

**Notes on converting to standardized NOAA limiting factors
for Upper Salmon salmon and steelhead populations**

In general— the group converted old limiting factors to corresponding standard NOAA LFs. Some clarifications on the meaning of some LFs as applied for Upper Salmon chinook and steelhead populations are described below. Local biologists occasionally added standard LFs that represent the current (2011) limiting factor status. Any LFs removed are described below. See 11/3/11 attendee list for those who participated in this effort.

1.3 HQ- competition is from brook trout; density dependence may also affect intra-species competition for habitat and food

2.2 Pathogens- whirling disease noted in Lemhi, Pahsimeroi, Upper Salmon Chinook- noted by adding this limiting factor in these assessment units, but no actions currently available to address; assigned “0” LF wt.

2.3 Mechanical injury = entrainment, migration delay, and stranding for all salmon and steelhead AUs where “screens” was the old LF

5.2 Hydrology- this old LF was not separated out, but included in “Floodplain condition” for Mainstem Salmon River (including Basin Creek) assessment unit chinook population

7.2 There is no known nutrient issue for the East Fork Salmon River AU of the chinook population- nutrients were not included in the update

Yankee Fork chinook and steelhead-

- Mainstem Yankee Fork- removed irrigation withdrawals (minor non-consumptive water use that doesn’t limit long term habitat conditions for fish)
- West Fork- problem is with altered channel in lowermost ½ mile confluence with the mainstem Yankee Fork (6.1, Bed and channel form). The rest of the West Fork has very little human impact. Removed irrigation withdrawals (minor non-consumptive water use that doesn’t limit long term habitat conditions for fish) and water quality (no mining activities in upstream parts of WF).
- Lightning Creek- removed “streambank degradation” limiting factor- very little human impacts in Lightning Creek.

Steelhead-

- Removed streamflow as a limiting factor the Mainstem Salmon River Steelhead AU of the East Fork Salmon River steelhead population- flow in the mainstem Salmon River is not limiting

- Removed “Migration barriers” limiting factor from the Mainstem Upper Salmon River assessment unit of the Upper Mainstem Salmon River steelhead population; no known barriers for this AU

Pahsimeroi chinook and steelhead- make sure that AU description for the break between upper and lower parts of the Pahsimeroi is “Big Creek”, not “Big Springs Creek” (some spreadsheets may contain the incorrect reference to “Big Springs Creek” – if so, need to be corrected).