



Spawning

Ecology

- Spawning occurs in a wide range of habitat types, including lake outlets, larger rivers and smaller streams.
- Spawning dunes resulting from the digging of redds may be well developed in buffered systems, such as those downstream from lakes.
- Substrate requirements, redd structure and spawning behaviour have not been specifically studied in the Yukon River drainage, but have been observed to vary significantly between different areas.
- Groundwater discharge areas are not preferred for spawning.
- A redd is excavated and eggs deposited.
- Spawning is usually complete for the entire Yukon River by the end of the first week in September

Potential Limiting Factors

- Short term climatic/hydrologic variation resulting in episodic extreme high flows during the spawning period in non-buffered streams resulting in reduced stock productivity, or extreme low flows in smaller streams resulting in inadequate velocities and depth of flow for spawning adults.
- Long-term trends to lower annual flows in some spawning streams.
- Sediment from natural sources and placer mining degrading spawning habitats.
- Pre-spawn mortality related to thermal stress or increased parasitism resulting in decreased spawning success (Kocan et al. 2004; Kocan and Hershberger 2006).
- Effects of flow reductions/increases below hydroelectric dams during spawning periods.
- Loss of spawning habitat due to flooding upstream of hydroelectric dams.