Estimated Benefits to Primary Limiting Factors (PLFs) from Habitat Actions by Population and Watershed

Future improvements to limiting factors are estimates from the best professional judgement of tribal biologists, assuming the implementation of all tribal habitat actions in the MOA. Limiting factors are weighted as to their relative importance in order to calculate watershed improvements.

ESU: Upper Columbia River Steelhead

Watershed	Primary Limiting Factors (PLFs)	Estimated Current Function of PLFs	Estimated Future Function		Estimated Current Watershed Function	Est. Future Funct. for Watershed	
			Estimate 10-Years	Estimate 25-Years		Estimate 10-Years	Estimate 25-Years
Entiat River Summer Steelhead							
Entiat River (Lower)	Ecologic – Community	80	85	90	**48.2**	**61.4**	**65.2**
	In-channel Characteristics	15	50	50			
	Passage / Entrainment	90	90	90			
	Riparian / Floodplain	25	35	50			
	Sediment	70	72	75			
	Side Channel Reconnection	10	15	15			
	Water Quality – Chemistry	80	80	80			
	Water Quality - Temperature	80	83	90			
	Water Quantity – Flow	80	80	80			
Entiat River (Middle - Stillwater)	Ecologic - Community	75	80	85	**72.4**	**77.2**	**81.9**
	In-channel Characteristics	70	75	80			
	Passage / Entrainment	93	93	93			
Mad River	In-channel Characteristics	90	97	99	**90.8**	**97.1**	**98.9**
	Passage / Entrainment	98	98	98			

ESU: Upper Columbia River Steelhead

Watershed	Primary Limiting Factors (PLFs)	Estimated Current Function of PLFs	Estimated Future Function		Estimated Current Watershed Function	Est. Future Funct. for Watershed	
			Estimate 10-Years	Estimate 25-Years		Estimate 10-Years	Estimate 25-Years
Methow River Summer Steelhead							
Beaver/Bear Creek	Ecologic - Community	80	83	85	**62.9**	**65.1**	**67.6**
	In-channel Characteristics	60	65	70			
	Passage / Entrainment	68	68	68			
	Riparian / Floodplain	60	70	85			
	Sediment	75	75	75			
	Water Quantity – Flow	40	40	40			
Black Canyon - Squaw Creek	In-channel Characteristics	90	93	93	**80.3**	**81.9**	**82.9**
	Passage / Entrainment	91	91	91			
	Pools	90	90	90			
	Riparian / Floodplain	80	85	90			
	Water Quantity – Flow	50	50	50			
Chewuch River (Lower)	Ecologic - Community	80	85	90	**72.3**	**75**	**76.8**
	In-channel Characteristics	55	65	70			
	Passage / Entrainment	88	88	88			
	Riparian / Floodplain	55	55	55			
	Sediment	90	90	90			
	Water Quality - Temperature	80	80	80			
	Water Quantity – Flow	75	75	75			
Chewuch River (Upper)	Ecologic - Community	85	85	85	**81.5**	**81.5**	**81.5**
	In-channel Characteristics	80	80	80			
	Riparian / Floodplain	80	80	80			
	Sediment	80	80	80			
Goat Creek/ Little Boulder Creek	In-channel Characteristics	50	50	50	**68**	**68**	**68**
	Passage / Entrainment	70	70	70			
	Pools	80	80	80			
	Water Quantity – Flow	80	80	80			
Gold/Libby Creek	Ecologic - Community	80	80	80	**67.2**	**71.2**	**75**
	In-channel Characteristics	45	55	60			
	Passage / Entrainment	95	100	100			
	Pools	45	45	45			
	Riparian / Floodplain	45	55	75			
	Water Quantity – Flow	80	80	80			
Methow River (Lower, to Carlton)	Ecologic - Community	70	70	70	**82.8**	**83.8**	**86.2**
	In-channel Characteristics	93	93	95			
	Pools	80	80	80			
	Water Quality - Temperature	70	72	80			
	Water Quantity – Flow	93	95	95			

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Watershed	Primary Limiting Factors (PLFs)	Estimated Current Function of PLFs	Estimated Future Function		Estimated Current Watershed Function	Est. Future Funct. for Watershed	
			Estimate 10-Years	Estimate 25-Years		Estimate 10-Years	Estimate 25-Years
Methow River (Middle, Carlton to Weeman Br)	Ecologic - Community	70	70	75	**64**	**66.8**	**71.8**
	In-channel Characteristics	55	60	65			
	Passage / Entrainment	70	70	70			
	Pools	60	65	75			
	Water Quantity – Flow	75	75	75			
Methow River (Middle, Weeman Br to Lost R)	Ecologic - Community	90	95	95	**90.5**	**93.6**	**95.3**
	In-channel Characteristics	85	90	95			
	Water Quality - Temperature	95	96	98			
	Water Quantity – Flow	95	95	95			
Methow River (Upper - Early Winters/Lost)	Riparian / Floodplain	75	80	90	**75**	**80**	**90**
Twisp River (Lower)	Ecologic – Community	80	85	90	**50.5**	**53**	**55**
	In-channel Characteristics	55	65	70			
	Passage / Entrainment	55	55	55			
	Pools	55	55	55			
	Riparian / Floodplain	55	65	75			
	Sediment	80	80	80			
	Water Quality - Temperature	60	60	60			
	Water Quantity – Flow	20	20	20			
Twisp River (Upper)	Ecologic - Community	80	85	90	**85.5**	**89**	**93.8**
	In-channel Characteristics	93	95	97			
	Riparian / Floodplain	80	85	95			
	Sediment	95	95	95			
	Water Quantity – Flow	95	95	95			
Wolf Creek / Hancock Creek	In-channel Characteristics	40	55	65	**50.5**	**56.2**	**61.8**
	Pools	40	40	40			
	Riparian / Floodplain	50	55	65			
	Water Quantity – Flow	80	80	80			

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Watershed	Primary Limiting Factors (PLFs)	Estimated Current Function of PLFs	Estimated Future Function		Estimated Current Watershed Function	Est. Future Funct. for Watershed	
			Estimate 10-Years	Estimate 25-Years		Estimate 10-Years	Estimate 25-Years
Wenatchee River Summer Steelhead							
Chiwawa River	Ecologic – Community	85	90	95	**91.8**	**93.4**	**95.1**
	In-channel Characteristics	95	95	95			
	Passage / Entrainment	93	93	93			
	Pools	95	95	95			
	Riparian / Floodplain	93	95	97			
Chumstick Creek	In-channel Characteristics	55	55	55	**67.5**	**68.5**	**71.5**
	Passage / Entrainment	70	70	70			
	Riparian / Floodplain	55	60	75			
	Water Quality – Chemistry	85	85	85			
	Water Quality - Temperature	80	80	80			
	Water Quantity – Flow	70	70	70			
Icicle Creek	In-channel Characteristics	70	75	80	**70.2**	**73.4**	**77.8**
	Passage / Entrainment	55	55	55			
	Riparian / Floodplain	70	75	85			
	Sediment	90	92	95			
	Water Quantity – Flow	55	55	55			
Little Wenatchee	Ecologic – Community	85	90	95	**90.2**	**92.2**	**94.2**
	In-channel Characteristics	97	97	97			
	Riparian / Floodplain	90	90	90			
	Sediment	95	95	95			
Mission Creek	In-channel Characteristics	20	20	20	**43.8**	**43.8**	**43.8**
	Passage / Entrainment	70	70	70			
	Riparian / Floodplain	55	55	55			
	Sediment	70	70	70			
	Water Quality - Temperature	55	55	55			
	Water Quantity – Flow	20	20	20			
Nason Creek	Ecologic – Community	55	70	80	**65**	**72.3**	**78.8**
	In-channel Characteristics	55	65	75			
	Passage / Entrainment	93	93	93			
	Water Quality - Temperature	80	80	80			
North Side Tributaries	Passage / Entrainment	60	60	60	**60**	**60**	**60**
Peshastin Creek	In-channel Characteristics	55	75	80	**62.8**	**76.2**	**80**
	Passage / Entrainment	93	98	98			
	Water Quality - Temperature	98	98	98			
	Water Quantity – Flow	40	45	50			
Wenatchee River (Lower)	In-channel Characteristics	60	60	60	**68**	**68**	**68**

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Watershed	Primary Limiting Factors (PLFs)	Estimated Current Function of PLFs	Estimated Future Function		Estimated Current Watershed Function	Est. Future Funct. for Watershed	
			Estimate 10-Years	Estimate 25-Years		Estimate 10-Years	Estimate 25-Years
Wenatchee River (Lower)	Water Quality - Temperature	80	80	80	**68**	**68**	**68**
	Water Quantity – Flow	70	70	70			
Wenatchee River (Upper + Chiwaukum)	In-channel Characteristics	80	85	90	**80.5**	**85.2**	**90**
	Passage / Entrainment	90	90	90			
White River	Ecologic – Community	80	85	90	**89.8**	**91.5**	**93.2**
	In-channel Characteristics	95	95	95			

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Watershed	Primary Limiting Factors (PLFs)	Estimated Current Function of PLFs	Estimated Future Function		Estimated Current Watershed Function	Est. Future Funct. for Watershed	
			Estimate 10-Years	Estimate 25-Years		Estimate 10-Years	Estimate 25-Years