

Limiting Factor Report

This report contains a list of limiting factors by watershed (HUC5) as generated during multiple processes. These factors have been described as impediments to fish productivity or abundance that occur in the tributary habitat of the species. They pertain to salmon, generally Chinook or Steelhead, that spawn, rear, or migrate through these watersheds. We provide these lists here for Tribal PCSRF project solicitors so that they may use them as needed for project selection and design, and also for documentation of how projects will meet the objectives to remedy limiting factors in their areas. Because limiting factor definitions were not standardized between these different sources, they are provided here as separate lists.

Up to three sources of limiting factors are provided here, although not all basins were assessed for each process:

1) Subbasin Planning: Limiting Factors were identified at CRITFC as they were documented in the 2001/2002 Subbasin Plans. Generally, this information was generated for Ecosystems Diagnosis & Treatment (EDT) or Qualitative Habitat and Analysis (QHA) modeling of subbasin processes, but in many cases the Subbasin Planners edited these lists for publication in the Subbasin Plans according to their knowledge.

2) Tribal Remand Process: During the Tribal response and habitat action proposal process of the BiOp Remand, Tribal biologists identified limiting factors by watershed that affect Chinook and Steelhead habitat. These limiting factors were used to assess the potential benefit for survival improvement if habitat actions occur. These lists of limiting factors are provided here.

3) NOAA Technical Recovery Team: We have been assured that NOAA will generate a standardized set of limited factors for use, probably during the Fall of 2007. When these lists are made available, we will add them here.

Limiting Factors identified by Tribes during Remand by Watershed

HUC4: Little Salmon (17060210)

Watershed Upper Little (1706021001)
(HUC5): Salmon River

Limiting Factor:

Low Flows
Reduced Habitat complexity
Sediment/Nutrients
Elevated Water Temperature
Migration barriers
Streamflow alteration
Water Temperature
wetland alteration/destruction
Riparian Condition
Channel alteration
Sediment

Watershed Middle Little (1706021002)
(HUC5): Salmon River

Limiting Factor:

Sediment
Reduced Habitat complexity
Channel alteration
Elevated Water Temperature
Low Flows
Migration barriers
Streamflow alteration
Sediment/Nutrients
wetland alteration/destruction
Riparian Condition
Water Temperature

Limiting Factors identified by Tribes during Remand by Watershed

Watershed Hazard Creek (1706021003) (HUC5):

Limiting Factor:

wetland alteration/destruction
Channel alteration
Migration barriers
Elevated Water Temperature
Sediment
Low Flows
Sediment/Nutrients
Water Temperature
Reduced Habitat complexity
Streamflow alteration
Riparian Condition

Watershed Rapid River (1706021004) (HUC5):

Limiting Factor:

Sediment/Nutrients
Reduced Habitat complexity
Riparian Condition
Channel alteration
Migration barriers
Streamflow alteration
Water Temperature
wetland alteration/destruction
Low Flows
Sediment
Elevated Water Temperature

Limiting Factors identified by Tribes during Remand by Watershed

Watershed Lower Little (1706021005)
(HUC5): Salmon River

Limiting Factor:

Low Flows

Riparian Condition

Reduced Habitat complexity

Channel alteration

Elevated Water Temperature

Migration barriers

Sediment

Sediment/Nutrients

Streamflow alteration

wetland alteration/destruction

Water Temperature