

Fish Survey Protocol

Updated 2026



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Outline

- What is the Survey Forest Streams for Fish Use document?
- Fish Survey Protocol Background
- Regulatory Framework
- Changes resulting from Private Forest Accord
- Fish survey requirements – when are they needed?
- Resident Fish Criteria changes
- SSBT field survey criteria and triggers



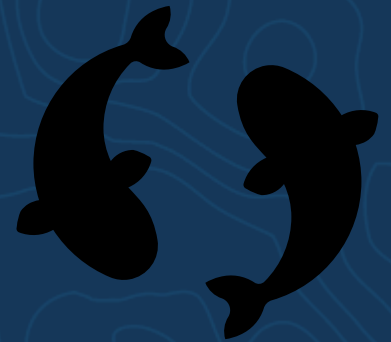
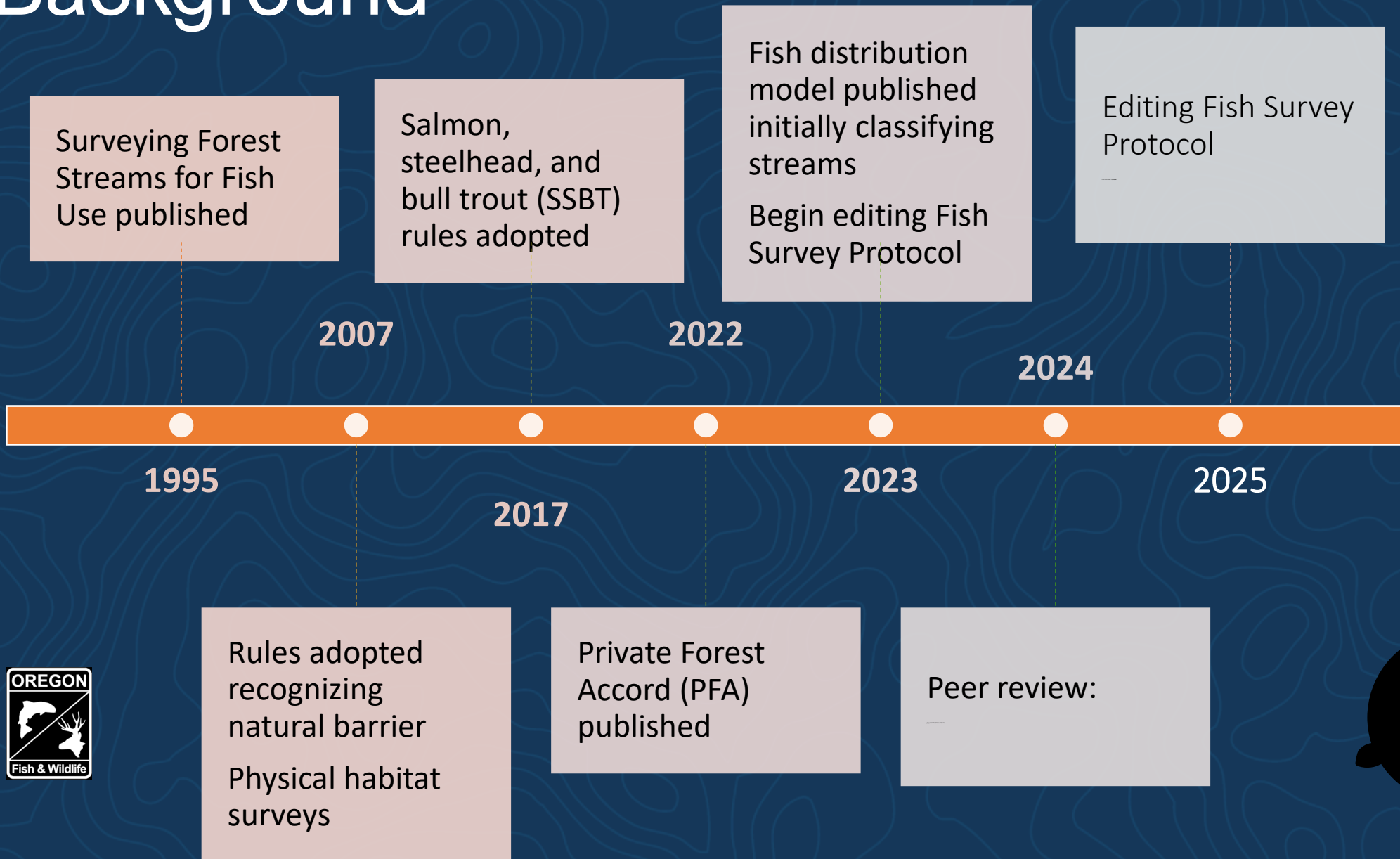


What is the Surveying Forest Streams for Fish document?

Provides the fish survey protocols and the methodology for conducting surveys to determine fish use in accordance with *OAR 629-635-0200 (11)(e)*

The purpose of the Forest Practices water classification rules (OAR 629-635-0200 (1)) is to match the physical characteristics and beneficial uses, including fish use, of a water body to a set of appropriate protection measures (OAR Chapter 629, Division 643) required during forest management activities on non-federal forest lands regulated by the FPA.

Background





Regulatory Framework

- Streams must be classified as either Type F (including SSBT), or Type N
- Initial classification for fish use provided by model (Fransen 2006)
- Field surveys may correct or verify modeled fish distribution





Need for a Fish Survey

- Needed to correct/verify model
- Fish observed in non-fish stream requires survey
- Consultation recommended when unsure



Updated Survey Guidelines

- ✓ Survey methods
- ✓ Permit requirements
- ✓ Proper time of year to conduct surveys
- ✓ Proper way to conduct surveys
- ✓ Instructions to complete and submit survey forms
- ✓ Workflows

30 years



Surveying Forest Streams for Fish Use

Oregon Department of Fish and Wildlife
and
Oregon Department of Forestry

2026





Survey Methods

- Physical Habitat Only
- Physical Habitat with E-fishing
- E-fishing Only



Photo Credit:
Tim Giraudier



Survey Timing

- Any time of year depending on method.
- Highly recommended.
 - Westside: March – April.
 - Eastside: April – June.
- Bankfull flows must be considered at other times.
- E-fishing only during optimal timeframes.



Physical Habitat Criteria

Salmon, steelhead,
bull trout (SSBT)



Physical Habitat Criteria Used to Determine End of SSBT (Salmon, Steelhead, or Bull Trout) Use			
Stream Size	Barrier Type	Physical Survey Criteria/Description	Criterion indicates barrier ¹
All Streams	Falls ²	Leap height ≥ 11.5 -feet (3.5-m) high	yes
		Leap height 10- to 11.5-feet (3.0- to 3.5-m) high and jump pool ² depth < 5 -feet (1.5-m) deep at active channel height ³	yes
		Leap height 4- to 10-feet (1.2- to 3.0-m) high and jump pool ² depth at active channel height ³ is $<$ half of the leap height	yes
All Streams	Channel Gradient	≥ 60 feet (18.3 m) of stream length with $\geq 30\%$ gradient with pools ≥ 6 -inches (15-cm) deep at active channel height ³	yes
		≥ 60 feet (18.3 m) of stream length with $\geq 20\%$ gradient without pools ≥ 6 -inches (15-cm) deep at active channel height ³	yes
Small valley bottom ⁴	Lack of livable space	No pools ≥ 6 inches (15 cm) at active channel height ³ for 300-ft (91.4-m) stream distance	yes
Small non-valley bottom ⁴	Lack of livable space	No pools > 12 inches (30 cm) at active channel height ³ for at least 300-feet (91.4-m) stream distance	End of SSBT has been met when 2 of these 3 criteria have been met.
		< 2 -feet (0.6-m) average active channel width for 100 feet (30.5 m) ⁵	
		≥ 30 feet (9.1 m) of stream length with $> 10\%$ gradient	



Physical Habitat Criteria

Resident trout



Physical Habitat Criteria Used to Determine End of Resident Fish Use (excluding Bull Trout)			
Stream Size	Barrier Type	Physical Survey Criteria/Description	Criterion indicates barrier ¹
All streams	Falls ²	Leap height ≥ 5 -feet (1.5-m) high	yes
		Leap height 2 to < 5 feet (0.6 to < 1.5 m) and jump pool ² depth $<$ half the leap height at active channel height ³	yes
All streams	Channel Gradient	≥ 20 feet (6.1 m) of stream length with $\geq 20\%$ gradient with pools ≥ 6 -inches (10-cm) deep at active channel height ³	yes
		≥ 20 feet (6.1 m) of stream length with $\geq 12\%$ gradient without pools ≥ 6 -inches (10-cm) deep at active channel height ³	yes
Small valley bottom ⁴	Lack of livable space	No pools ≥ 6 -inches (15-cm) deep at active channel height for 300 feet (91.4 m) ³	yes
Small non-valley bottom ⁴	Lack of livable space	No pools > 12 inches (30 cm) at active channel height for 300 feet (91.4 m) ³	yes



Electrofishing Surveys

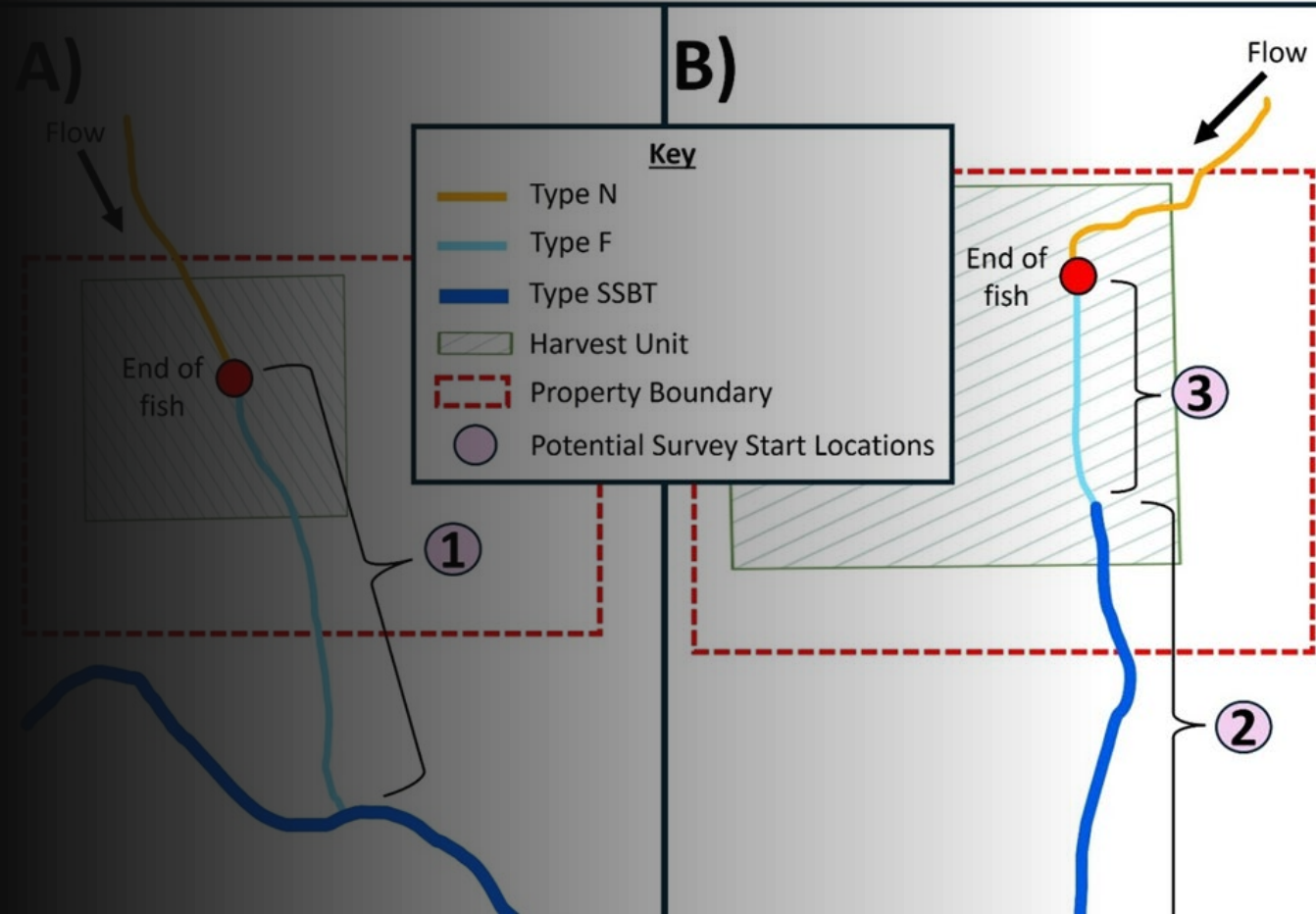
- Use only under certain circumstances.
- Permit requirements.
- Must use in accordance with NOAA Fisheries guidelines.
- Cannot use to determine SSBT use.

Planning and conducting a survey

- Determine if survey needed to correct or verify fish use in ODF Hydrography Flow Line data.
 - Do you disagree with existing survey results or modeled fish use?
 - Do you want to correct or verify the modeled or surveyed data?
- If **"no"**, fish survey not needed.
- If **"yes"**, survey can be completed.

Determine start location based on extent of survey

Field investigators can choose where to survey based on operational needs and goals for verifying fish use on their ownership.





Determine survey method based on whether SSBT and/or resident fish use occurs in the stream

Checklist to determine appropriate conditions for each survey method:

- **Physical Habitat Only**
 - ✓ Anytime under any conditions for any species. This is the only method for SSBT.
- **Physical Habitat with E-fishing**
 - ✓ Anytime under any conditions for resident fish¹, AND
 - ✓ You have the proper permits and training to use an electrofisher^{2,3}
- **E-fishing Only**
 - ✓ You are surveying for resident fish use only¹,
 - ✓ You have the proper permits and training to use an electrofisher²,
 - ✓ You are within the recommended timeframe to electrofish⁴,
 - ✓ Fish use does not end at an artificial barrier⁵, AND
 - ✓ Environmental conditions are suitable for e-fishing⁶

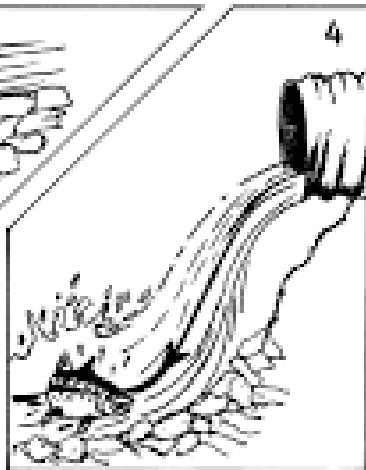
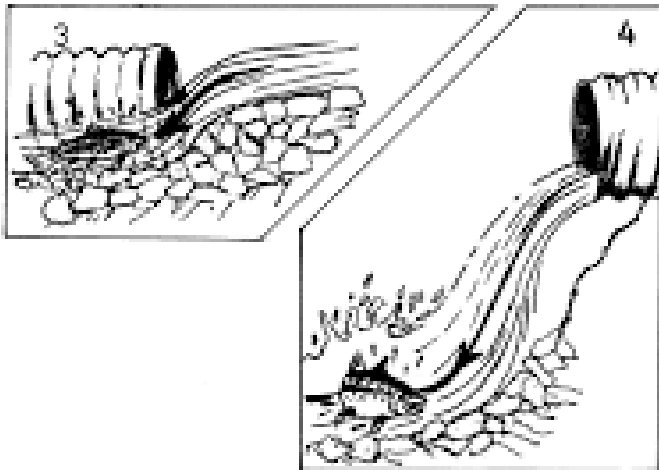
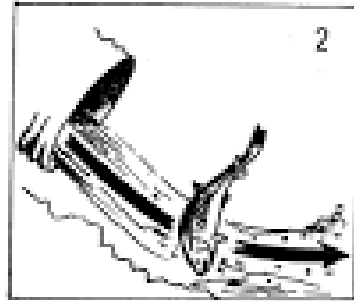
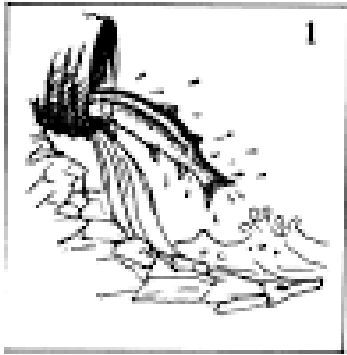


Conduct survey to identify and document end of SSBT and/or resident fish use

- ✓ End of fish use occurs at the first qualifying physical habitat barrier or last fish observed (if e-fishing only).



Artificial barriers cannot be used to determine end of fish use





Submit Results

- Submit survey form(s), maps, GPS data, pictures to ODF.
- 21-day ODFW review.
- Updates to ODF Hydrography Flow Line data.



Recap of Changes

- Resident fish leap height criteria increase from 4 to 5 feet
 - Based on peer reviewed scientific justification
- SSBT physical habitat criteria adopted
- E-fishing method retained with increased sample distance with no observed fish



What are we looking for?

Written comments/feedback on the current draft of the SFSFU Protocol from any committee members or other survey practitioners with focus regarding the following areas:

- Implementation
- Clarity
- Feasibility



Questions – Discussion

Thank you

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