

Deschutes River Steelhead Sport Fishery Management Framework



Revised

2025

Oregon Department of Fish and Wildlife

Middle Columbia Fish District

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Background

The Oregon Department of Fish and Wildlife (ODFW) has outlined this fishery framework to establish standards for closing the steelhead sport fishery on the Lower Deschutes River. This framework provides conservation protection for summer steelhead in the Deschutes River Sport Fishery by limiting sport angling pressure in critically low return years. ODFW begins monitoring annual run strength of Columbia Basin wild summer steelhead in relationship to Deschutes River wild steelhead returns at Bonneville Dam starting on July 1. The relationships between the returns of wild steelhead passing upstream of Bonneville Dam and escapement estimates of wild steelhead upstream of Sherars Falls on the Deschutes River were analyzed to determine when abundance is likely to be critically low and if in-season sport fishery restrictions are necessary (Figures 2- Figure 5, Table 1). The Critical Abundance Threshold (CAT) and Minimum Abundance Threshold (MAT) determination and descriptions can be found in the Middle Columbia River Steelhead Distinct Population Segment ESA Recovery Plan (NMFS 2009).

The Deschutes River Sport Fishery permanent rules apply (see Oregon Sport Fishing Regulations, Central Zone), unless the following steps of the Deschutes River Steelhead Sport Fishery Framework triggers adoption of an Oregon Temporary Rule(s) to restrict angling in the Deschutes River Sport Fisheries.

STEP 1. Monitor Wild Steelhead Passage Over Bonneville Dam

The Deschutes River Steelhead Sport Fishery will remain open or determined closed in accordance with upstream passage counts of unmarked (wild) steelhead through Bonneville Dam by set dates. Upstream passage parameters through Bonneville Dam for time periods **July 1 – July 31** and **July 1 – August 31** are defined below and in Figure 1.

Scenario A. If upstream passage counts of wild steelhead through Bonneville Dam from July 1 to July 31 **exceed 18,700** wild steelhead, the Deschutes steelhead sport fishery will **remain open**.

Scenario B. If upstream passage counts of wild steelhead through Bonneville Dam from July 1 to July 31 are **less than 9,900** wild steelhead, the steelhead sport fishery will **close by August 15**. ODFW will continue to monitor Bonneville Dam counts through August 31 to evaluate scenarios D, E, and F.

Scenario C. If upstream passage counts of wild steelhead at Bonneville Dam from July 1 to July 31 are **between 9,900 and 18,700** wild steelhead, the steelhead sport fishery will **stay open**; but ODFW will continue to monitor counts at Bonneville Dam through August 31 to evaluate scenarios D, E, and F.

Scenario D. If upstream passage counts of wild steelhead through Bonneville Dam from July 1 through August 31 **exceed 23,100** wild steelhead, the steelhead sport fishery will **remain open**.

Scenario E. If upstream passage counts of wild steelhead through Bonneville Dam from July 1 through August 31 are **less than 23,100** wild steelhead, the steelhead sport fishery will **close** by September 15, or **remain closed** from Scenario B.

Scenario F. If the Deschutes steelhead sport fishery is closed due to low returns of wild steelhead passing upstream through Bonneville Dam (<9,900) from July 1 to July 31 (Scenario B), but upstream passage counts to of wild steelhead through Bonneville Dam from July 1 to August 31 improve to **exceed 23,100** wild steelhead, the steelhead sport fishery will **re-open by September 15**.

STEP 2. Sherars Falls Trap Parameters

Capture numbers of wild steelhead at the Sherars Falls Adult Salmon and Steelhead Trap are a late-season metric to evaluate run-strength for Deschutes-origin wild steelhead. Sherars Falls Trap sample size may alter the status of the Deschutes sport fishery under two conditions:

1. If a total of 120 or more wild steelhead are captured at the Sherars Falls Trap by November 1, and the Deschutes steelhead sport fishery is closed by temporary rule based on Step 1, the steelhead sport fishery will re-open within 10 days of meeting 120 wild steelhead captured during Sherars Trap operations.
2. If a total of 60 or fewer wild steelhead are captured at the Sherars Falls Trap by November 1, and the Deschutes steelhead fishery is open under permanent rule, the steelhead sport fishery will close November 15.
3. If the total wild steelhead captured at the Sherars Falls Trap by November 1 is between 60 and 120, the steelhead sport fishery will remain either open or closed, based on decisions made from Scenarios A to F of Step 1.

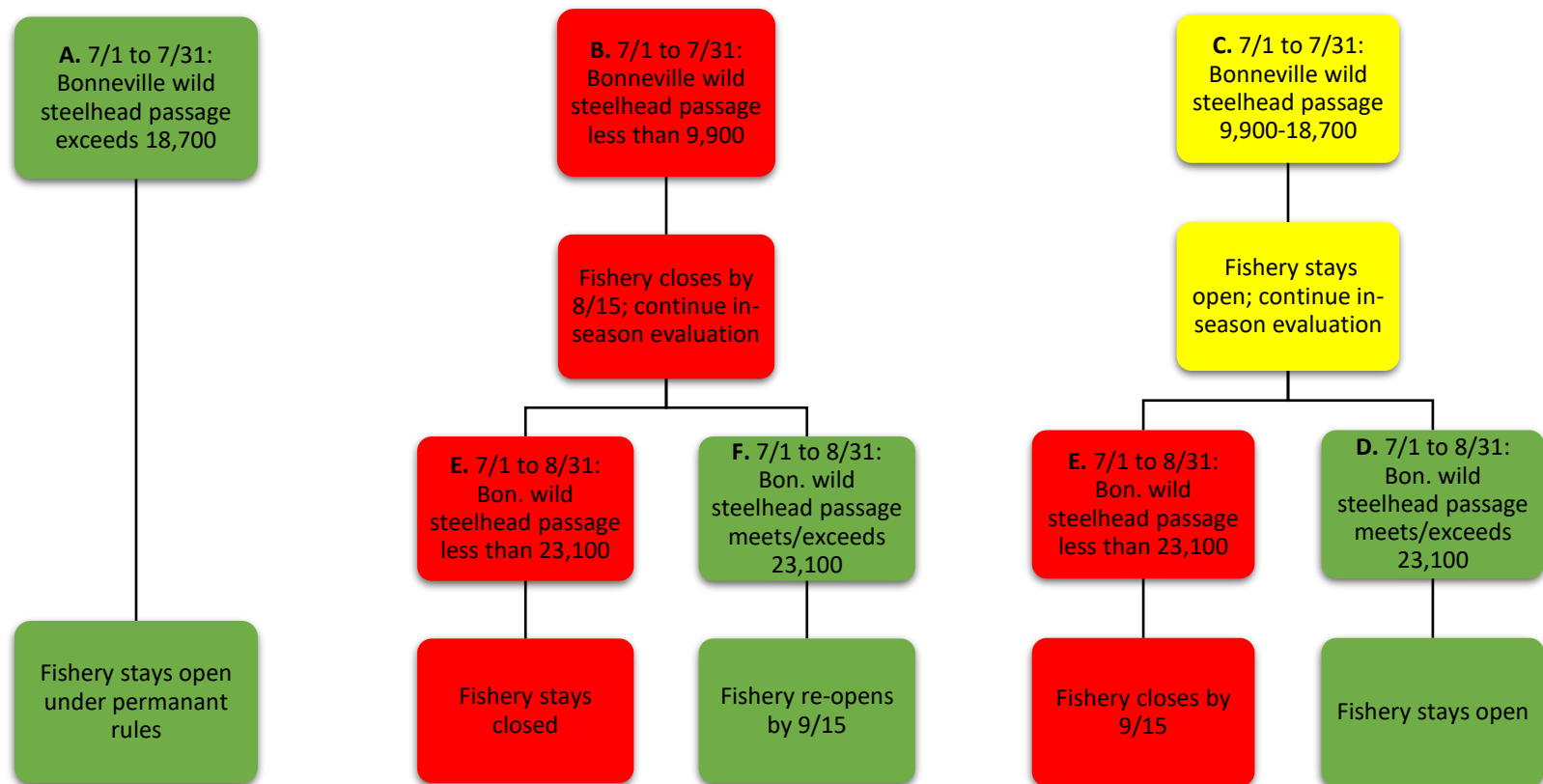


Figure 1. Flow charts of Step 1, Scenarios A to E, of the Deschutes River Steelhead Sport Fishery Management Framework in-season parameters.

Impacts to other Deschutes River Fisheries

Fall Chinook

If a temporary rule is in place which closes the Deschutes steelhead sport fishery, angling for fall Chinook from the I-84 Bridge (river mile 0) upstream to the upper railroad trestle (river mile 40) will be concurrently closed.

Angling for fall Chinook from the upper railroad trestle upstream to Sherars Falls will remain open by permanent rule. Steelhead are bycatch in this fishery. Annual catch of wild steelhead by salmon anglers in this fishery is generally low with a 5-year average of 58 wild steelhead captured and released. During the 2021 steelhead closures, 33 wild steelhead were estimated captured and released in this fishery.

Coho Salmon

If a temporary rule is in place which closes the Deschutes River for steelhead angling, angling for coho salmon will be concurrently closed from I-84 upstream to Pelton Dam (river mile 100).

Angling for coho salmon will remain open under permanent rule from the upper railroad trestle upstream to Sherars Falls. Steelhead are bycatch in this fishery. Annual catch of wild steelhead by salmon anglers in this fishery is generally low with a 5-year average of 58 wild steelhead captured and released. During the 2021 steelhead closures, 33 wild steelhead were estimated captured and released in this fishery.

Redband Trout

If a temporary rule is in place which closes the Deschutes River for steelhead angling, angling for trout will remain open under permanent rules.

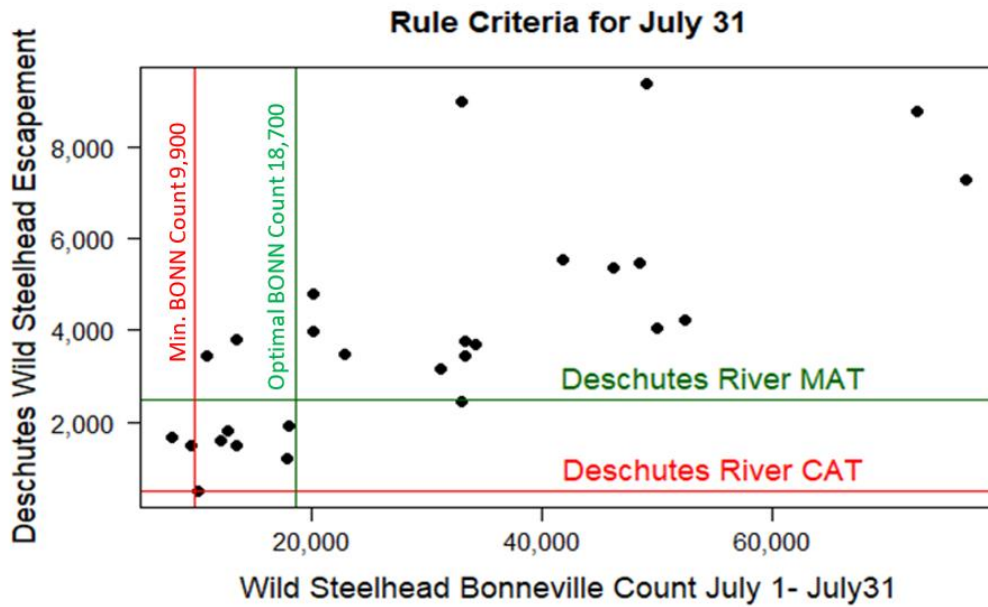


Figure 2: The relationship between wild steelhead counts over Bonneville Dam from July 1 to July 31 and wild steelhead escapement estimates for the Deschutes River above Sherars Falls. Minimum and optimal passage counts of wild steelhead over Bonneville (BONN) are included with vertical lines.

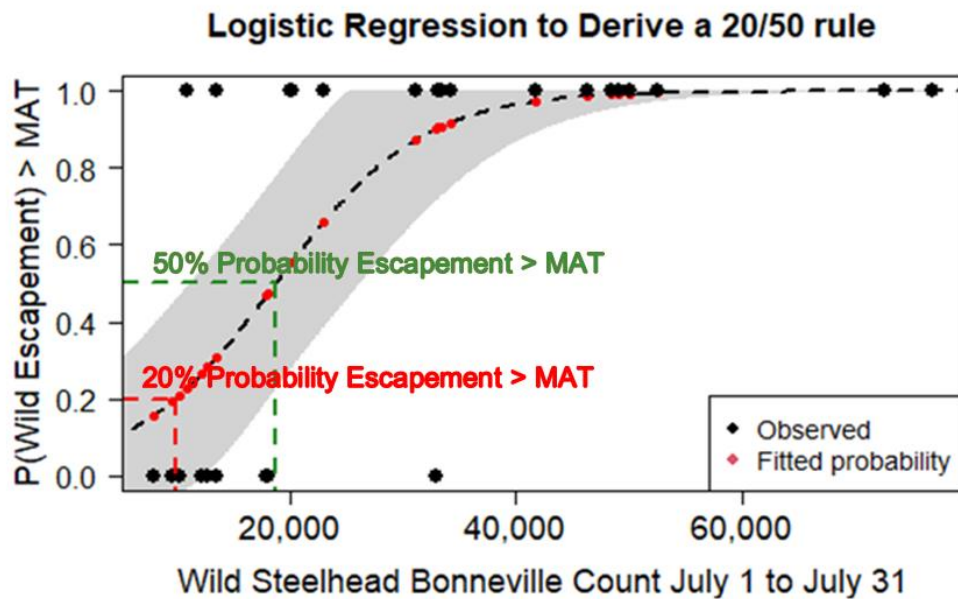


Figure 3: Logistic regression used to derive minimal and optimal Bonneville counts of wild steelhead from July 1 to July 31. The 20 and 50 percent probabilities thresholds reflect the likelihood that escapement of wild steelhead on the Deschutes River will be above or below MAT (2,500 fish) based on observed, in-season passage over Bonneville.

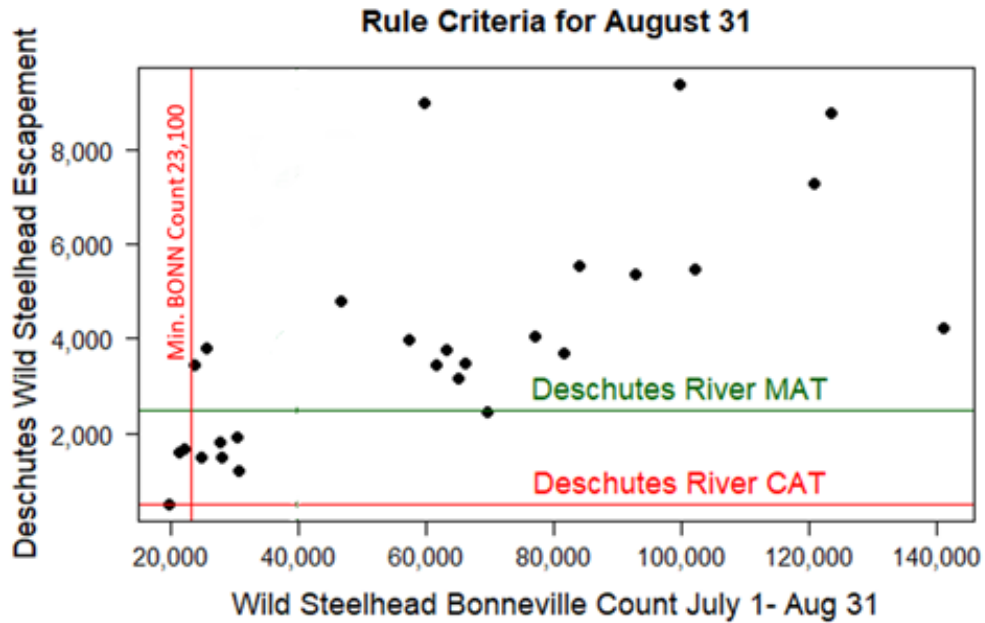


Figure 4: The relationship between wild steelhead counts over Bonneville Dam from July 1 to August 31 and wild steelhead escapement estimates for the Deschutes River above Sherars Falls. Minimum passage count of wild steelhead over Bonneville (BONN) is included with red vertical line.

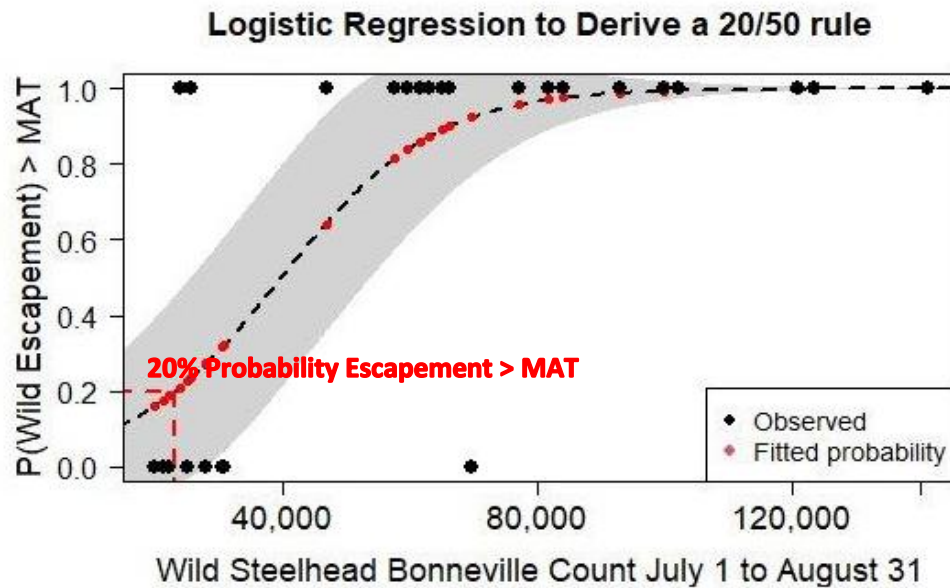


Figure 5: Logistic regression used to derive the minimal Bonneville count of wild steelhead from July 1 to August 31. The 20 percent probability threshold reflects the likelihood that escapement of wild steelhead on the Deschutes River will be above or below MAT (2,500 fish) based on observed, in-season passage over Bonneville.

Table 1. Deschutes River wild steelhead escapement estimate above Sherars Falls, wild steelhead captured (sample size) at the Sherars Trap by November 1, wild steelhead (StS) counted at Bonneville Dam from July 1 – July 31, and wild steelhead (StS) counted over Bonneville Dam from July 1 – August 31, 1994 to 2022.

Run - Spawn Year	Deschutes Escapement	Wild Steelhead at Sherars Trap	Wild StS Bonn July 1 - July 31	Wild StS Bonn July 1 - Aug 31
1994-1995	482	55	10,195	19,758
1995-1996	1,662	184	7,921	22,179
1996-1997	3,458	299	10,939	23,760
1997-1998	1,820	166	12,745	27,745
1998-1999	3,800	391	13,492	25,516
1999-2000	4,790	695	20,168	46,710
2000-2001	8,985	931	33,130	59,637
2001-2002	8,749	957	72,609	123,375
2002-2003	9,363	867	49,045	99,688
2003-2004	5,524	590	41,817	84,073
2004-2005	3,161	293	31,199	65,044
2005-2006	3,432	372	33,289	61,487
2006-2007	3,986	578	20,114	57,393
2007-2008	3,482	486	22,974	66,199
2008-2009	4,048	504	50,057	77,039
2009-2010	4,236	964	52,524	141,152
2010-2011	7,257	813	76,892	120,691
2011-2012	5,450	500	48,545	102,181
2012-2013	3,749	295	33,412	63,082
2013-2014	3,677	343	34,228	81,701
2014-2015	5,358	529	46,295	92,839
2015-2016	2,457	376	33,025	69,532
2016-2017	1,196	105	17,960	30,773
2017-2018	1,487	--	9,527	24,877
2018-2019	1,605	124	12,196	21,231
2019-2020	1,492	176	13,470	27,935
2020-2021	1,935	169	18,064	30,449
2021-2022	523	46	6,736	16,023

References

National Marine Fisheries Service. 2009. Middle Columbia River Steelhead Distinct Population Segment ESA Recovery Plan. Northwest Region.