

Eel River Fish Passage Screening Criteria

Fish Passage Concept:

Biological Viability: Very high, high, medium, low

Upstream Passage		Juvenile Steelhead	Adult Winter Run Steelhead	Adult Summer Run Steelhead	Juvenile Chinook	Adult Chinook	Lamprey	Other Native Species	Non-Native Species
	Potential to increase the carrying capacity of an existing population or establish a new, discrete, demographically independent population								
	Potential to increase average vital rates (e.g., reproductive success, survival) of quality habitat								
	Potential to reduce isolation of extant populations, thereby restoring natural patterns of dispersal and connectivity within the ESU/DPS								
	Potential to reestablish occupancy of habitats that are rare or underrepresented within the extant distribution, thereby promoting ecological and evolutionary process responsible for local adaptation and diverse life histories								
	Potential to allow species distribution to shift or access refuge habitats in response to climate change								
	Passage efficiency and delay potential (barrier passage time)								
	Volitional upstream passage potential								
	Biological monitoring potential								
	Collection, handling, stress, and mortality potential								
	Potential to segregate species if desired								
	Predation risks potential								
	Desired dispersion of adults and juveniles potential								
	Attraction and Collection 100% to 80% exceedance flows								
Attraction and Collection 80% to 20% exceedance flows									
Attraction and Collection 20% to 5% exceedance flows									

Fish Passage Concept:

Biological Viability: Very high, high, medium, low

Downstream Passage		Juvenile Steelhead	Adult Winter/Summer Run Steelhead ~ Kelts	Juvenile Chinook	Lamprey (post-spawn)	Other Native Fish	Non-Native Fish Species
	Volitional downstream passage potential						
	Safety of upstream migrants						
	Re-conditioning (kelts/post-spawn) potential						
	Passage efficiency and delay potential (barrier passage time)						
	Biological monitoring potential						
	Collection, handling, stress, and mortality potential						
	Predation risks potential						

Fish Passage Concept:

Habitat Conditions:

Upstream Passage		Very High	High	Medium	Low
	Hydrologic impairment (upper Eel River)				
	Hydrologic impairment (Eel River)				
	Geomorphic impairment (upper Eel River)				
	Geomorphic impairment (Eel River)				
	Potential for habitat production capacity				
	Water quality constraints (reservoir)				
	Water quality constraints (below reservoir)				
	Ecosystem benefit				

Fish Passage Concept:

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	Hydrologic impairment (Eel River)				
	Geomorphic impairment (upper Eel River)				
	Geomorphic impairment (Eel River)				
	Potential for habitat production capacity				
	Water quality constraints (reservoir)				
	Water quality constraints (below reservoir)				
	Ecosystem benefit				

Fish Passage Concept:

Operations and Maintenance:

Upstream Passage		Very Good	Good	Fair	Poor
	Reliability of facility				
	Reliability of operations				
	Debris management				
	Durability of structure				
	Passage performance certainty				
	Operational certainty				
	Adaptability of collection and passage				
	Potential to complement a downstream passage facility				

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Fish Passage Concept:

Cost:

Upstream Passage		Very High	High	Medium	Low
	Construction				
	Operation and maintenance				
	Certainty of cost				

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