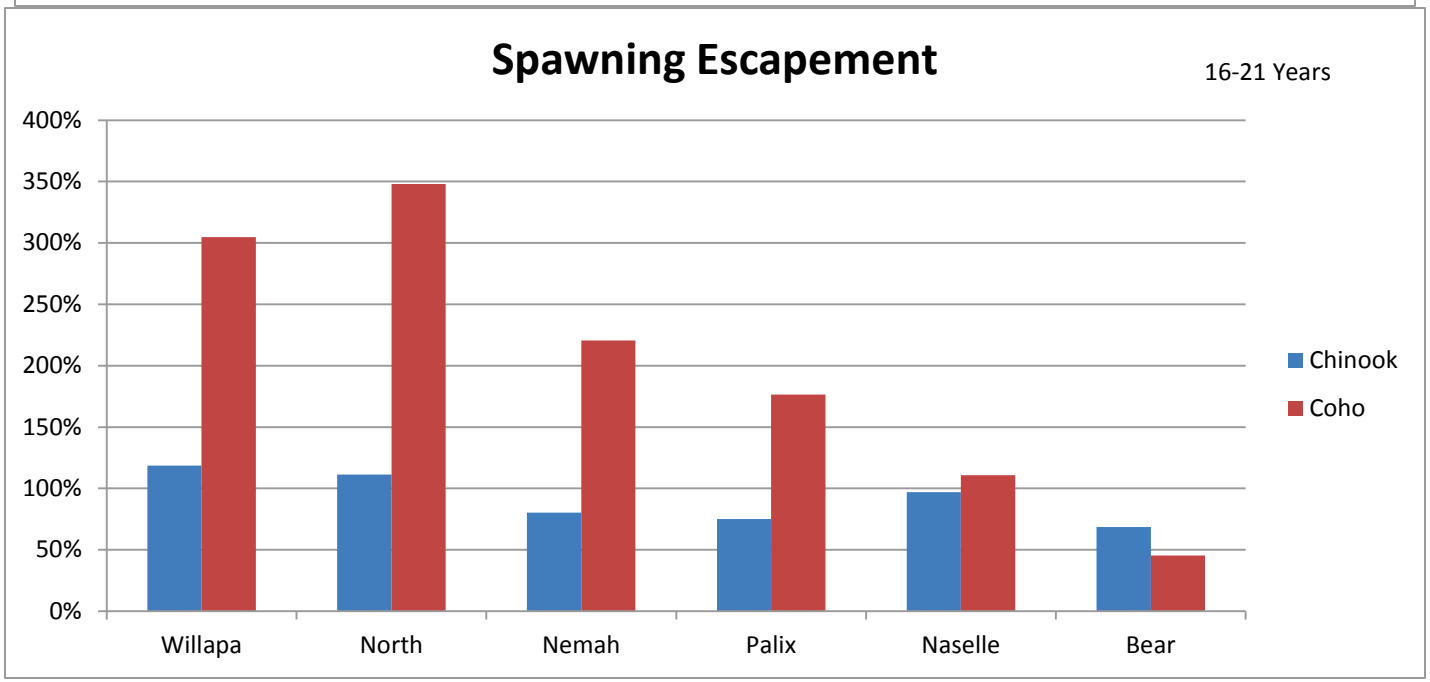

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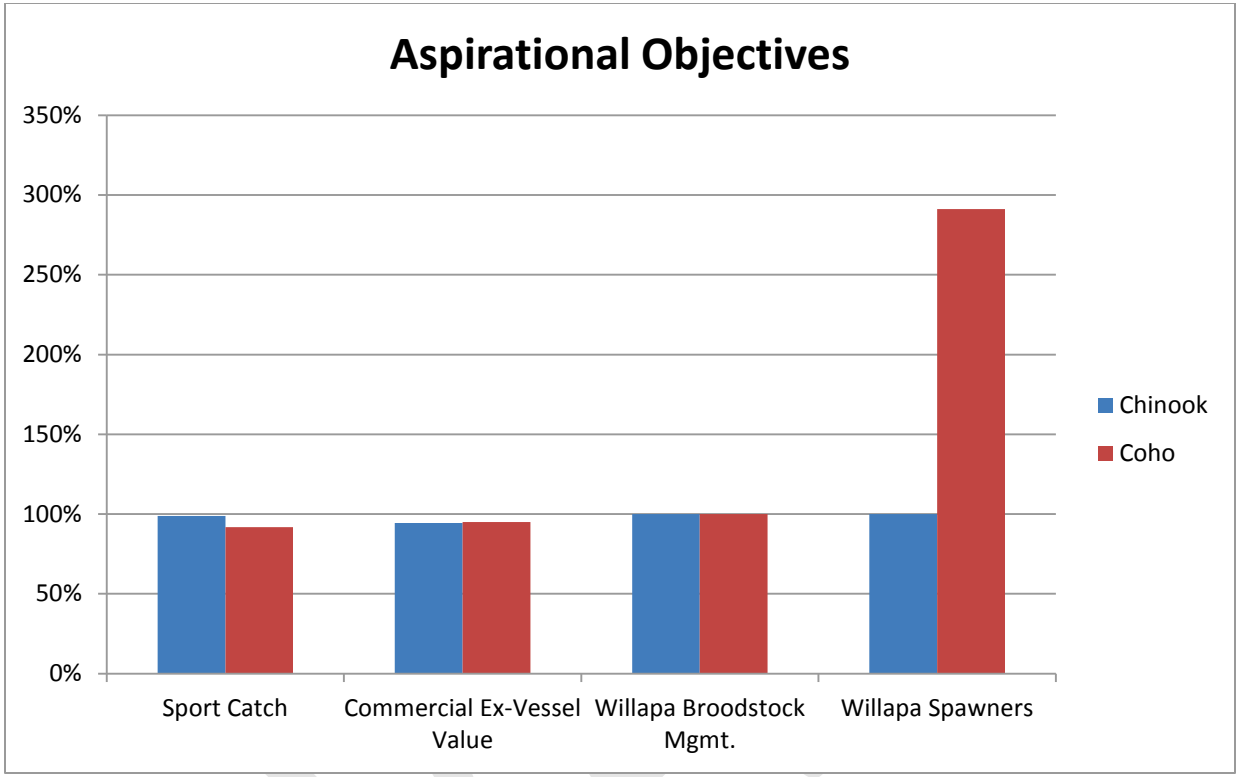

Harvest rates:

Fishery	Willapa/North				Nemah/Palix				Naselle Bear			
	Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin	
	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho
Willapa Bay Commercial	.060	.214	.091	.187	.225	.444	.375	.444	.198	.635	.328	.576
Willapa Bay Recreational - Marine	.022	.044	.124	.044	.022	.044	.124	.044	.022	.044	.124	.044
Willapa Bay Recreational - Freshwater	.010	.061	.072	.061	.087	.004	.611	.004	.020	.154	.146	.154

Estimated Catch: Corrected for model bias, does not include any additional fisheries related mortality.

Preliminary Data and is subject to change 01/16/2015

Fishery	Chinook	Coho
Willapa Bay Commercial	10,750	33,028
Willapa Bay Recreational - Marine	2,532	2,956
Willapa Bay Recreational - Freshwater	4,394	3,134

Commercial Schedule:

				Days Open In Period					
Management Period	PERIOD	# Days	Hours/Day	T	U	R	M	N	Chinook MSF
CHINOOK	July 22-August 15	3	24						No
CHINOOK	August 16-20	5	12						No
CHINOOK	August 21-25	5	12						No
CHINOOK	Aug 26 - Sept 1	7	12						No
CHINOOK	September 2-8	7	12			7	6.75		Yes
COHO	September 9-15	7	12			7	7	2	Yes
COHO	September 16-22	7	24	2.75	3	7	7	7	Yes
COHO	Sept 23-30	8	24	3	3	5	5	6	Yes
COHO	Oct 1- Oct 7	7	24	3	3	6	6	6	No
COHO	October 8-14	7	24	3	3	6	6	6	No
CHUM (no directed)	October 15-31	17	12	1	1	1	1	1	No
LATE COHO	November 1-10	10	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 11-19	9	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 20-30	11	24						No
	TOTAL SALMON DIRECTED	107		17.8	18.0	54.0	53.8	43.0	

Preliminary Data and is subject to change 01/16/2015

Option: A

Primary Chinook Population: Willapa

Chinook Production Level: Current

Chinook Spawning Capacity met in: 10-15 Years

Basin	Chinook			Coho		
	Population Designation	Program Type	HSRG Requirements	Population Designation	Program Type	HSRG Requirements
North/Smith	Contributing	--	--	Primary	--	--
Willapa	Primary	Integrated	PNI ≥0.67; pHOS ≤30%	Primary	Integrated	PNI ≥0.67; pHOS ≤30%
Palix	Stabilizing	--	--	Contributing	--	--
Nemah	N/A	Segregated	Current Condition	Contributing	Integrated	PNI ≥0.50; pHOS ≤30%
Naselle	Stabilizing	Segregated	Current Condition	Stabilizing	Integrated	Current Condition
Bear	Stabilizing	--	--	Contributing	--	--

Hatchery production:

Species	Forks					Nemah						Naselle			
	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI
Chinook	0.35M	194	35%	17%	0.67	3.3M	1,836	--	55%	--	3.3M	1,925	--	55%	--
Coho	0.65M	553	46%	23%	0.67	0.3M	255	50%	30%	0.62	0.75M	1,020	10%	60%	0.14

indicates HSRG requirements are met

Estimated escapements: averaged from 50 replicates of AHA model in 10-15 years.

Species	Willapa		North		Nemah		Palix		Naselle		Bear		Willapa Bay Basin	
	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Total	Capacity
Chinook	1,181	1,181	706	991	200	224	53	104	1,541	1,547	138	306	3,819	4,353
Coho	14,658	4,030	19,767	5,286	2,258	994	331	251	2,820	2,091	109	438	39,943	13,090

Preliminary Data and is subject to change 01/16/2015

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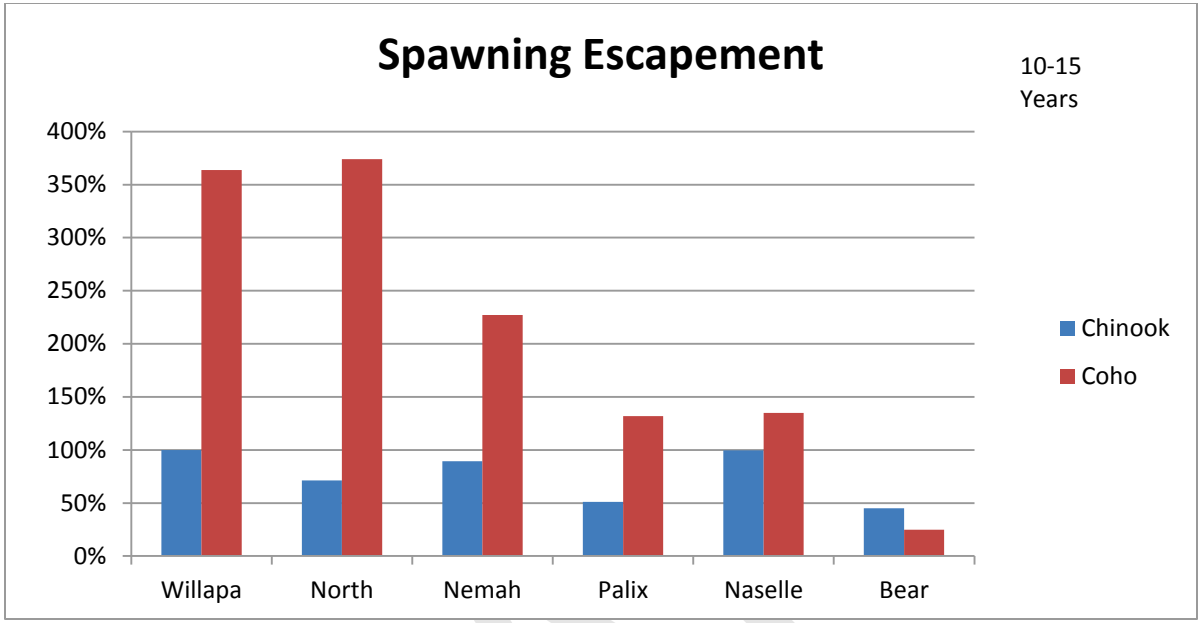

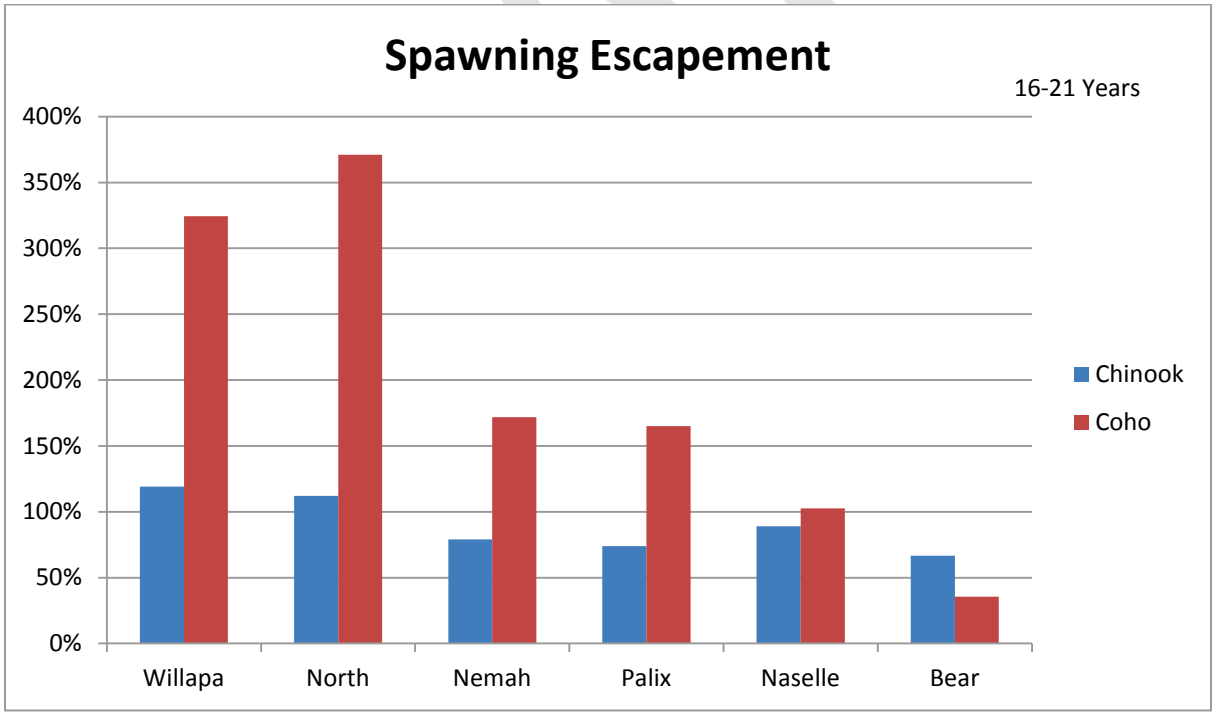

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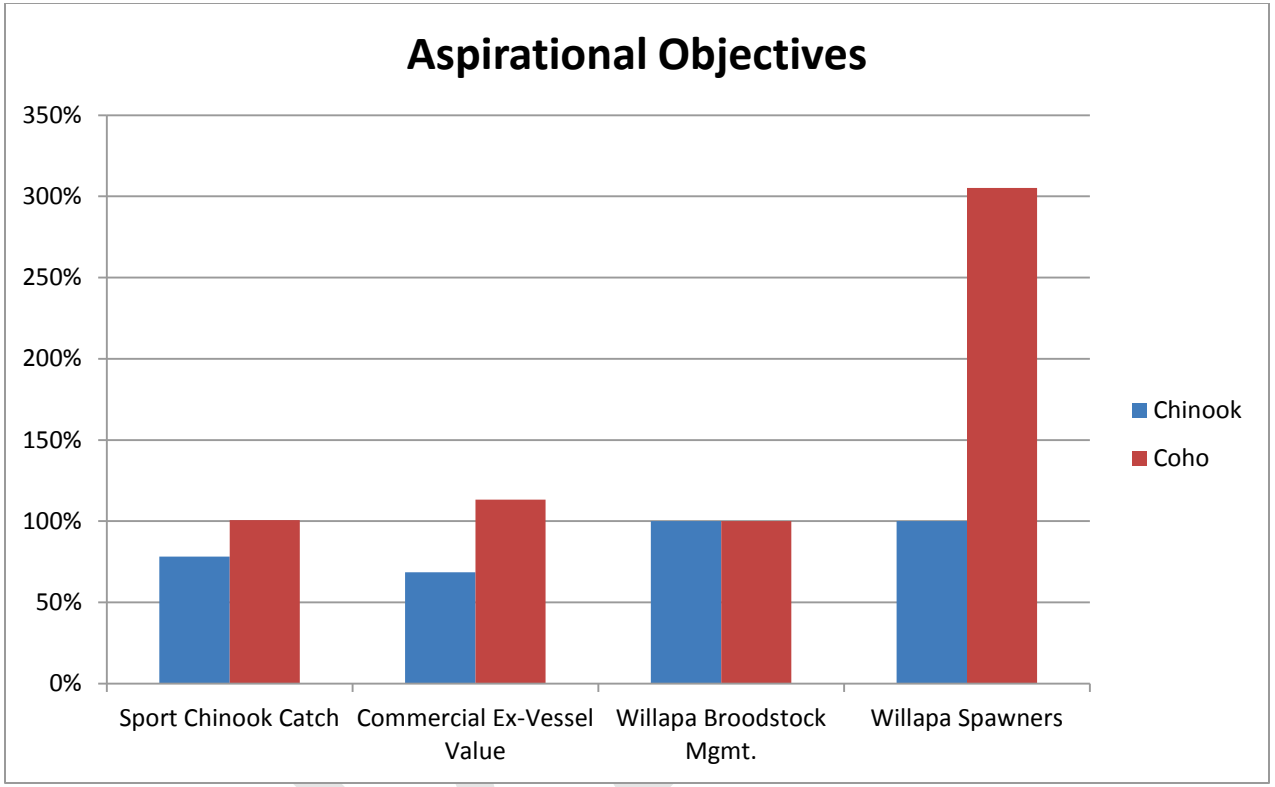

Harvest rates:

Fishery	Willapa/North				Nemah/Palix				Naselle Bear			
	Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin	
	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho
Willapa Bay Commercial	.060	.168	.091	.141	.232	.466	.387	.466	.204	.661	.339	.600
Willapa Bay Recreational - Marine	.022	.044	.124	.044	.022	.044	.124	.044	.022	.044	.124	.044
Willapa Bay Recreational - Freshwater	.010	.061	.072	.061	.087	.004	.611	.004	.020	.154	.146	.154

Estimated Catch: Corrected for model bias, does not include any additional fisheries related mortality.

Preliminary Data and is subject to change 01/16/2015

Fishery	Chinook	Coho
Willapa Bay Commercial	7,813	39,396
Willapa Bay Recreational - Marine	1,880	3,118
Willapa Bay Recreational - Freshwater	3,607	3,563

Commercial Schedule:

				Days Open In Period					
Management Period	PERIOD	# Days	Hours/Day	T	U	R	M	N	Chinook MSF
CHINOOK	July 22-August 15	3	24						No
CHINOOK	August 16-20	5	12						No
CHINOOK	August 21-25	5	12						No
CHINOOK	Aug 26 - Sept 1	7	12						No
CHINOOK	September 2-8	7	12			7	7		Yes
COHO	September 9-15	7	12			7	7	3	Yes
COHO	September 16-22	7	24			7	7	7	Yes
COHO	Sept 23-30	8	24	2	2	8	6	8	Yes
COHO	Oct 1- Oct 7	7	24	3	3	7	6	6	No
COHO	October 8-14	7	24	3	3	7	6	6	No
CHUM (no directed)	October 15-31	17	12	1	1	1	1	1	No
LATE COHO	November 1-10	10	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 11-19	9	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 20-30	11	24						No
	TOTAL SALMON DIRECTED	107		14.0	14.0	59.0	55.0	46.0	

Preliminary Data and is subject to change 01/16/2015

Option: B

Primary Chinook Population: Willapa

Chinook Production Level: Increased

Chinook Spawning Capacity met in: 16-21 Years

Basin	Chinook			Coho		
	Population Designation	Program Type	HSRG Requirements	Population Designation	Program Type	HSRG Requirements
North/Smith	Contributing	--	--	Primary	--	--
Willapa	Primary	Integrated	PNI ≥0.67; pHOS ≤30%	Primary	Integrated	PNI ≥0.67; pHOS ≤30%
Palix	Stabilizing	--	--	Contributing	--	--
Nemah	N/A	Segregated	Current Condition	Contributing	Integrated	PNI ≥0.50; pHOS ≤30%
Naselle	Stabilizing	Segregated	Current Condition	Stabilizing	Integrated	Current Condition
Bear	Stabilizing	--	--	Contributing	--	--

Hatchery production:

Species	Forks					Nemah					Naselle				
	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI
Chinook	0.35M	195	36%	18%	0.67	3.3M	1,836	--	55	--	6.0M	3,500	--	65%	--
Coho	0.65M	555	47%	23%	0.67	0.3M	255	48%	30%	0.62	0.5M	680	10%	51%	0.16

indicates HSRG requirements are met

Estimated escapements: averaged from 50 replicates of AHA model in 16-21 years.

Species	Willapa		North		Nemah		Palix		Naselle		Bear		Willapa Bay Basin	
	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Total	Capacity
Chinook	1,275	1,181	983	991	175	224	76	104	1,470	1,547	194	306	4,173	4,353
Coho	12,277	4,030	18,340	5,286	2,134	994	425	251	2,254	2,091	190	438	35,620	13,090

Preliminary Data and is subject to change 01/16/2015

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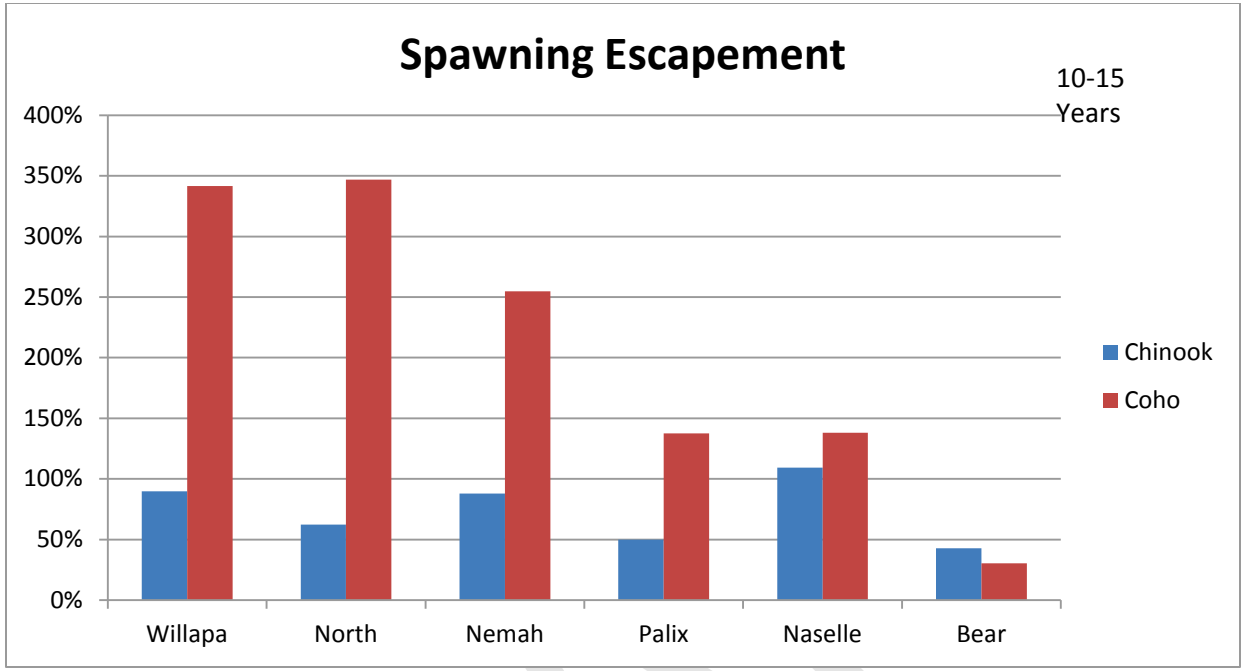

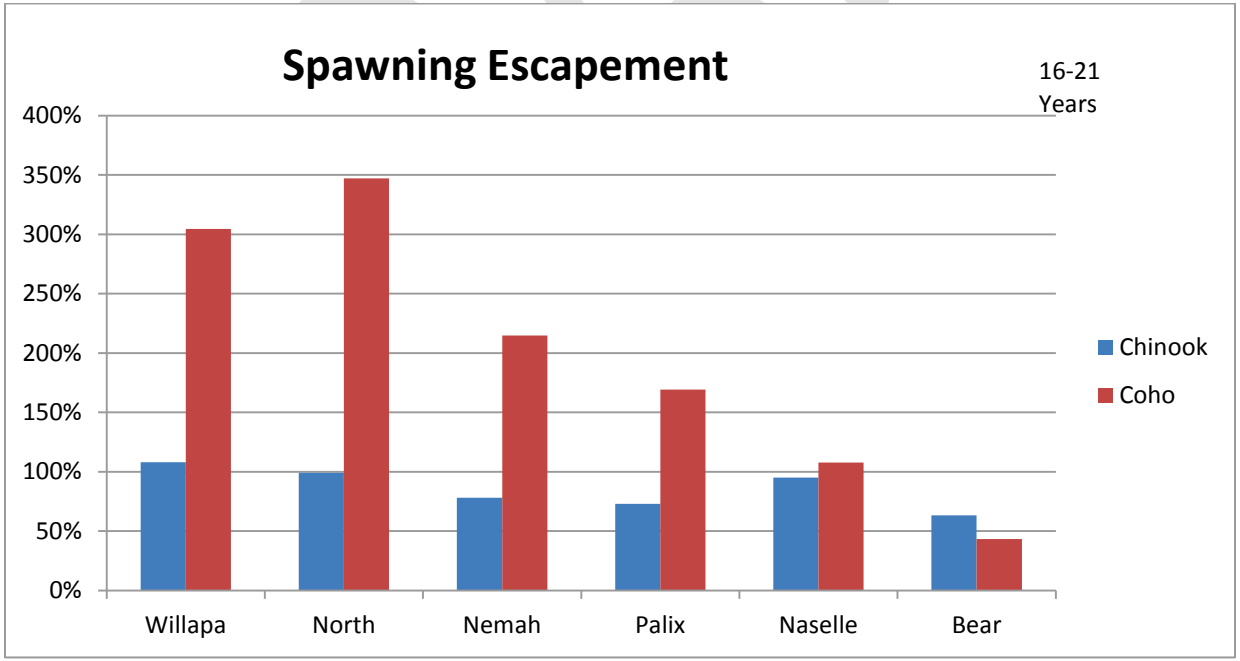

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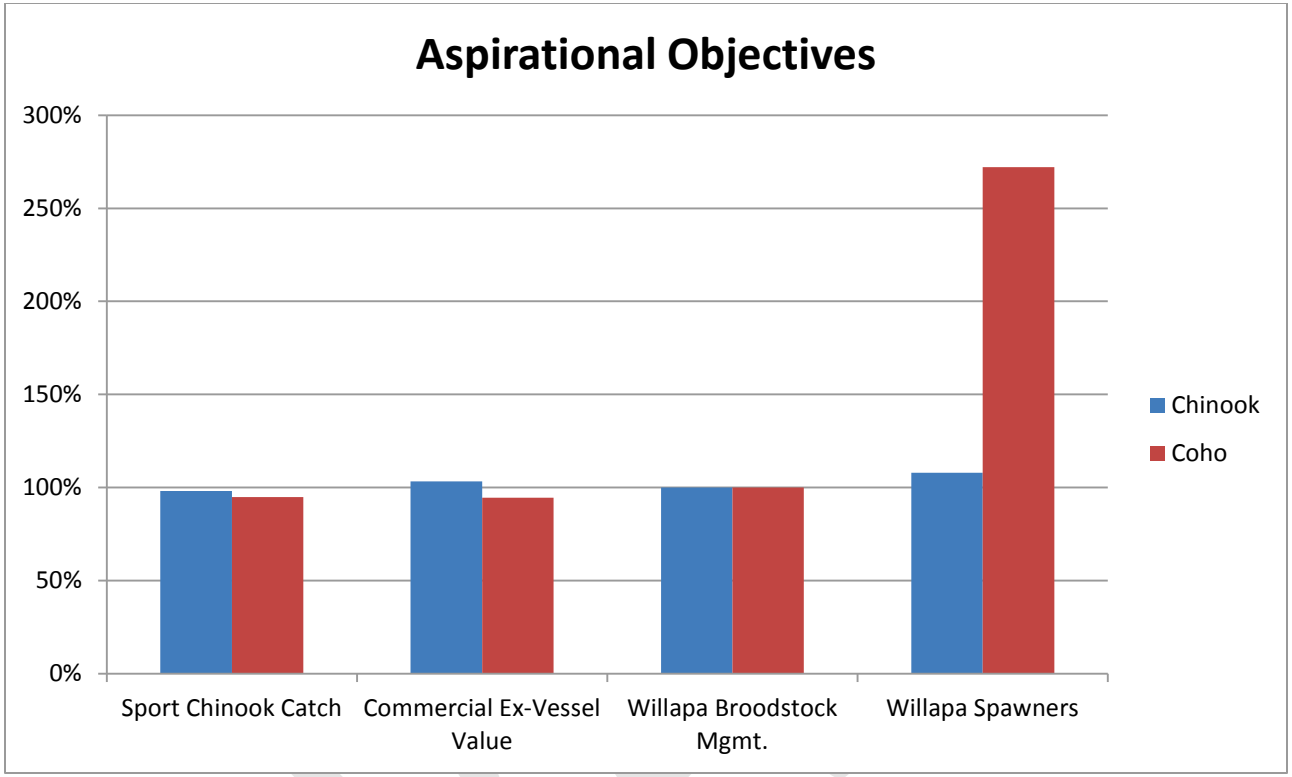

Harvest rates:

Fishery	Willapa/North				Nemah/Palix				Naselle Bear			
	Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin	
	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho
Willapa Bay Commercial	.108	.216	.165	.187	.239	.456	.384	.456	.220	.639	.352	.574
Willapa Bay Recreational - Marine	.022	.044	.124	.044	.022	.044	.124	.044	.022	.044	.124	.044
Willapa Bay Recreational - Freshwater	.010	.061	.072	.061	.087	.004	.611	.004	.020	.154	.146	.154

Preliminary Data and is subject to change 01/16/2015

Estimated Catch: Corrected for model bias, does not include any additional fisheries related mortality.

Fishery	Chinook	Coho
Willapa Bay Commercial	11,761	32,886
Willapa Bay Recreational - Marine	2,621	2,993
Willapa Bay Recreational - Freshwater	4,257	3,305

Commercial Schedule:

				Days Open In Period					
Management Period	PERIOD	# Days	Hours/Day	T	U	R	M	N	Chinook MSF
CHINOOK	July 22-August 15	3	24						No
CHINOOK	August 16-20	5	12						No
CHINOOK	August 21-25	5	12						No
CHINOOK	Aug 26 - Sept 1	7	12						No
CHINOOK	September 2-8	7	12			5	5	3	Yes
COHO	September 9-15	7	12			6	6	6	Yes
COHO	September 16-22	7	24	3	3	6	6	6	Yes
COHO	Sept 23-30	8	24	3	3	6	6	6	No
COHO	Oct 1- Oct 7	7	24	3	3	6	6	6	No
COHO	October 8-14	7	24	3	3	6	6	6	No
CHUM (no directed)	October 15-31	17	12	1	1	1	1	1	No
LATE COHO	November 1-10	10	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 11-19	9	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 20-30	11	24						No
	TOTAL SALMON DIRECTED	107		18.0	18.0	51.0	51.0	49.0	

Preliminary Data and is subject to change 01/16/2015

Option: B

Primary Chinook Population: Willapa

Chinook Production Level: Current

Chinook Spawning Capacity met in: 16-21 Years

Basin	Chinook			Coho		
	Population Designation	Program Type	HSRG Requirements	Population Designation	Program Type	HSRG Requirements
North/Smith	Contributing	--	--	Primary	--	--
Willapa	Primary	Integrated	PNI ≥0.67; pHOS ≤30%	Primary	Integrated	PNI ≥0.67; pHOS ≤30%
Palix	Stabilizing	--	--	Contributing	--	--
Nemah	N/A	Segregated	Current Condition	Contributing	Integrated	PNI ≥0.50; pHOS ≤30%
Naselle	Stabilizing	Segregated	Current Condition	Stabilizing	Integrated	Current Condition
Bear	Stabilizing	--	--	Contributing	--	--

Hatchery production:

Species	Forks					Nemah					Naselle				
	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI
Chinook	0.35M	195	36%	18%	0.67	3.3M	1,836	--	55%	--	3.3M	1,925	--	55%	--
Coho	0.65M	555	47%	23%	0.67	0.3M	255	48%	30%	0.62	0.75M	1,020	10%	60%	0.14

indicates HSRG requirements are met

Estimated escapements: averaged from 50 replicates of AHA model in 16-21 years.

Species	Willapa		North		Nemah		Palix		Naselle		Bear		Willapa Bay Basin	
	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Total	Capacity
Chinook	1,291	1,181	974	991	175	224	76	104	1,333	1,547	195	306	4,044	4,353
Coho	12,245	4,030	18,384	5,286	2,114	994	424	251	2,299	2,091	188	438	35,654	13,090

Preliminary Data and is subject to change 01/16/2015

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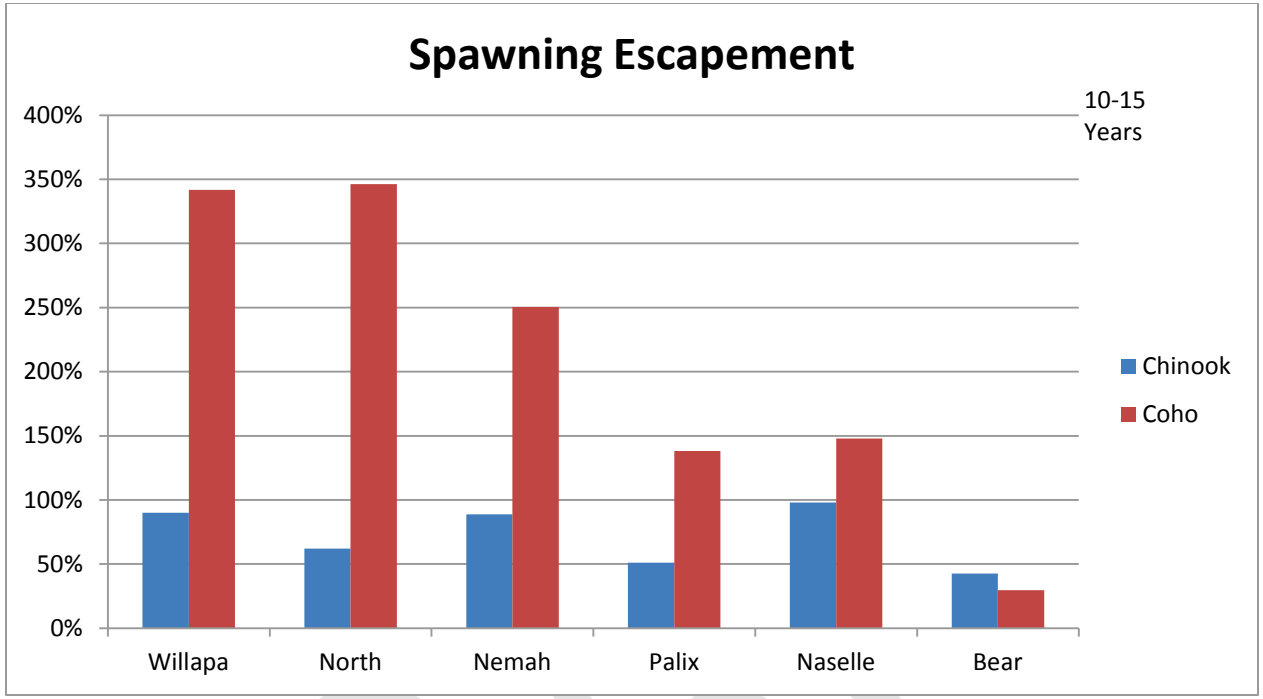

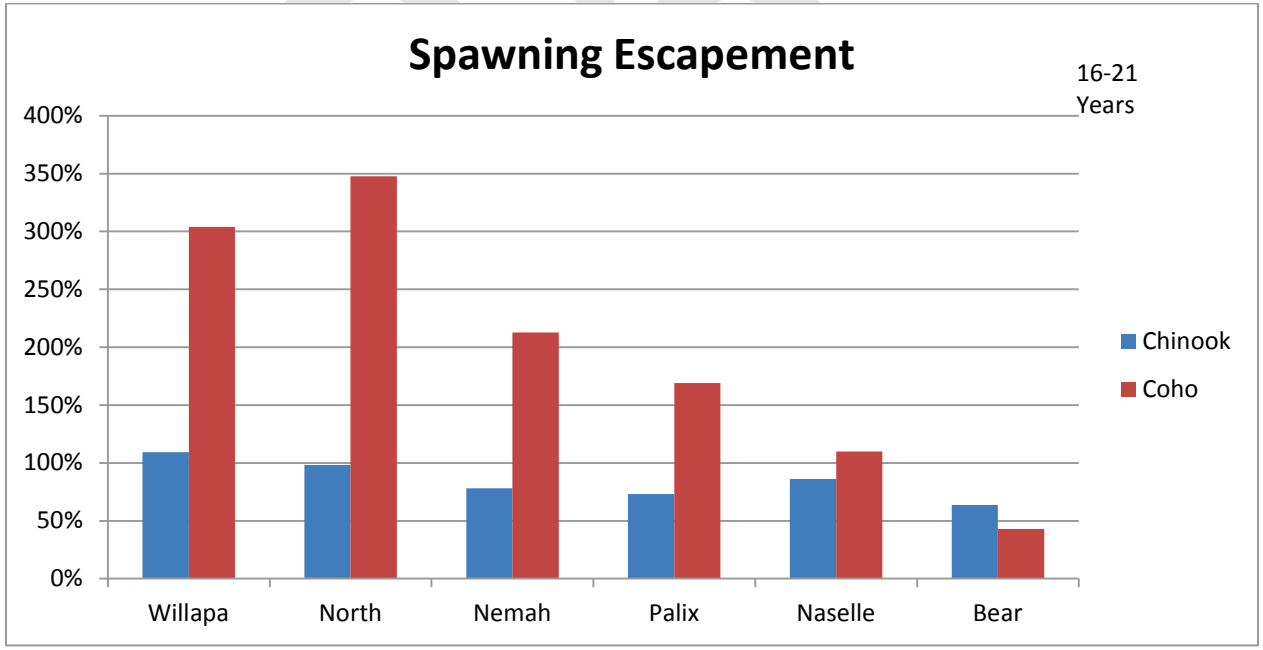

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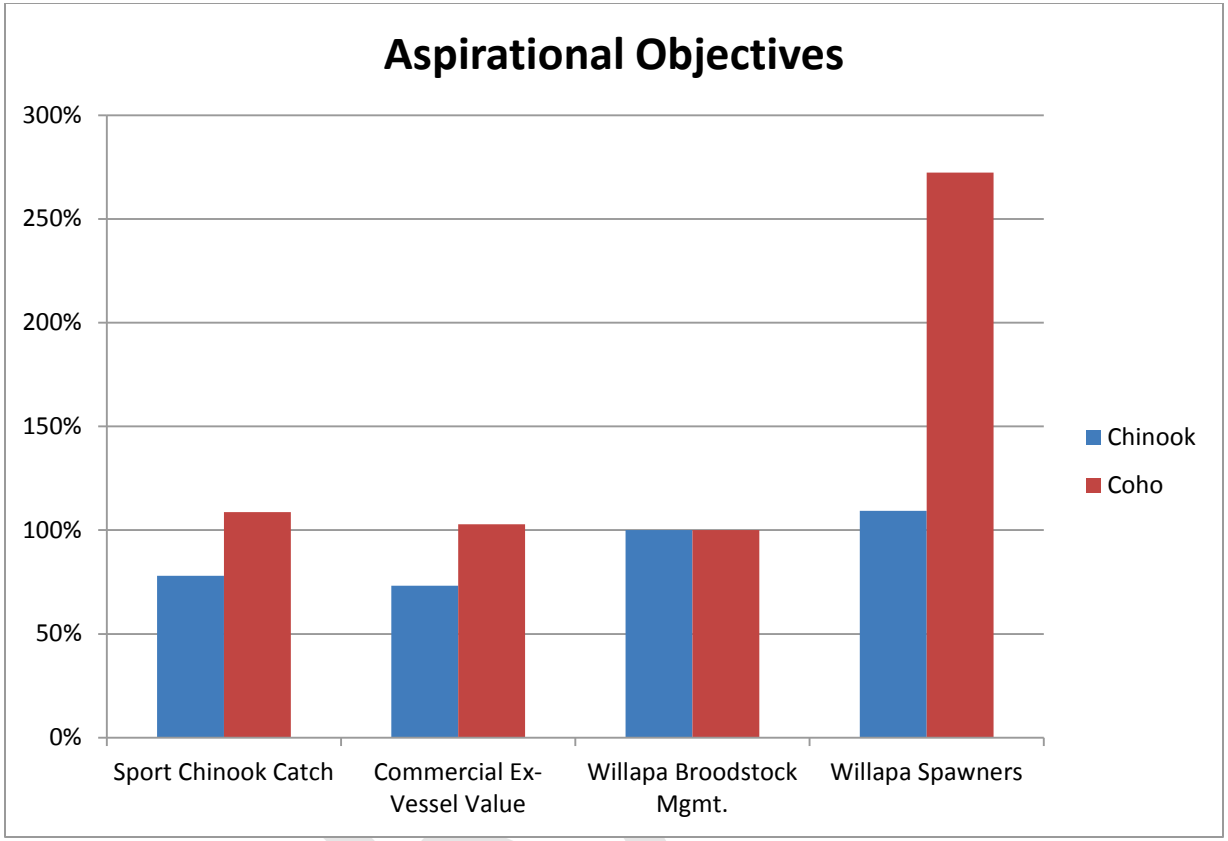

Harvest rates:

Fishery	Willapa/North				Nemah/Palix				Naselle Bear			
	Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin	
	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho
Willapa Bay Commercial	.108	.216	.165	.187	.239	.456	.384	.456	.220	.639	.352	.574
Willapa Bay Recreational - Marine	.022	.044	.124	.044	.022	.044	.124	.044	.022	.044	.124	.044
Willapa Bay Recreational - Freshwater	.010	.061	.072	.061	.087	.004	.611	.004	.020	.154	.146	.154

Preliminary Data and is subject to change 01/16/2015

Estimated Catch: Corrected for model bias, does not include any additional fisheries related mortality.

Fishery	Chinook	Coho
Willapa Bay Commercial	8,339	35,776
Willapa Bay Recreational - Marine	1,860	3,332
Willapa Bay Recreational - Freshwater	3,612	3,876

Commercial Schedule:

				Days Open In Period					
Management Period	PERIOD	# Days	Hours/Day	T	U	R	M	N	Chinook MSF
CHINOOK	July 22-August 15	3	24						No
CHINOOK	August 16-20	5	12						No
CHINOOK	August 21-25	5	12						No
CHINOOK	Aug 26 - Sept 1	7	12						No
CHINOOK	September 2-8	7	12			5	5	3	Yes
COHO	September 9-15	7	12			6	6	6	Yes
COHO	September 16-22	7	24	3	3	6	6	6	Yes
COHO	Sept 23-30	8	24	3	3	6	6	6	No
COHO	Oct 1- Oct 7	7	24	3	3	6	6	6	No
COHO	October 8-14	7	24	3	3	6	6	6	No
CHUM (no directed)	October 15-31	17	12	1	1	1	1	1	No
LATE COHO	November 1-10	10	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 11-19	9	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 20-30	11	24						No
	TOTAL SALMON DIRECTED	107		18.0	18.0	51.0	51.0	49.0	

Preliminary Data and is subject to change 01/16/2015

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Option: C

Primary Chinook Population: Naselle

Chinook Production Level: Current

Chinook Spawning Capacity met in: 16-21 Years

Basin	Chinook			Coho		
	Population Designation	Program Type	HSRG Requirements	Population Designation	Program Type	HSRG Requirements
North/Smith	Contributing	--	--	Primary	--	--
Willapa	Stabilizing	Segregated	Current Condition	Primary	Integrated	PNI ≥0.67; pHOS ≤30%
Palix	Stabilizing	--	--	Contributing	--	--
Nemah	N/A	Segregated	Current Condition	Contributing	Integrated	PNI ≥0.50; pHOS ≤30%
Naselle	Primary	Integrated	PNI ≥0.67; pHOS ≤30%	Stabilizing	Integrated	Current Condition

Hatchery production:

Species	Forks					Nemah					Naselle				
	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI	Production	Broodstock	pNOB	pHOS	PNI
Chinook	3.2M	1,780	--	64%	--	3.3M	1,836	--	55%	--	0.5M	290	31%	16%	0.67
Coho	0.3M	258	27%	14%	0.67	--	--	--	--	--	1.4M	1,902	10%	67%	0.13

indicates HSRG requirements are met

Estimated escapements: averaged from 50 replicates of AHA model in 16-21 years.

Species	Willapa		North		Nemah		Palix		Naselle		Bear		Willapa Bay Basin	
	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Est. Esc	Capacity	Total	Capacity
Chinook	1,174	1,181	817	991	224	224	121	104	1,566	1,547	280	306	4,182	4,353
Coho	8,383	4,030	12,327	5,286	2,034	994	595	251	3,535	2,091	138	438	27,012	13,090

Preliminary Data and is subject to change 01/16/2015

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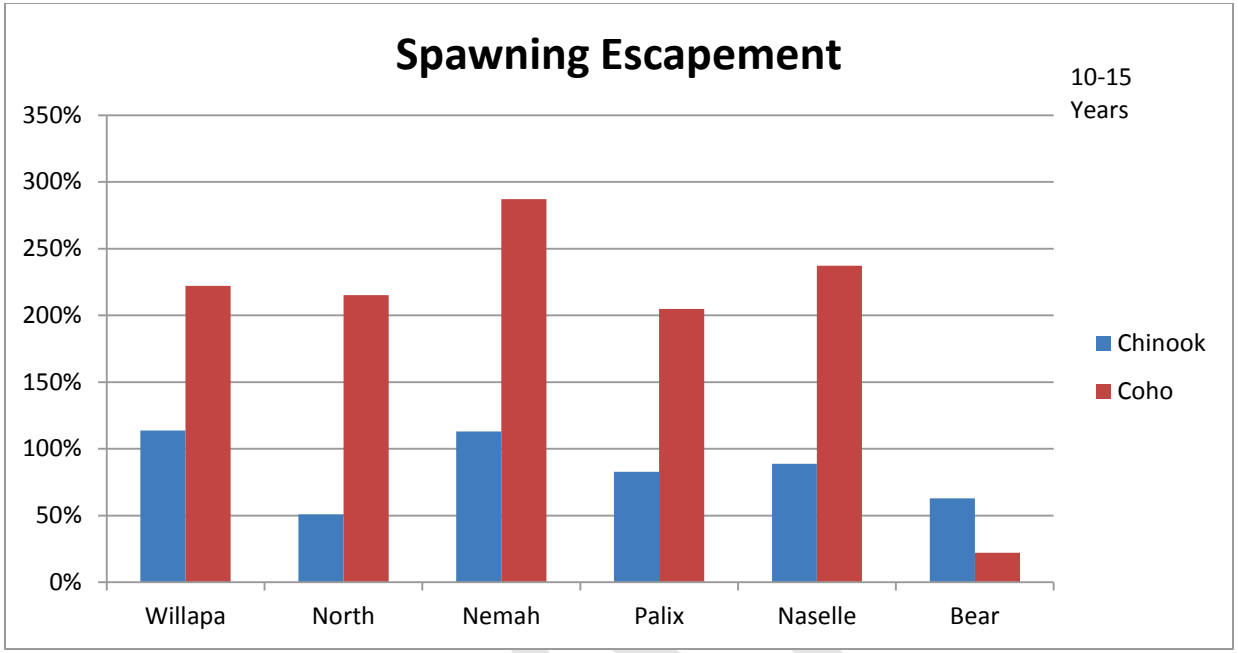
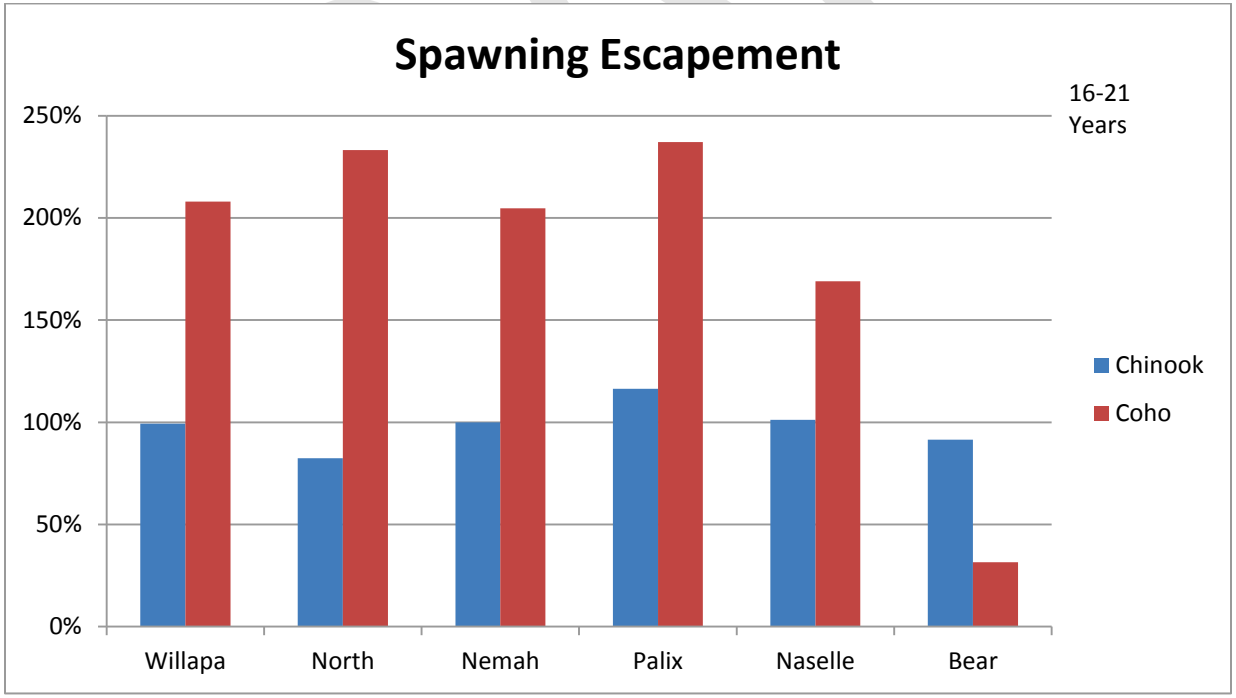
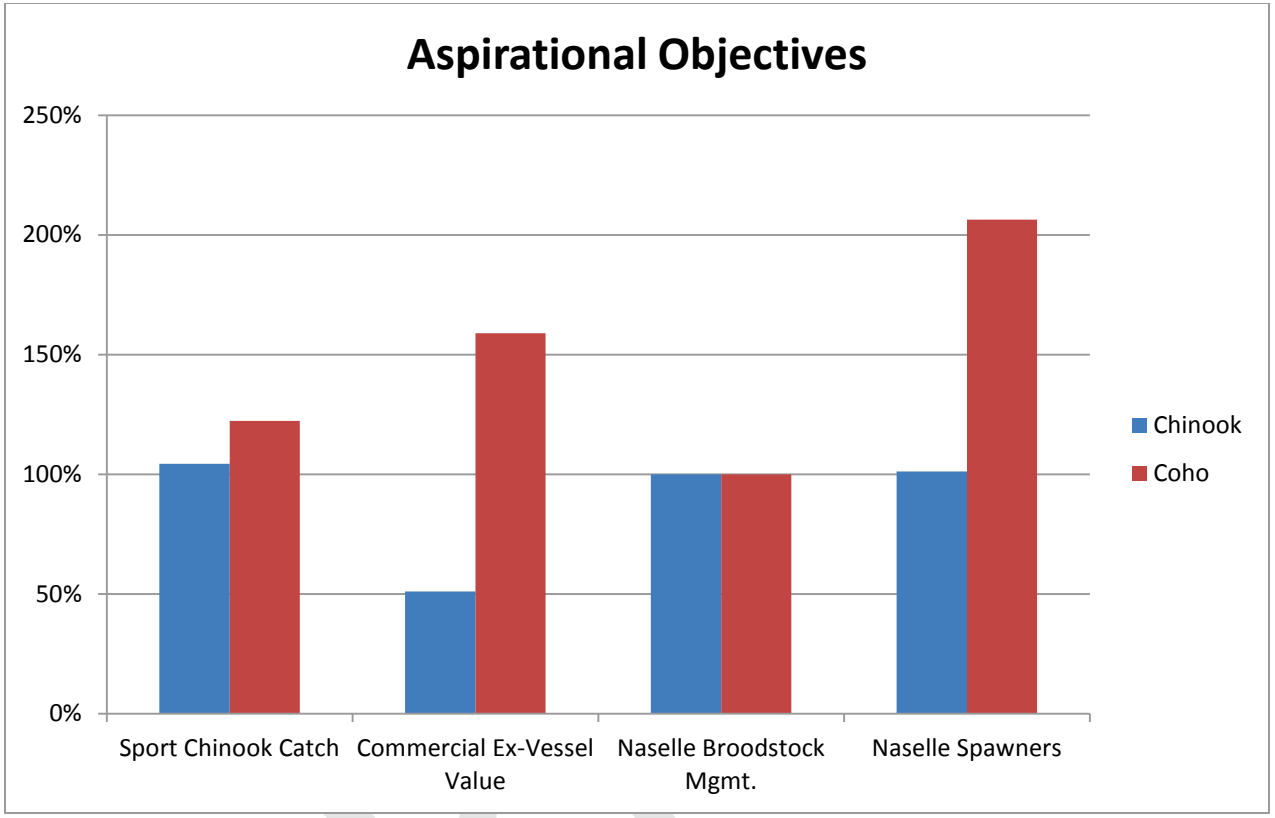




Preliminary Data and is subject to change 01/16/2015



Harvest rates:

Fishery	Willapa/North				Nemah/Palix				Naselle Bear			
	Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin		Natural Origin		Hatchery Origin	
	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho	Chinook	Coho
Willapa Bay Commercial	.161	.438	.259	.418	.083	.328	.128	.328	.095	.420	.147	.382
Willapa Bay Recreational - Marine	.022	.044	.124	.044	.022	.044	.124	.044	.022	.044	.124	.044
Willapa Bay Recreational - Freshwater	.010	.061	.072	.061	.087	.004	.611	.004	.020	.154	.146	.154

Preliminary Data and is subject to change 01/16/2015

Estimated Catch: Corrected for model bias, does not include any additional fisheries related mortality.

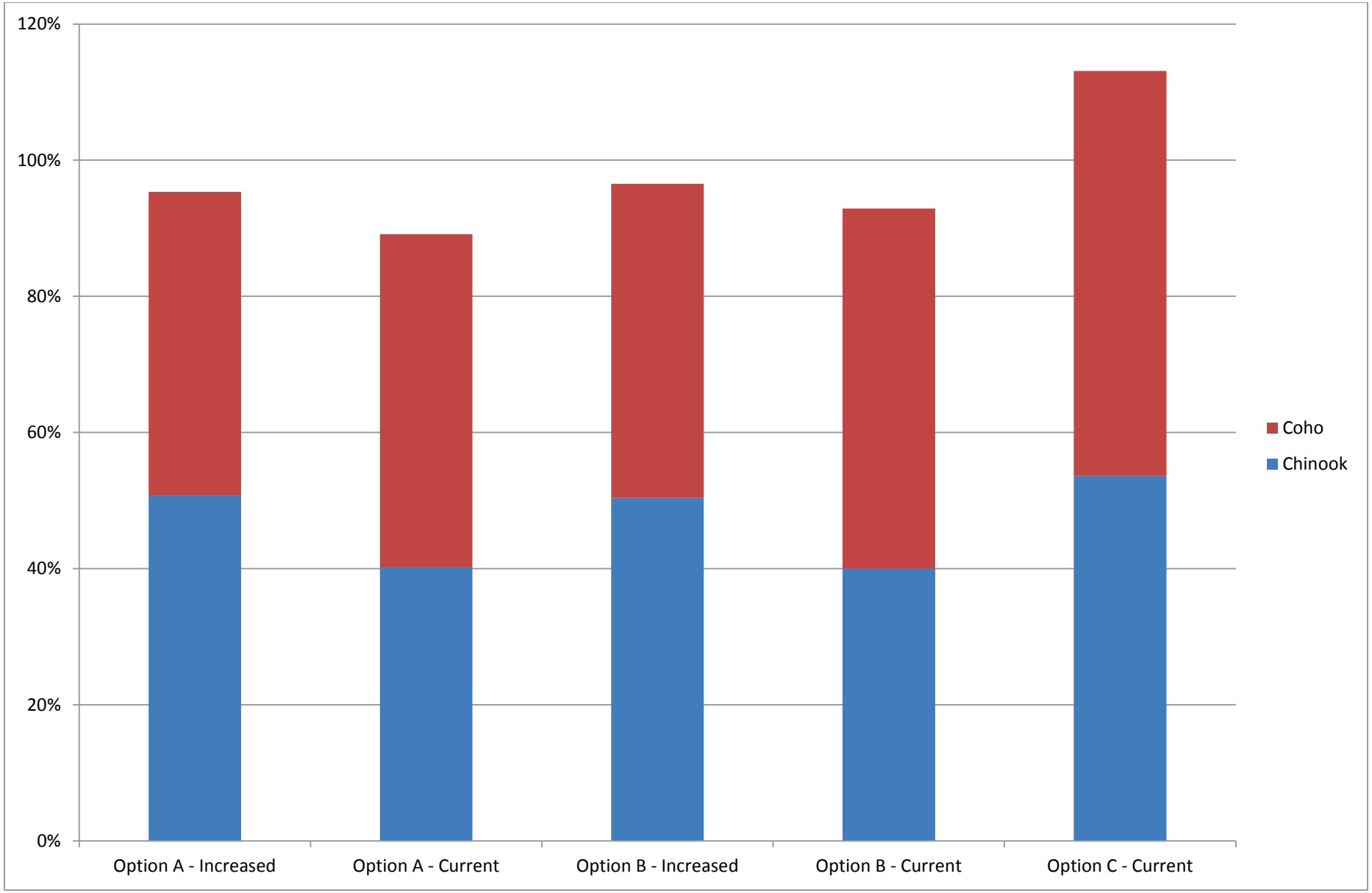
Fishery	Chinook	Coho
Willapa Bay Commercial	5,808	55,225
Willapa Bay Recreational - Marine	2,717	3,955
Willapa Bay Recreational - Freshwater	4,608	4,156

Commercial schedule:

				Days Open In Period					
Management Period	PERIOD	# Days	Hours/Day	T	U	R	M	N	Chinook MSF
CHINOOK	July 22-August 15	3	24						No
CHINOOK	August 16-20	5	12						No
CHINOOK	August 21-25	5	12						No
CHINOOK	Aug 26 - Sept 1	7	12						No
CHINOOK	September 2-8	7	12		5			2	Yes
COHO	September 9-15	7	12	3	5			3	Yes
COHO	September 16-22	7	24	5	6			5	Yes
COHO	Sept 23-30	8	24	6	6	2	2	6	Yes
COHO	Oct 1- Oct 7	7	24	6	6	4	4	6	No
COHO	October 8-14	7	24	6	6	5	5	6	No
CHUM (no directed)	October 15-31	17	12	1	1	1	1	1	No
LATE COHO	November 1-10	10	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 11-19	9	24	3.0	3.0	8.0	8.0	8.0	No
LATE COHO	November 20-30	11	24						No
	TOTAL SALMON DIRECTED	107		32.0	40.0	27.0	27.0	44.0	

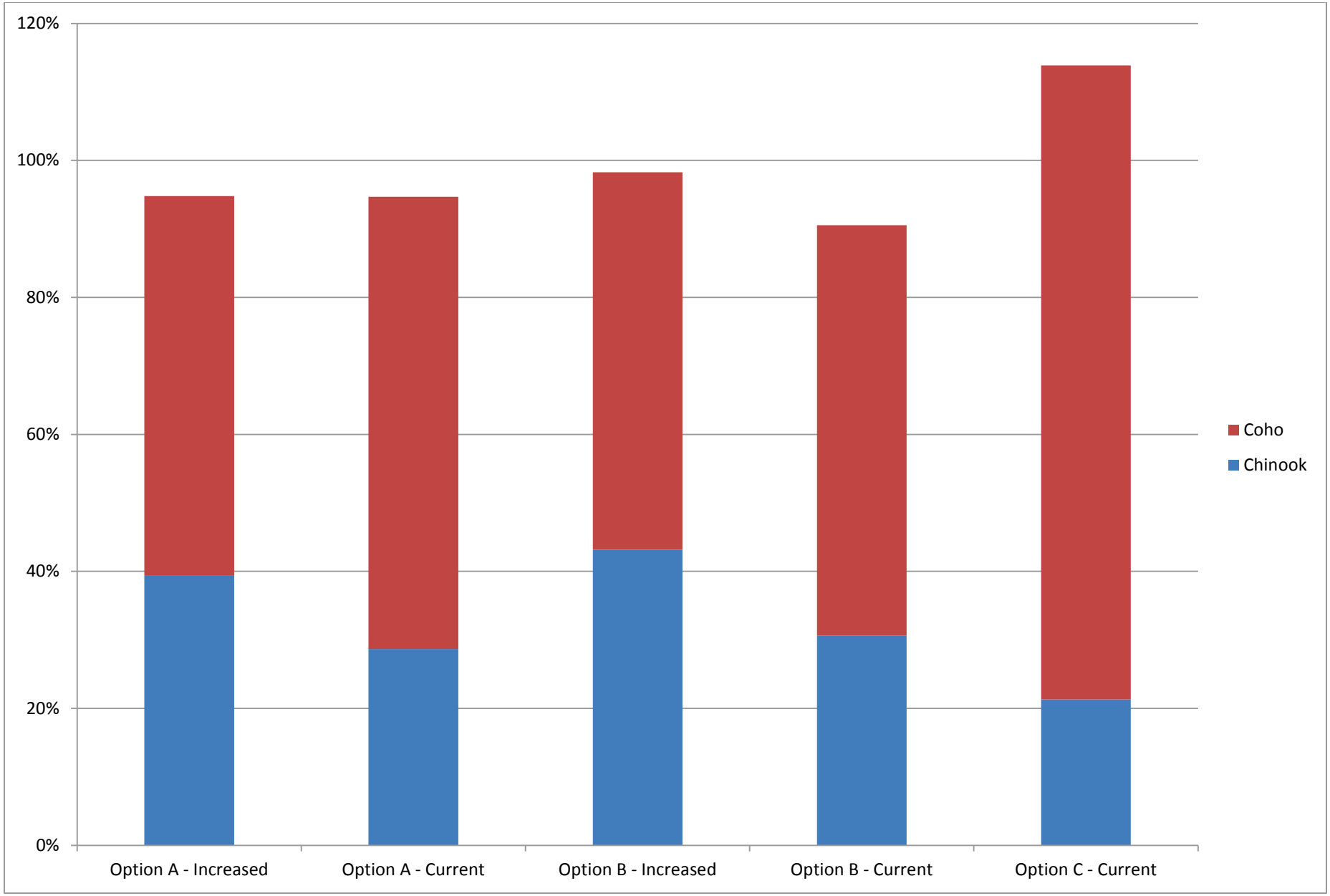
Preliminary Data and is subject to change 01/16/2015

Recreational catch proportional to the aspirational objective by species:



Preliminary Data and is subject to change 01/16/2015

Commercial ex-vessel value proportional to the aspirational objective by species:



Preliminary Data and is subject to change 01/16/2015

HSRG Requirements:

Designation Standards

Primary—

- **Integrated hatchery programs--PNI ≥ 0.67; pHOS ≤30%**
- **Segregated hatchery programs—pHOS < 5%**

Contributing—

- **Integrated hatchery programs--PNI > 0.50; pHOS ≤30%**
- **Segregated hatchery programs—pHOS < 10%**

Stabilizing—

- **Integrated hatchery programs—current condition**
- **Segregated hatchery programs—current condition**

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