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Jane Doe, Eva Nováková and Matti Meikäläinen

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Citation

 $\rm EE$ Holmes, 2022. Quarto Report Template. Northwest Fisheries Science Center.

1 Interior Columbia Snake River Chinook

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1.1 General location

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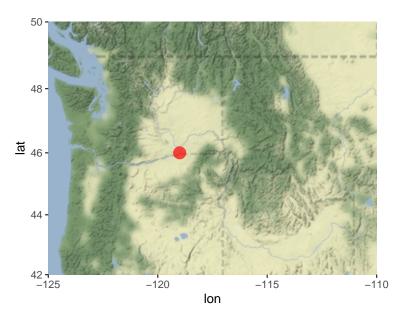


Figure 1.1: Interior Columbia Snake River Chinook. Map of the general location of the ESU.

1.2 Recent trends

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1 Interior Columbia Snake River Chinook

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Interior Columbia Snake River Chinook

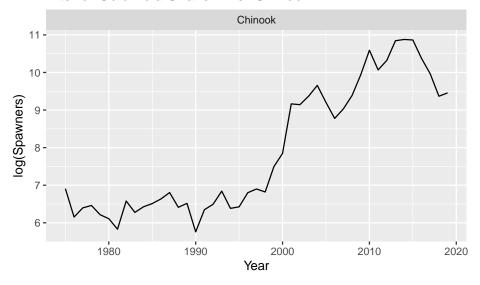


Figure 1.2: Interior Columbia Snake River Chinook. Log spawner count trends.

1.3 Population raw data

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1.3.1 Chinook

Table 1.1: Spawners and fracwild from Chinook for 2000 to 2010.

Year	Spawners	Fracwild
2000	2558	0.449
2001	9545	0.541
2002	9347	0.226
2003	11724	0.278
2004	15609	0.390
2005	9924	0.462
2006	6485	0.600
2007	8354	0.337
2008	11925	0.251
2009	20685	0.207
2010	39764	0.185

Note:

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^{**} data file:

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^{*} These spawner counts are from river redd surveys.

2 Interior Columbia Snake River Chinook steelhead

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2.1 General location

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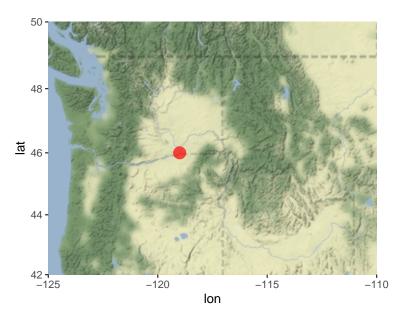


Figure 2.1: Interior Columbia Snake River Chinook steelhead. Map of the general location of the ESU.

2.2 Recent trends

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Interior Columbia Snake River Chinook steelhead

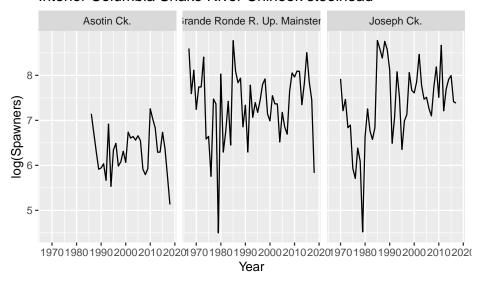


Figure 2.2: Interior Columbia Snake River Chinook steelhead. Log spawner count trends.

2.3 Population raw data

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2.3.1 Asotin Ck.

Table 2.1: Spawners and fracwild from Asotin Ck. for 2000 to 2010.

Year	Spawners	Fracwild
2000	431	0.89
2001	844	0.90
2002	740	0.90
2003	766	0.90
2004	707	0.90
2005	779	0.94
2006	696	0.92
2007	371	0.83
2008	328	0.94
2009	375	0.97
2010	1418	1.00

Note:

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 ** data file: ICSRsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

2.3.2 Joseph Ck.

Table 2.2: Spawners and fracwild from Joseph Ck. for 2000 to 2010.

Year	Spawners	Fracwild
2000	2020	1
2001	2596	1
2002	4752	1
2003	2381	1
2004	1756	1
2005	1832	1
2006	1428	1
2007	1212	1
2008	2322	1
2009	3598	1
2010	1831	1

Note:

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** data file: ICSRsthd.csv mod date: Wed Aug 10 17:57:25

2022 -0600

* These spawner counts are from river redd surveys.

2.3.3 Grande Ronde R. Up. Mainstem

Table 2.3: Spawners and fracwild from Grande Ronde R. Up. Mainstem for 2000 to 2010.

Year	Spawners	Fracwild
2000	1084	0.76
2001	1898	0.89
2002	1581	0.92
2003	1581	1.00
2004	678	0.99
2005	1310	0.99
2006	949	0.99
2007	806	1.00
2008	2096	1.00
2009	3148	1.00
2010	2876	0.95

Note:

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** data file: ICSRsthd.csv mod date: Wed Aug 10 17:57:25

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* These spawner counts are from river redd surveys.

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3.1 General location

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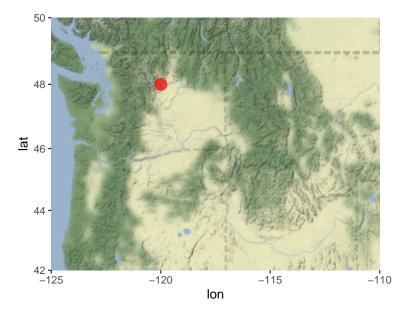


Figure 3.1: Upper Columbia Chinook. Map of the general location of the ESU.

3.2 Recent trends

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3.3 Population raw data

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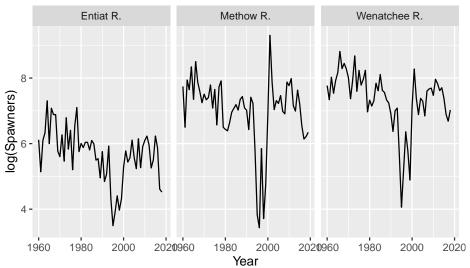


Figure 3.2: Upper Columbia Chinook. Log spawner count trends.

3.3.1 Wenatchee R.

Table 3.1: Spawners and fracwild from Wenatchee R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	1250	0.39
2001	3930	0.25
2002	1595	0.45
2003	978	0.39
2004	1605	0.63
2005	1473	0.21
2006	939	0.33
2007	2005	0.19
2008	2139	0.17
2009	2195	0.27
2010	1759	0.31

Note:

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 $^{^{**}}$ data file: ICUCchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

3.3.2 Entiat R.

Table 3.2: Spawners and fracwild from Entiat R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	197	0.37
2001	323	0.70
2002	230	0.66
2003	262	0.76
2004	449	0.32
2005	263	0.49
2006	188	0.42
2007	468	0.44
2008	194	0.49
2009	368	0.49
2010	445	0.75

Note:

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 $^{^{**}}$ data file: ICUCchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

3.3.3 Methow R.

Table 3.3: Spawners and fracwild from Methow R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	979	0.12
2001	10971	0.17
2002	2636	0.13
2003	1138	0.05
2004	1497	0.33
2005	1376	0.38
2006	1748	0.19
2007	1079	0.25
2008	1002	0.30
2009	2641	0.21
2010	2364	0.25

Note:

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 $^{^{**}}$ data file: ICUCchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

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4.1 General location

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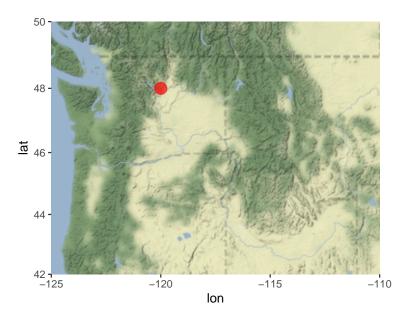


Figure 4.1: Upper Columbia steelhead. Map of the general location of the ESU.

4.2 Recent trends

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4.3 Population raw data

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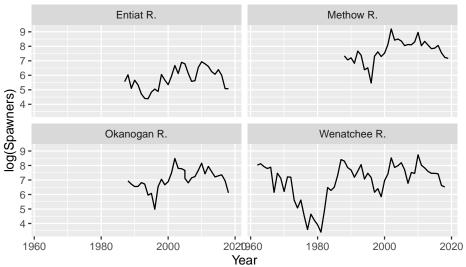


Figure 4.2: Upper Columbia steelhead. Log spawner count trends.

4.3.1 Wenatchee R.

Table 4.1: Spawners and fracwild from Wenatchee R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	1049	0.34
2001	1656	0.43
2002	5051	0.39
2003	2598	0.33
2004	2940	0.22
2005	3608	0.23
2006	2214	0.41
2007	869	0.45
2008	1835	0.39
2009	1733	0.41
2010	6236	0.36

Note:

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 ** data file: ICUCsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

4.3.2 Entiat R.

Table 4.2: Spawners and fracwild from Entiat R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	211	0.24
2001	380	0.26
2002	794	0.34
2003	456	0.26
2004	988	0.10
2005	892	0.13
2006	461	0.28
2007	266	0.22
2008	278	0.44
2009	693	0.15
2010	1033	0.29

Note:

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 ** data file: ICUCsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

4.3.3 Methow R.

Table 4.3: Spawners and fracwild from Methow R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	1860	0.13
2001	3374	0.10
2002	9884	0.06
2003	4561	0.11
2004	4928	0.13
2005	4304	0.12
2006	3119	0.14
2007	3375	0.11
2008	3306	0.22
2009	4031	0.16
2010	7781	0.14

Note:

kable

 ** data file: ICUCsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

4.3.4 Okanogan R.

Table 4.4: Spawners and fracwild from Okanogan R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	973	0.07
2001	1786	0.06
2002	4842	0.03
2003	2436	0.06
2004	2391	0.08
2005	2123	0.07
2005	1226	0.12
2006	899	0.22
2007	1268	0.12
2008	1386	0.16
2009	2133	0.10
2010	3496	0.21

Note:

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* These spawner counts are from river redd surveys.

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5.1 General location

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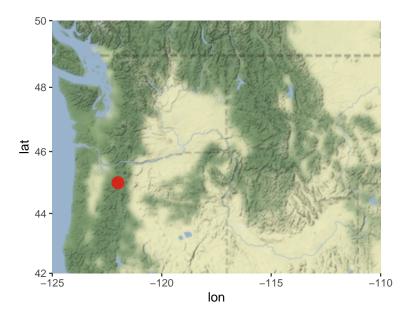


Figure 5.1: Lower Columbia Chinook. Map of the general location of the ESU.

5.2 Recent trends

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5.3 Population raw data

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Lower Columbia Chinook Clackamas R. Clatskanie R. Coweeman R. Elochoman R. Kalama R. Lewis R. Lewis R. Bright log(Spawners) ow. Gorge Tribs pernathy/German 10.0 -7.5 -5.0 -0.0 -Up. Cowlitz R. Toutle R. Up. Gorge Tribs. Washougal R. Youngs Bay 1980 2000 2020 1980 2000 2020 1980 2000 2020 1980 2000 2020 1980 2000 2020 Year

Figure 5.2: Lower Columbia Chinook. Log spawner count trends.

5.3.1 Grays & Chinook R.

Table 5.1: Spawners and fracwild from Grays & Chinook R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	89	-99.000
2001	241	-99.000
2002	78	-99.000
2003	373	-99.000
2004	726	-99.000
2005	122	-99.000
2006	383	-99.000
2007	96	-99.000
2008	95	0.347
2009	555	0.378
2010	170	0.486

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.2 Youngs Bay

Table 5.2: Spawners and frac wild from Youngs Bay for Inf to -Inf. $\,$

Year Spawn	ers Fracwild
Note:	
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** data file:	LCchinook.csv
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2022 -0600	
* These spay	vner counts are
from river rec	ld surveys.

5.3.3 Big Ck.

Table 5.3: Spawners and frac wild from Big Ck. for Inf to -Inf. $\,$

Year	Spawners	Fracwild
Note:		
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** da	ata file: LCchin	$\mathrm{nook.csv}$
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2022 -	-0600	
* Th	ese spawner co	unts are
from	river redd surve	eys.

5.3.4 Elochoman R.

Table 5.4: Spawners and fracwild from Elochoman R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	146	-99.000
2001	2806	-99.000
2002	7893	-99.000
2003	7348	-99.000
2004	6880	-99.000
2005	2699	-99.000
2006	324	-99.000
2007	168	-99.000
2008	1320	-99.000
2009	1467	-99.000
2010	1260	0.108

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.5 Clatskanie R.

Table 5.5: Spawners and fracwild from Clatskanie R. for 2002 to 2010.

Year	Spawners	Fracwild
2002	389	0.10
2003	475	0.10
2004	110	0.10
2005	101	0.10
2006	42	0.10
2007	94	0.10
2008	94	0.10
2009	167	0.56
2010	103	0.12

Note:

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 ** data file: LCchinook.csv mod date: Wed Aug 10 17:57:25 2022 -0600

5.3.6 Mill/Abernathy/Germany Ck.

Table 5.6: Spawners and fracwild from Mill/Abernathy/Germany Ck. for 2000 to 2010.

Year	Spawners	Fracwild
2000	370	-99.000
2001	3860	-99.000
2002	3299	-99.000
2003	3792	-99.000
2004	4611	-99.000
2005	2066	-99.000
2006	622	-99.000
2007	335	-99.000
2008	780	-99.000
2009	604	-99.000
2010	2410	0.065

Note:

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 $\ensuremath{^{**}}$ data file: LCchinook.csv mod date: Wed Aug 10 17:57:25

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5.3.7 Low. Cowlitz R.

Table 5.7: Spawners and fracwild from Low. Cowlitz R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	2363	-99.000
2001	4652	-99.000
2002	13514	-99.000
2003	10048	-99.000
2004	4466	-99.000
2005	2870	-99.000
2006	2944	-99.000
2007	1847	-99.000
2008	1828	-99.000
2009	2602	-99.000
2010	3734	0.683

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.8 Coweeman R.

Table 5.8: Spawners and fracwild from Coweeman R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	290	-99.000
2001	802	-99.000
2002	877	-99.000
2003	1106	-99.000
2004	1503	-99.000
2005	853	-99.000
2006	566	-99.000
2007	251	-99.000
2008	424	-99.000
2009	783	-99.000
2010	584	0.707

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.9 Toutle R.

Table 5.9: Spawners and fracwild from Toutle R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	879	-99.000
2001	4971	-99.000
2002	7896	-99.000
2003	13943	-99.000
2004	4711	-99.000
2005	3303	-99.000
2006	5752	-99.000
2007	1149	-99.000
2008	1725	-99.000
2009	539	-99.000
2010	1917	0.119

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.10 Up. Cowlitz R.

Table 5.10: Spawners and fracwild from Up. Cowlitz R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	1	-99.000
2001	3646	-99.000
2002	6113	-99.000
2003	4165	-99.000
2004	2145	-99.000
2005	2901	-99.000
2006	1782	-99.000
2007	1325	-99.000
2008	1845	-99.000
2009	7491	-99.000
2010	9808	0.215

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.11 Kalama R.

Table 5.11: Spawners and fracwild from Kalama R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	1420	-99.000
2001	3613	-99.000
2002	18809	-99.000
2003	24710	-99.000
2004	6612	-99.000
2005	9168	-99.000
2006	10386	-99.000
2007	3296	-99.000
2008	3734	-99.000
2009	7546	-99.000
2010	5315	0.112
2000	33	-99.000
2001	555	-99.000
2002	886	-99.000
2003	756	-99.000
2004	352	-99.000
2005	380	-99.000
2006	292	-99.000
2007	3469	0.011
2008	352	0.168
2009	80	1.000
2010	46	1.000

Note:

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 $^{^{**}}$ data file: LCchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \mbox{-}0600$

^{*} These spawner counts are from river redd4 surveys.

5.3.12 Lewis R.

Table 5.12: Spawners and fracwild from Lewis R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	1689	-99.00
2001	4132	-99.00
2002	5224	-99.00
2003	6518	-99.00
2004	2171	-99.00
2005	2536	-99.00
2006	1332	-99.00
2007	1012	-99.00
2008	1256	-99.00
2009	2437	-99.00
2010	2490	0.64

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.13 Sandy R.

Table 5.13: Spawners and fracwild from Sandy R. for 2000 to 2010.

Year	Spawners	Fracwild
2009	3128	-99.000
2010	1713	-99.000
2000	363	0.237
2001	3510	0.237
2002	5463	0.237
2003	3993	0.237
2004	2524	0.237
2005	3998	0.237
2006	5359	0.237

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.14 Clackamas R.

Table 5.14: Spawners and fracwild from Clackamas R. for Inf to -Inf. $\,$

Year	Spawners	Fracwild
Note:		
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** da	ata file: LCchin	$\mathrm{nook.csv}$
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* Th	ese spawner co	unts are
from	river redd surve	eys.

5.3.15 Washougal R.

Table 5.15: Spawners and fracwild from Washougal R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	2078	-99.000
2001	3836	-99.000
2002	5725	-99.000
2003	3440	-99.000
2004	10404	-99.000
2005	2671	-99.000
2006	2600	-99.000
2007	1528	-99.000
2008	2491	-99.000
2009	2741	-99.000
2010	5530	0.107

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.16 Lewis R. Bright

Table 5.16: Spawners and fracwild from Lewis R. Bright for 2000 to 2010.

Year	Spawners	Fracwild
2000	8741	-99
2001	11274	-99
2002	13293	-99
2003	12912	-99
2004	12928	-99
2005	9775	-99
2006	5066	-99
2007	3708	-99
2008	5485	-99
2009	6283	-99
2010	9294	1

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.17 NF Lewis R.

Table 5.17: Spawners and fracwild from NF Lewis R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	473	-99
2001	678	-99
2002	493	-99
2003	679	-99
2004	494	-99
2005	116	-99
2006	847	-99
2007	264	-99
2008	25	-99
2009	58	-99
2010	157	-99

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.18 Low. Gorge Tribs.

Table 5.18: Spawners and fracwild from Low. Gorge Tribs. for 2000 to 2010.

Year	Spawners	Fracwild
2000	681	-99.000
2001	653	-99.000
2002	1796	-99.000
2003	1503	-99.000
2004	1724	-99.000
2005	1346	-99.000
2006	3282	-99.000
2007	552	-99.000
2008	497	-99.000
2009	609	-99.000
2010	670	0.954

Note:

kable

^{*} These spawner counts are from river redd surveys.

5.3.19 Up. Gorge Tribs.

Table 5.19: Spawners and fracwild from Up. Gorge Tribs. for 2000 to 2010.

Year	Spawners	Fracwild
2000	105	-99.000
2001	868	-99.000
2002	621	-99.000
2003	3670	-99.000
2004	3099	-99.000
2005	656	-99.000
2006	466	-99.000
2007	701	-99.000
2008	651	-99.000
2009	661	-99.000
2010	565	0.781

Note:

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^{*} These spawner counts are from river redd surveys.

5.3.20 Big White Salmon R.

Table 5.20: Spawners and fracwild from Big White Salmon R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	147	-99.000
2001	1668	-99.000
2002	1787	-99.000
2003	11480	-99.000
2004	8691	-99.000
2005	1448	-99.000
2006	755	-99.000
2007	898	-99.000
2008	770	-99.000
2009	964	-99.000
2010	1887	0.725

Note:

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 ** data file: LCchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \mbox{-}0600$

6 Lower Columbia steelhead

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6.1 General location

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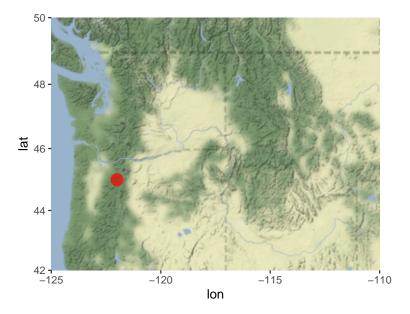


Figure 6.1: Lower Columbia steelhead. Map of the general location of the ESU.

6.2 Recent trends

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6.3 Population raw data

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Lower Columbia steelhead EF Lewis R. Hood R. Clackamas R. Coweeman R. 8 **-**6 **-**4 **-**2 **-**~ Kalama R. NF Toutle R. SF Toutle R. Sandy R. log(Spawners) Up. Cowlitz R. Tilton R. Up. Gorge Tribs. Washougal R. 1960 1980 2000 20201960 1980 2000 20201960 1980 2000 2020 Wind R. 8 **-**6 **-**4 **-**2 **-**1960 1980 2000 2020 Year

Figure 6.2: Lower Columbia steelhead. Log spawner count trends.

6.3.1 Coweeman R.

Table 6.1: Spawners and fracwild from Coweeman R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	530	-99
2001	384	-99
2002	298	-99
2003	460	-99
2004	722	-99
2005	370	-99
2006	372	-99
2007	384	-99
2008	722	-99
2009	602	-99
2010	528	-99

Note:

kable

** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

2022 - 0600

6.3.2 NF Toutle R.

Table 6.2: Spawners and fracwild from NF Toutle R. for 2005 to 2010.

Year	Spawners	Fracwild
2005	222	-99
2006	592	-99
2007	410	-99
2008	554	-99
2009	610	-99
2010	256	-99

Note:

kable

** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

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6.3.3 SF Toutle R.

Table 6.3: Spawners and fracwild from SF Toutle R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	490	-99
2001	348	-99
2002	640	-99
2003	1510	-99
2004	1212	-99
2005	520	-99
2006	656	-99
2007	548	-99
2008	412	-99
2009	498	-99
2010	274	-99

Note:

kable

** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

2022 - 0600

6.3.4 Up. Cowlitz R.

Table 6.4: Spawners and fracwild from Up. Cowlitz R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	412	-99
2001	729	-99
2002	2787	-99
2003	2532	-99
2004	1397	-99
2005	691	-99
2006	999	-99
2007	1253	-99
2008	1089	-99
2009	3556	-99
2010	622	-99

Note:

kable

** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

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6.3.5 Tilton R.

Table 6.5: Spawners and fracwild from Tilton R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	797	-99
2001	1015	-99
2002	1855	-99
2003	695	-99
2004	846	-99
2005	555	-99
2006	299	-99
2007	143	-99
2008	142	-99
2009	1419	-99
2010	179	1

Note:

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** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

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6 Lower Columbia steelhead

6.3.6 Kalama R.

Table 6.6: Spawners and frac wild from Kalama R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	921	-99
2001	1042	-99
2002	1495	-99
2003	1815	-99
2004	2400	-99
2005	1982	-99
2006	1733	-99
2007	1011	-99
2008	742	-99
2009	1044	-99
2010	961	-99
2000	140	-99
2001	286	-99
2002	454	-99
2003	817	-99
2004	549	-99
2005	435	-99
2006	387	-99
2007	361	-99
2008	237	-99
2009	308	-99
2010	370	-99

Note:

kable

^{*} These spawner counts are from river redd4 surveys.

6 Lower Columbia steelhead

6.3.7 EF Lewis R.

Table 6.7: Spawners and fracwild from EF Lewis R. for 2000 to 2010.

Year	Spawners	Fracwild
2001	377	-99
2002	292	-99
2003	532	-99
2004	1298	-99
2005	246	-99
2006	458	-99
2007	448	-99
2008	548	-99
2009	688	-99
2010	336	-99
2000	229	-99
2001	271	-99
2002	440	-99
2003	910	-99
2004	425	-99
2005	673	-99
2006	560	-99
2007	412	-99
2008	365	-99
2009	800	-99
2010	600	-99

Note:

kable

 $^{^{**}}$ data file: LCsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

6.3.8 Clackamas R.

Table 6.8: Spawners and fracwild from Clackamas R. for 2000 to 2007.

Year	Spawners	Fracwild
2000	879	0.848
2001	2048	0.727
2002	3330	0.698
2006	1763	0.660
2007	1450	0.833

Note:

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 ** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

6.3.9 Sandy R.

Table 6.9: Spawners and fracwild from Sandy R. for 2010 to 2010.

Year	Spawners	Fracwild
2010	2096	0.715

Note:

kable

** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

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6 Lower Columbia steelhead

6.3.10 Washougal R.

Table 6.10: Spawners and fracwild from Washougal R. for 2000 to 2010.

Year	Spawners	Fracwild
2001	216	-99
2002	286	-99
2003	764	-99
2004	1114	-99
2005	320	-99
2006	524	-99
2007	632	-99
2008	732	-99
2009	418	-99
2010	232	-99
2000	140	-99
2001	184	-99
2002	404	-99
2003	607	-99
2005	608	-99
2006	636	-99
2007	681	-99
2008	755	-99
2009	433	-99
2010	787	-99

Note:

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** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

2022 - 0600

^{*} These spawner counts are from river redd surveys.

6.3.11 Up. Gorge Tribs.

Table 6.11: Spawners and frac wild from Up. Gorge Tribs. for 2000 to 2010.

Year	Spawners	Fracwild
2000	20	-99
2001	53	-99
2002	51	-99
2003	27	-99
2004	28	-99
2005	22	-99
2006	23	-99
2007	13	-99
2008	7	-99
2009	20	-99
2010	30	-99

Note:

kable

 ** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

6.3.12 Hood R.

Table 6.12: Spawners and frac wild from Hood R. for Inf to -Inf.

Year	Spawners	Fracwild
Note:		
kable		
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* The	ese spawner c	ounts are
from r	river redd sur	veys.

6 Lower Columbia steelhead

6.3.13 Wind R.

Table 6.13: Spawners and fracwild from Wind R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	218	1.000
2001	503	0.966
2002	700	0.986
2003	1113	1.000
2004	898	0.994
2005	608	0.987
2006	661	0.995
2007	766	1.000
2008	638	1.000
2009	614	0.985
2010	772	0.992

Note:

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** data file: LCsthd.csv mod date: Wed Aug 10 17:57:25

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7.1 General location

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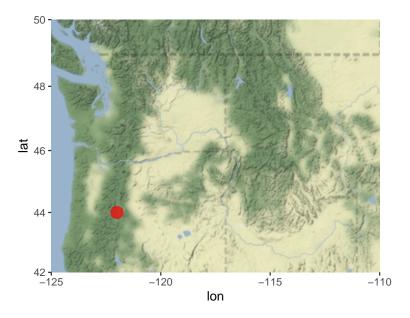


Figure 7.1: Upper Willamette Chinook. Map of the general location of the ESU.

7.2 Recent trends

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7.3 Population raw data

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Upper Willamette Chinook Clackamas R. McKenzie R. MF Willamette R. 10 8 N Santiam R. S Santiam R. Willamette Falls ESC 8 N Santiam R. MWillamette Falls ESC

Figure 7.2: Upper Willamette Chinook. Log spawner count trends.

Year

1980 2000 2020

1960

1980 2000 2020

1960

6 -

1960 1980 2000 2020

7.3.1 Clackamas R.

Table 7.1: Spawners and fracwild from Clackamas R. for 2000 to 2010.

Year	Spawners	Fracwild
2000	2596	0.326
2001	4474	0.326
2002	2783	0.693
2003	4313	0.784
2004	6636	0.783
2005	3695	0.621
2006	1345	0.761
2007	2122	0.712
2008	2272	0.918
2009	1049	0.922
2010	1719	0.933

Note:

kable

 ** data file: UWchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

7.3.2 Willamette Falls ESC

Table 7.2: Spawners and frac wild from Willamette Falls ESC for 2000 to 2010.

Year	Spawners	Fracwild
2000	39073	-99
2001	53973	-99
2002	83136	-99
2003	87749	-99
2004	96776	-99
2005	36633	-99
2006	37041	-99
2007	23134	-99
2008	14672	-99
2009	28529	-99
2010	67051	-99

Note:

kable

 ** data file: UWchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

7.3.3 N Santiam R.

Table 7.3: Spawners and fracwild from N Santiam R. for 2007 to 2010.

Year	Spawners	Fracwild
2007	1399	0.221
2009	809	0.443
2010	1656	0.176

Note: kable

 ** data file: UWchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

7.3.4 S Santiam R.

Table 7.4: Spawners and fracwild from S Santiam R. for 2007 to 2010.

Year	Spawners	Fracwild
2007	1735	0.141
2008	855	0.378
2009	1418	0.644
2010	2378	0.158

Note:

kable

 ** data file: UWchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \hbox{-}0600$

^{*} These spawner counts are from river redd surveys.

7.3.5 McKenzie R.

Table 7.5: Spawners and fracwild from McKenzie R. for 2005 to 2010.

Year	Spawners	Fracwild
2005	2967	0.720
2006	2894	0.708
2007	3585	0.715
2008	2432	0.571
2009	2540	0.470
2010	3266	0.387

Note:

kable

 ** data file: UWchinook.csv mod date: Wed Aug 10 17:57:25 $2022\ \mbox{-}0600$

7.3.6 MF Willamette R.

Table 7.6: Spawners and fracwild from MF Willamette R. for Inf to -Inf.

Year	Spawners	Fracwild	
Note:			
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* These spawner counts are			
from river redd surveys.			

8 Upper Willamette steelhead

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8.1 General location

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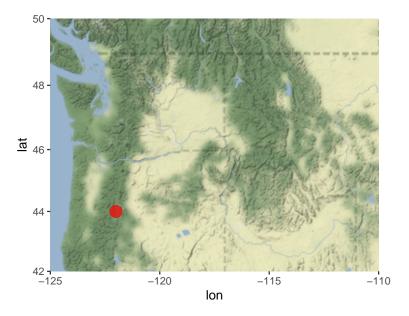


Figure 8.1: Upper Willamette steelhead. Map of the general location of the ESU.

8.2 Recent trends

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8.3 Population raw data

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Upper Willamette steelhead

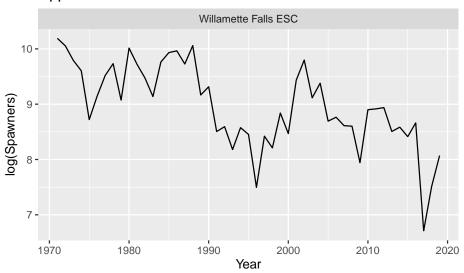


Figure 8.2: Upper Willamette steelhead. Log spawner count trends.

8.3.1 Willamette Falls ESC

Table 8.1: Spawners and fracwild from Willamette Falls ESC for 2000 to 2010.

Year	Spawners	Fracwild
2000	4761	1
2001	12525	1
2002	17998	1
2003	9092	1
2004	11842	1
2005	5963	1
2006	6404	1
2007	5497	1
2008	5442	1
2009	2813	1
2010	7337	1

Note:

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 ** data file: UWsthd.csv mod date: Wed Aug 10 17:57:25 2022 -0600

9 Conclusion

We want to reference the Interior Columbia Upper Columbia population 1 data. It is in Table 3.1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam commodo sit amet nibh non molestie. Maecenas hendrerit nisl velit, a condimentum enim lobortis sit amet. Ut vitae nunc sed mauris condimentum fermentum. Mauris pellentesque nec neque id elementum. Suspendisse a quam aliquam, facilisis urna venenatis, malesuada diam. Pellentesque in fringilla orci. Cras sed purus urna. Ut pharetra enim ut ligula egestas mattis.

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9 Conclusion

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