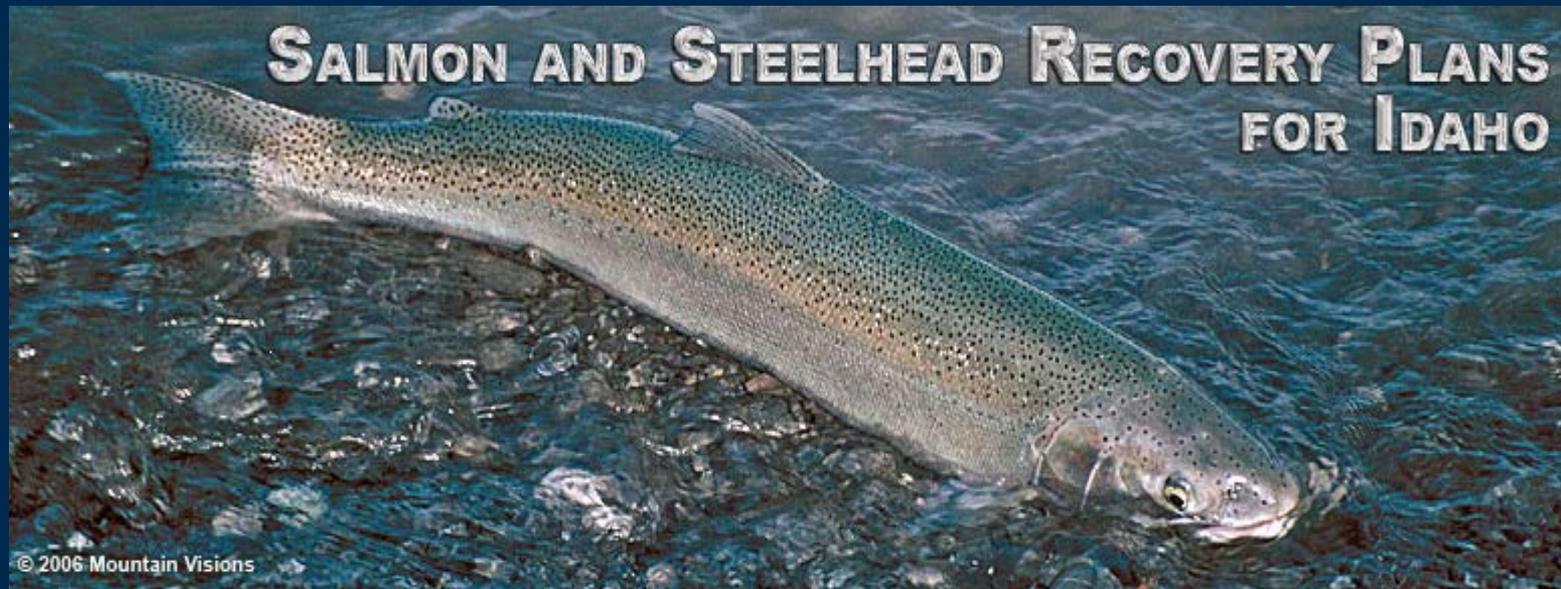




Idaho Recovery Planning





Web site is IdahoSalmonRecovery.net

—Contains latest draft chapters 1-5

- **Biology**
- **Habitat Limiting Factors**
- **Habitat Priority Actions**

Comments to: IdahoSalmon@noaa.gov

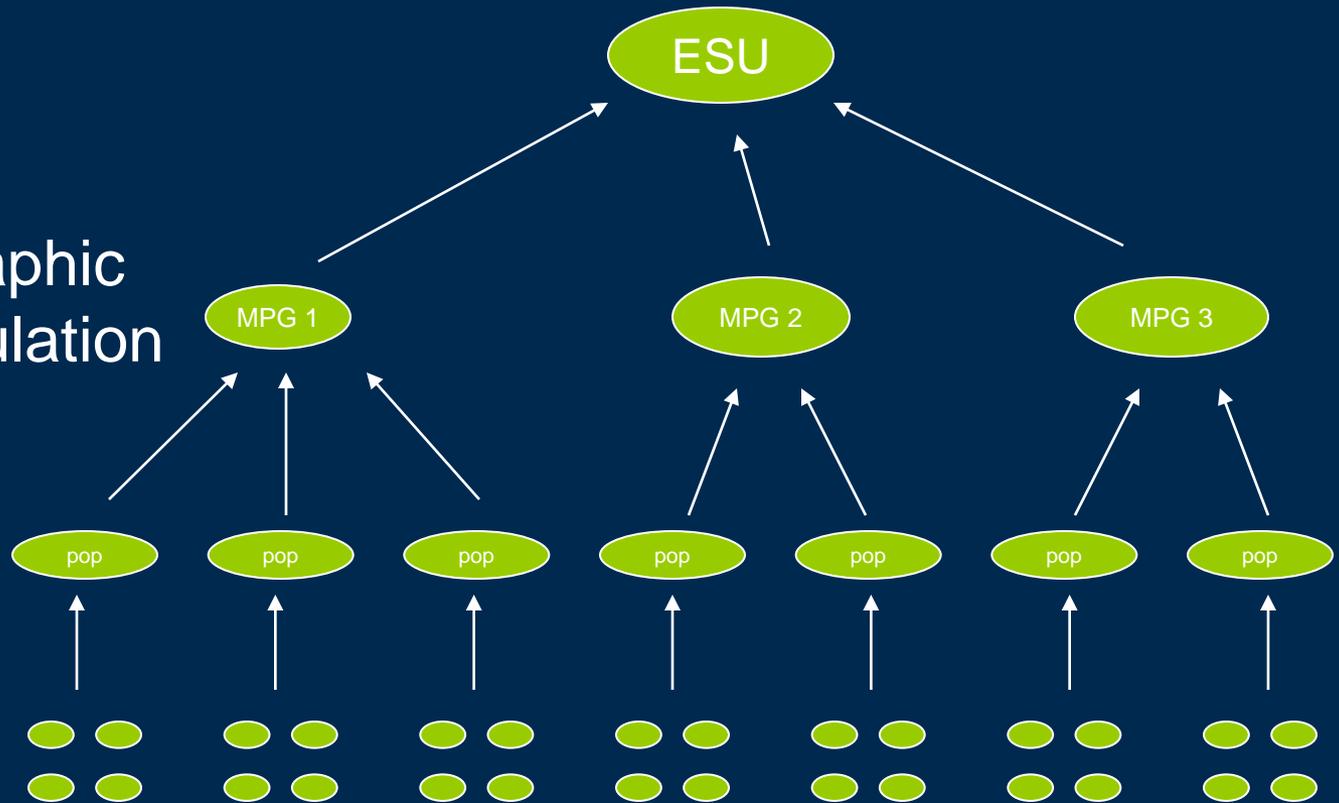


ESU Status

Stratum/Geographic
Unit/Major Population
Group Status

Pop Status

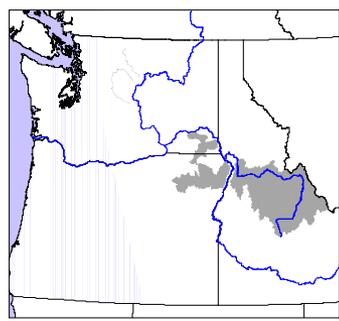
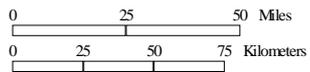
Pop
Attributes



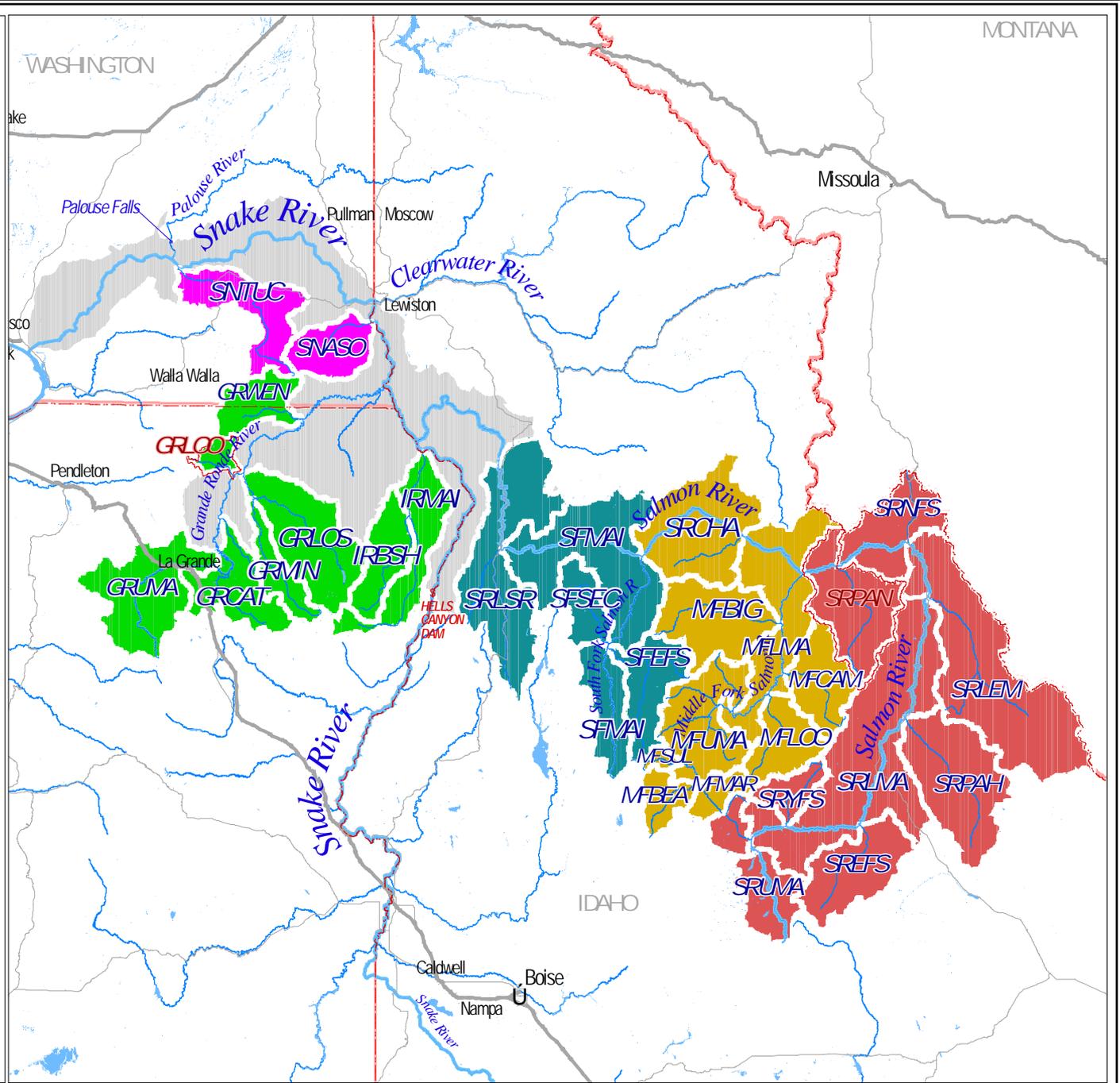
Snake River Sp/Su Chinook Major Population Groups

- Grande Ronde / Imnaha
- Lower Snake
- Middle Fork Salmon River
- South Fork Salmon River
- Upper Salmon River

- Snake River domain
- historic population



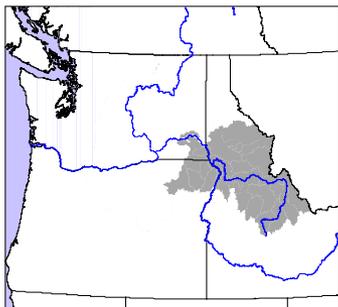
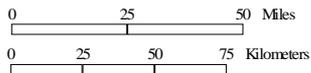
Map developed by NOAA - Fisheries, June 2004.
2725 Montlake Blvd East, Seattle WA 98112
tel. 206.860.3405 fax. 206.860.3400



Snake River Steelhead Major Population Groups

- Clearwater River
- Grande Ronde River
- Hells Canyon
- Imnaha River
- Lower Snake
- Salmon River

- Snake River domain
- historic population



Map developed by NOAA - Fisheries, June 2004.
2725 Montlake Blvd East, Seattle WA 98112
tel. 206.860.3405 fax. 206.860.3400

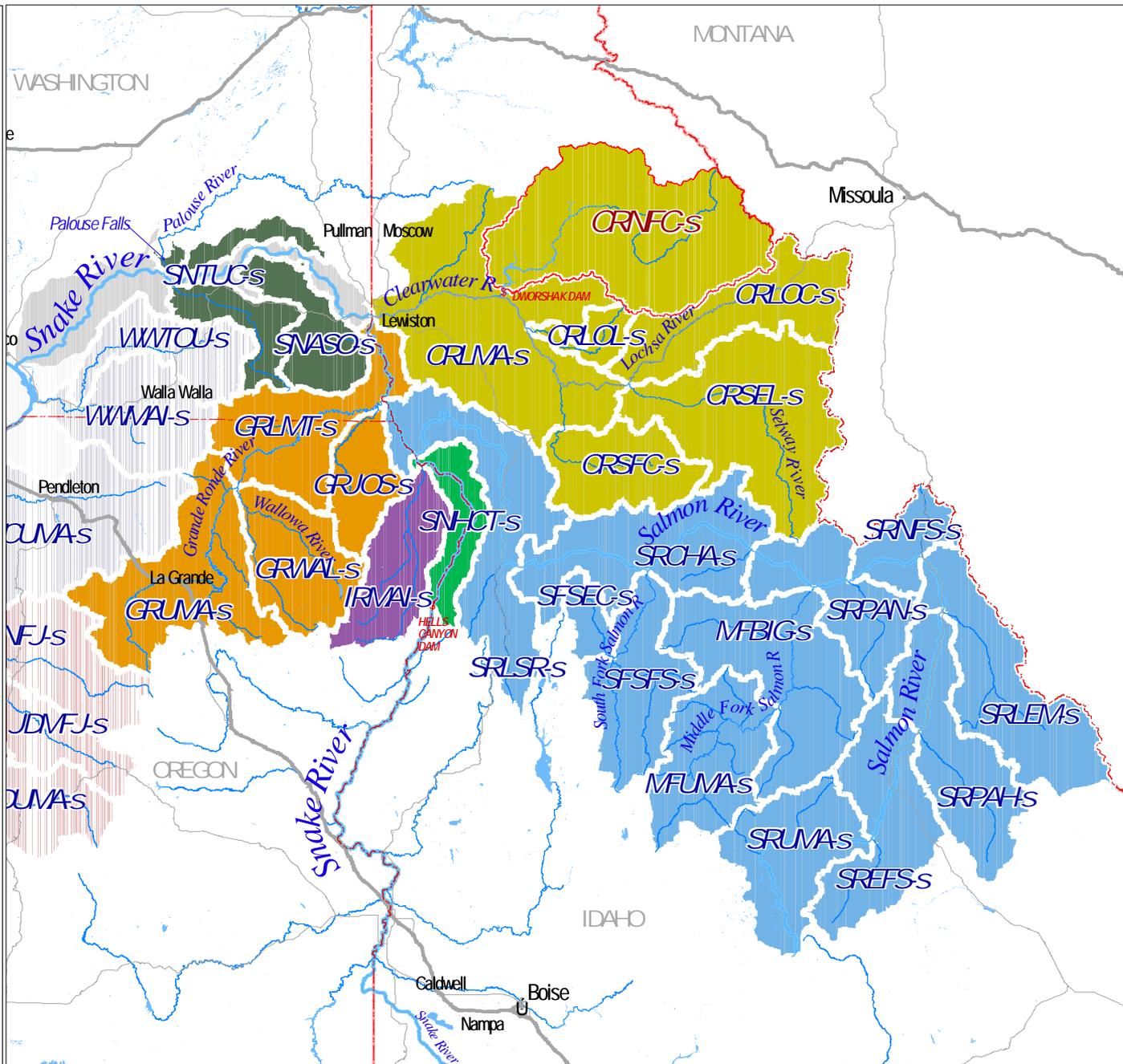




Table 4.2-3. Viable Salmonid Population (VSP) risk matrix for independent salmonid populations in the South Fork Salmon River MPG, with desired status shown for each population.

		Spatial Structure/Diversity Risk			
		Very Low	Low	Moderate	High
Abundance/ Productivity Risk	Very Low (<1%)	HV	Secesh R HV	V	M
	Low (1-5%)	V	V	SFSR Mainstem V	Little Salmon M
	Moderate (6 – 25%)	M	EFSF Salmon M	M	HR
	High (>25%)	HR	HR	HR	HR



Table 4.3-3. Viable Salmonid Population (VSP) risk matrix for independent salmonid populations in the Middle Fork Salmon River MPG, with desired status shown for each population.

		Spatial Structure/Diversity Risk			
		Very Low	Low	Moderate	High
Abundance/ Productivity Risk	Very Low (<1%)	HV	Big Creek HV	V	M
	Low (1-5%)	V	Chamberlain Bear Valley Marsh V	Loon V	M
	Moderate (6 – 25%)	M	M	Lower Middle Camas Upper Middle Sulphur M	HR
	High (>25%)	HR	HR	HR	HR

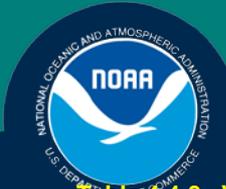
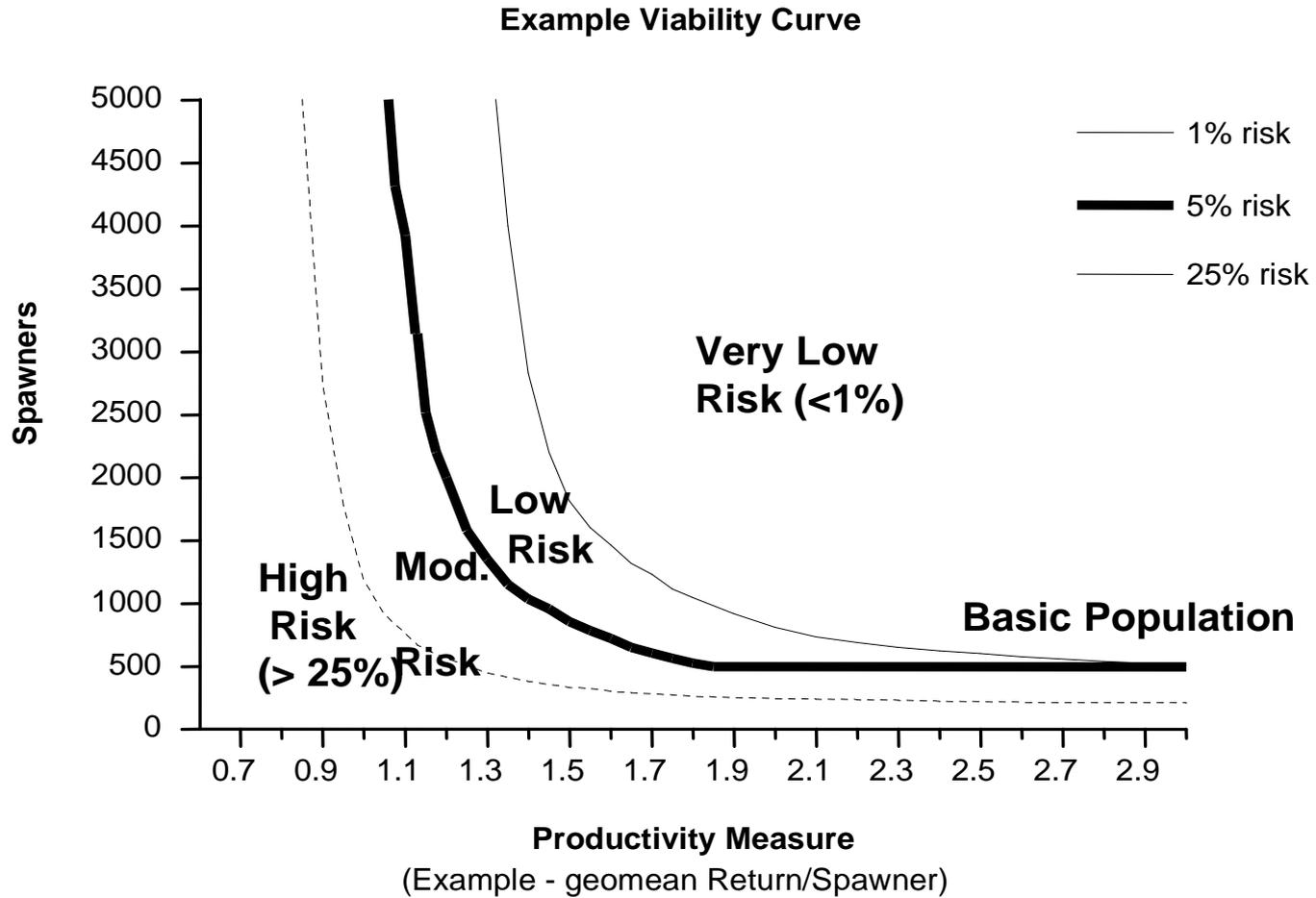


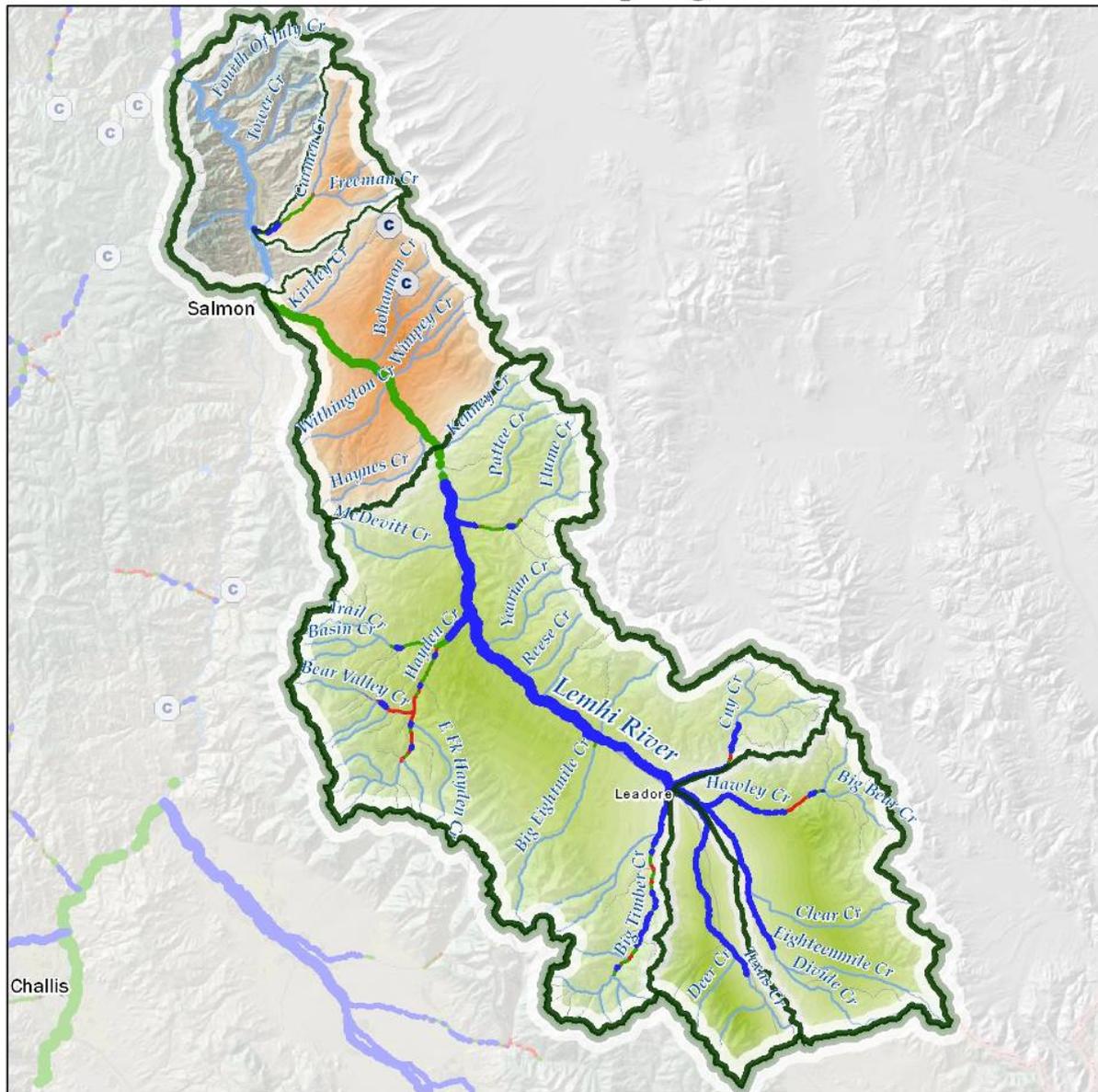
Table 4.4-3. Viable Salmonid Population (VSP) risk matrix for independent salmonid populations in the Upper Salmon River spring/summer Chinook MPG, with desired status shown for each population.

		Spatial Structure/Diversity Risk			
		Very Low	Low	Moderate	High
Abundance/ Productivity Risk	Very Low (<1%)	HV	U. Salmon Mainstem HV	V	M
	Low (1-5%)	V	V	Valley Creek, Lemhi, Pahsimeroi, East Fork V	M
	Moderate (6 – 25%)	M	North Fork Salmon, L. Salmon Mainstem M	Yankee Fork M	HR
	High (>25%)	HR	HR	HR	HR

Figure 3-1. Example of an Abundance/Productivity Viability Curve.

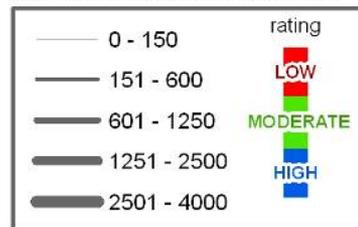


Lemhi River Spring Chinook (SRLEM)



Intrinsic Potential

Weighted Bankfull Area / 200m reach



Population

currently occupied

extirpated

Spawning Area

major

minor

no spawning area designated within population

Natural barrier (chinook)

complete

impaired access



Jun 30, 2008

20

Miles

Figure 4.4-13. Lemhi River spring Chinook population spawner abundance estimates (1957-2003).

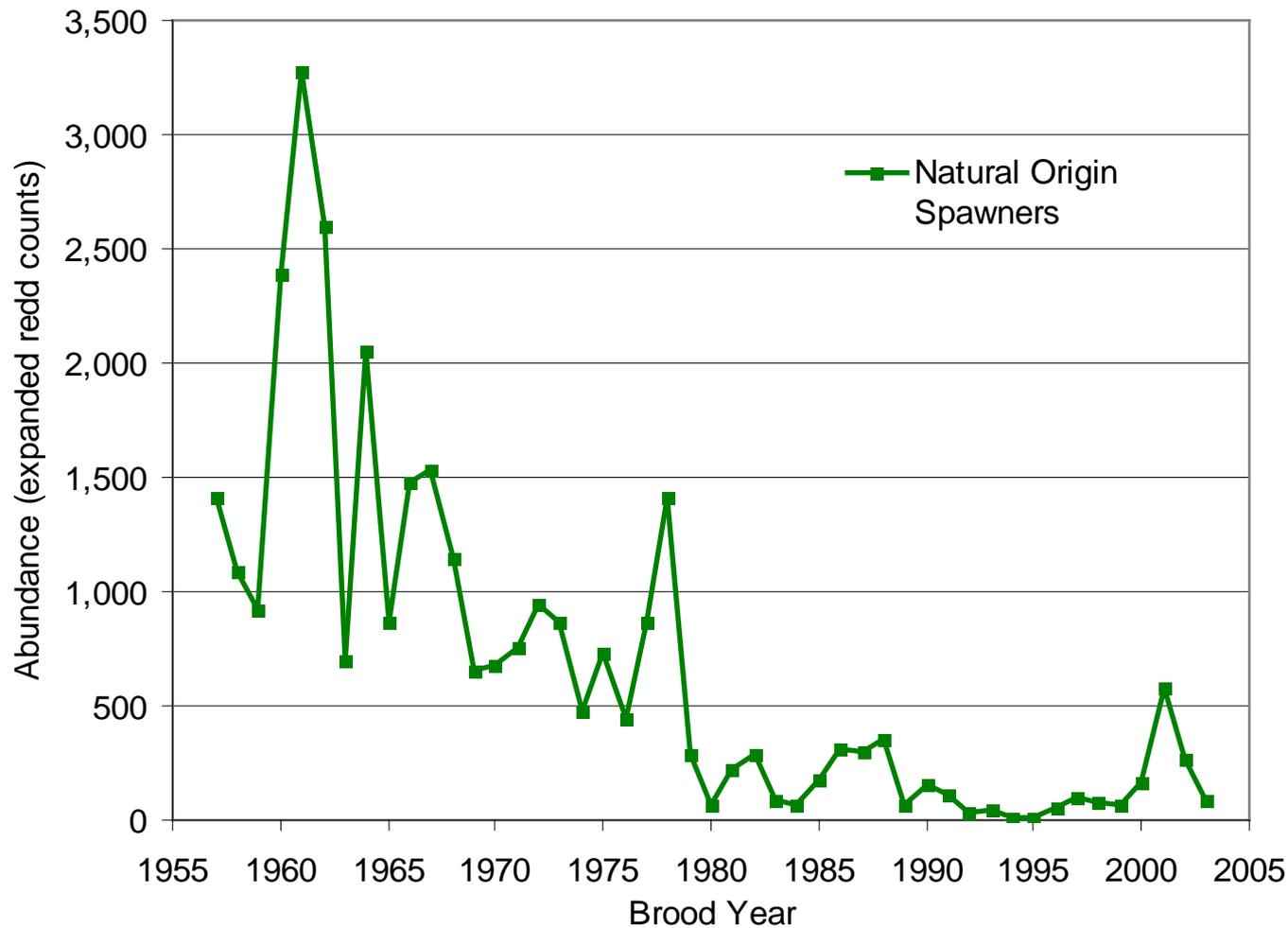


Figure 4.4-14. Lemhi River spring Chinook population current abundance and productivity compared to the ICTRT's viability curve for a very large-sized population.

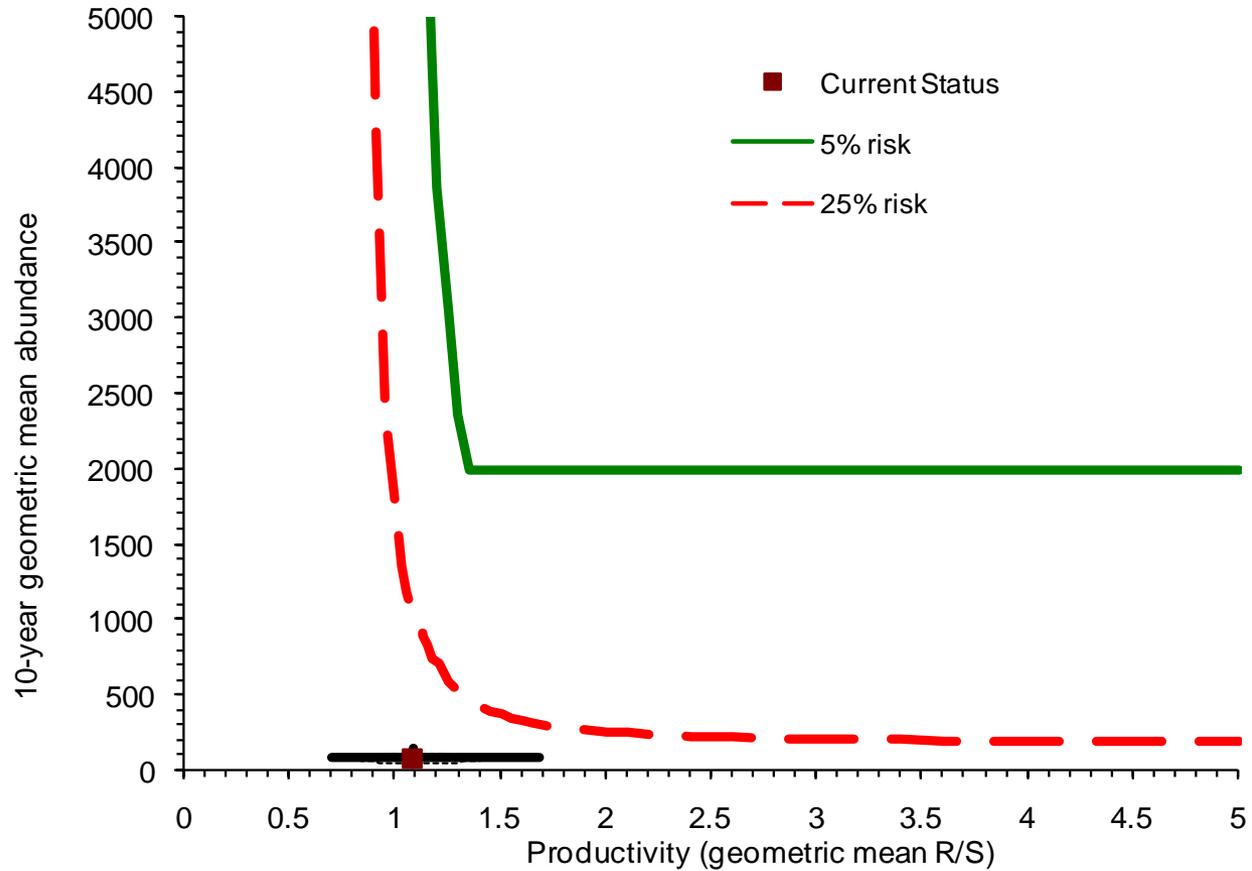


Table 4.4-14. Viable Salmonid Population parameter risk ratings for the Lemhi spring/summer Chinook population. The population does not meet population-level viability criteria.

		Spatial Structure/Diversity Risk			
		Very Low	Low	Moderate	High
Abundance/ Productivity Risk	Very Low (<1%)	HV	HV	V	M
	Low (1-5%)	V	V	V	M
	Moderate (6 – 25%)	M	M	M	HR
	High (>25%)	HR	HR	HR	HR Lemhi River

The Recovery Equation



+

Habitat Module



+

The Hydropower Module



+

The Hatchery Module



+

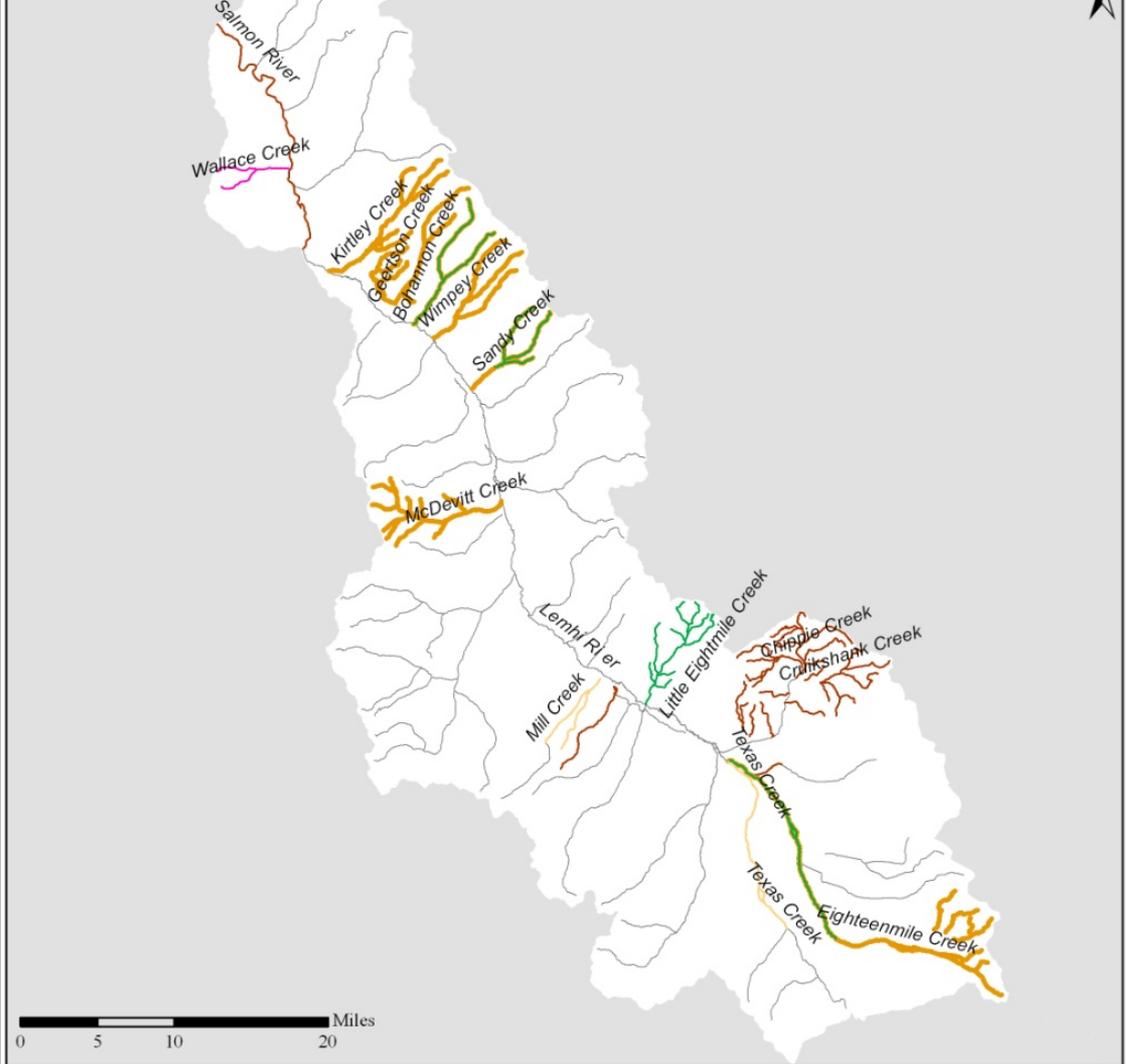
The Harvest Module



Estuary Module

= Recovery Plan

Lemhi River Spring/Summer Chinook Population



Data: Idaho Department of Environmental Quality. Idaho 2008 305(b)/303(d) Integrated Report (Final).

TMDLs

 Sediment

303(d) List

 Sediment, Temperature

 Temperature

 Sediment

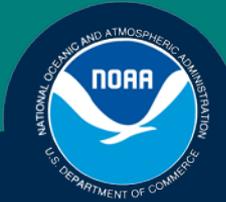
 Combined Biota/Habitat Bioassessments



Potential Habitat Limiting Factors and Threats

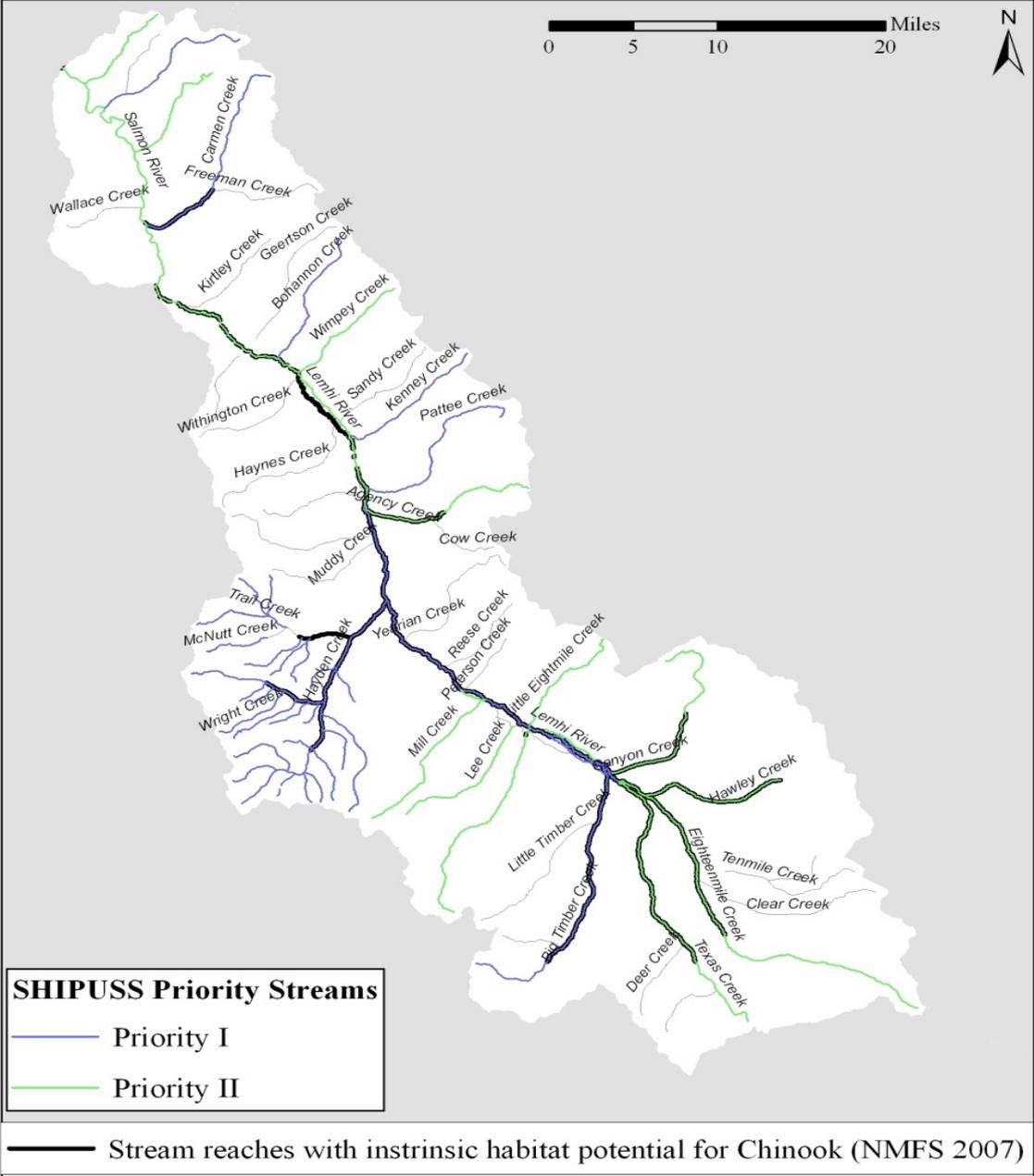
Some potential concerns have not yet risen to the level of a limiting factor, but need to be managed to protect the habitat in the Lemhi River watershed.

- 1.Reduced flows from new water use.
- 2.Floodplain and riparian degradation.
- 3.Noxious weeds.



Limiting Factors

1. Low flows during critical periods
2. Passage Barriers
3. Fish Entrainment
4. Degraded Riparian Conditions and Channelization





Recovery Actions

Listed in Priority Order

1. Increase flows in the mainstem Lemhi River.
2. Reconnect priority tributaries in the mainstem Lemhi River.
3. Screen priority diversions.
4. Improve riparian habitat conditions (implement the TMDL).

Recovery Actions Identified for the Lemhi River Spring/Summer Chinook Population.

Natal Habitat Recovery Actions

Assessment Unit (AU)	Primary Limiting Factor(s) by AU	Necessary Actions	Actions/Projects - 2008 to 2018	Cost for Identified Projects	Actions/Projects Beyond 2018	Project Costs Beyond 2020
Mainstem Lemhi River	Reduced Instream flow in the upper Lemhi River	Acquire irrigation flow by lease or purchase.	Acquire flow into the mainstem Lemhi in the upper reaches.	\$2,200,000 budgeted through 2013. Additional projects are likely, but not funded.	Acquire additional flow if necessary.	\$0
	Reduced Instream flow in the lower Lemhi River	Acquire irrigation flow by lease or purchase	Acquire 35 cfs of flow at L6 diversion using conservation agreements not to divert (35 cfs is being acquired annually)	Annual estimate of \$400,000.	Acquire additional flow if necessary.	\$0
Tributaries	Tributaries are disconnected from mainstem Lemhi R.	Acquire tributary flow and remove barriers in order to reconnect 10 tributaries.	Improve access to 23 miles of habitat. (5 tributaries already reconnected as of 2010)	Part of budget for flow improvements above.	Reconnect an additional 5 tributary streams.	\$0
	Unscreened diversions on tributaries	Install screens based on SHIPUSS priorities.	Operate and maintain priority screens in the Lemhi.	From annual budget of the IDFG Screen Shop. (Average of \$25,000 per screen)	Construct 12 new screens where needed.	
	Passage barriers creating lack of suitable habitat	Remove barriers	Remove 10 barriers (2 projects already completed, opening 25 miles of habitat)	Average cost of \$70,000 per barrier. (total \$700,000)		
All habitat (mainstem Lemhi River and tributaries)	Riparian conditions, channelization, and water quality	Implement projects to protect water quality and improve channel complexity.	11 projects involving 50 miles of habitat.	Part of budget from flow above. Will also include CWA funding from other sources.		