

**Habitat Indicators for 2018 SRFB Grant Cycle (unchanged from 2017)**

In WRIA 1, sponsors for Salmon Recovery Funding Board and Puget Sound Acquisition and Restoration grant funds will use the table below to identify and quantify the habitat objectives relevant to their project proposals. Note: Not all projects will have all of the indicators listed.

CATEGORY	INDICATOR	Methods
Instream Habitat- Large Wood Restoration	<b>Number of pools formed per mile</b>	Overlay structure locations with wetted low-flow channel (from relevant aerial photo or field mapping; including primary and secondary channels within the active channel).
	Number of deep (>1m residual depth) primary <sup>1</sup> pools formed	Overlay structure locations with <u>primary</u> wetted low-flow channel (see above). Primary pools expected to form where structures engage the thalweg of the primary wetted channel; pools in secondary channels not counted as primary.
	Length of wood engaged at low flow and high flow	Length is the perimeter length of wood engaged at low or high flow. For low flow area: use low flow wetted edge field data and/or wetted channel from relevant aerial photo. For high flow area: use active channel from relevant aerial photo or field mapping and floodplain channels expected to be wetted at up to 2-year flows (i.e. floodplain channels available at rearing flows, see “wetted length of side channels” below).
	Number of cold-water refuges <sup>2</sup> (cooler pools, tributary confluence, groundwater seeps) formed or enhanced	Overlay Structure locations with documented seeps, cool water tributaries <2 Deg C cooler (FLIR or field data) in a reach with temperature as a limiting factor
	Stable log jams/mile	Number of proposed ELJs divided by project reach length.
	Number key large wood pieces/100 m channel (for smaller tributary and side channels)	
	Wetted length of side channels available during spawning and rearing flows	Wetted length of floodplain channels expected to be available at spawning and rearing flows (based on interpreted channel response). Spawning = available during low flow (perennially connected) and focus on side channels (i.e. separated from main channel by well-vegetated island). Rearing may also include other floodplain channels; benefit may be presented at low to 2-year flow. Reference proposed condition hydraulic model depth if available.
Fish Passage	Length of chinook habitat connected	Length of suitable habitat upstream of barrier.
	Number of barriers removed	Count of partial or complete barriers; note extent of passability in documentation if available.
Riparian Restoration	Area in and within 300 feet of Historic Migration Zone vegetated and on trajectory to PFC <sup>3</sup> includes forest island area.	
	For tributaries- the proportion of the site potential buffer vegetated and on trajectory to PFC	
Sediment Reduction	Length of forest road treated	
	Area of sediment point sources, such as stream-adjacent landslides, stabilized.	

**Habitat Indicators for 2018 SRFB Grant Cycle (unchanged from 2017)**

Removal of hydromodifications	Edge habitat length by type (bar, bank <sup>5</sup> , hydromodified). at low and high flows (question for sponsors will be how it is defined or will be defined) bank flow width, length of channel at low flow length of channel at mid flow and produce the ratio per unit length per river mile.	
	Area of floodplain/ erosion hazard area reconnected by hydromodification setback/removal	Also calculate % of HMZ reconnected
Acquisition	Out of the area protected, how much of the HMZ+300' is protected? How much the area is already protected? How much is threatened? How much of the land area has mature trees?	
	Barriers to implementation that will be addressed	
Design	Potential barriers to implementation in the design reach. How will design get you to the next stage for reach restoration (i.e., anticipated benefits)?	
	Current and potential habitat conditions characterized (need for restoration/ enhancement demonstrated)	

<sup>1</sup> Primary pools are defined as pools that span at least 50% of the low flow main channel width.

<sup>2</sup> Cold-water refuges are defined as areas that are at least 2°C cooler than ambient temperature.

<sup>3</sup> PFC is properly functioning conditions and, in this context, relates to ability of vegetation to provide large wood and shade the stream.

<sup>4</sup> Floodplain is defined as the mapped 100-year floodplain.

<sup>5</sup> Bank condition can be divided into forested and unforested.