Off-Channel Habitat

- High species richness (niches)
- Complex habitats (food and cover)
- Refuge from predators (cover)
- Temporal variability (differential use)
- Species specific life stages

Off-Channel Habitat



Highly productive habitat for fish – Low velocity refuge (resting) – Food resources + thermal benefits= Growth



Non-game fishes

Chapter 76.09 RCW mandates protection of public resources – fish and fish habitat



washington state department of Natural Resources

Water typing system, Forest Practices Rules

WAC 222-16-031 Interim water typing system

The table shows how the protection afforded Type F waters covers the definitions of Type 2 and 3 waters. This sets the stage for the definitions that follow . . .

Water Type Conversion Table	
Permanent Water Typing	Interim Water Typing
Type "S"	Type 1 Water
Type "F"	Type 2 and 3 Water
Type "Np"	Type 4 Water
Type "Ns"	Type 5 Water



OCH in the Forest Practices Rules (continued)

WAC 222-16-031(2) Type 2 Water (F water)

Natural waters which have a high fish use . . . and periodically inundated areas of their associated wetlands, which:

(e) are used by fish for off-channel habitat. This [off-channel] habitat shall be based on the following criteria:

- must be connected to a fish bearing stream and accessible during some period of the year, and
- accessible to fish through a drainage with less than 5% gradient



OCH in the Forest Practices Rules (continued)

WAC 222-16-031(3) Type 3 Water (F water)
Natural waters with moderate to slight fish use . . . and periodically inundated areas of their associated wetlands, which:
(b) Are used by fish for spawning, rearing or migration



OCH Guidance in the Board Manual

Board Manual Section 2, Part 1

- Describes the process for measuring BFW as it is calculated from determining the bankfull edge. BFW is extrapolated to include areas at or below the bankfull depth
- The bankfull flow typically represents a discharge that is reached in most years
- Drainages of swales, backwater eddies or regularly flooded adjacent wetlands need to be considered in the evaluation when connectivity is present

Board Manual Section 8

 Guidance for identifying and establishing the wetland edge (periodically inundated areas of associated wetlands)



Application given rule and guidance

WAC 222-16-010 General Definitions

<u>Bankfull width</u> –

(streams) measurement of lateral extent of the water surface elevation perpendicular to the channel at bankfull depth

(associated wetlands) line of periodic inundation

<u>RMZ</u> –

The area protected on each side of a Type S or F water measured horizontally from the outer edge of the bankfull width or outer edge of the CMZ.



Application given rule and guidance

Once a Type S/F water is identified, delineating the BFW is required prior to establishing the RMZ.

The bankfull depth will be determined once the bankfull edge is established.

When an OCH feature (stream associated wetland, inundated area, backwater eddy, side channel) lies at or below the bankfull depth, the RMZ starts at the edge of the OCH feature.



Forest Practices Application Review

- Map review of harvest area
- Verify stream locations and water typing
- Connectivity to S/F waters (low gradient/elevation/BFW)
- Protection afforded to typed water

Interdisciplinary teams involve the TFW process and may be used to assist with water typing and OCH delineation

