Aquatic Resource Value Model

An aquatic resources value model was developed for the Central Yukon Field Office (CYFO) in conjunction with this plan as an indicator of the value of fish resources and habitat in the planning area.

Watersheds on BLM administered lands were ranked using the model after segregating the planning area into sixth level (12-digit) hydrologic units. The Hydrologic Unit Code (HUC) system was used because it provides a framework that delineates watersheds using an accepted national standard hierarchical system based on surface hydrologic features. The ranking system was developed to score the fisheries values by watershed using a combination of automated GIS modeling and professional judgment. Primary metrics considered in ranking were fish species presence (diversity), salmon and non-salmon diadromous species spawning habitat, and the presence of unique or rare fishery resources or habitat.

Based on the model, the highest ranked watersheds (i.e. those with the highest fisheries resource values within the planning area) are being used to inform decisions made during the development of alternatives (Alt. B, C, D).

Table xx outlines the ranking criteria and associated point system.

Table xx. Rank Criteria and Scoring Used to Identify Aquatic Resource Values.

Value	Definition	Score
ESA Aquatic Resources	Federally listed aquatic species are present	3 Points
Essential Fish Habitat (EFH) Present	ADF&G Anadromous Waters Catalog (AWC) GIS data served as the basis for determining if salmon species occur in the watershed.	2 Points
Fish Species Diversity	Based on reports and/or professional knowledge, determine the number of fish species occurring in the watershed.	1-2 Species = 1 Point 3-4 Species = 2 Points 5-6 Species = 3 Points 7-8 Species = 4 Points > 9 Species = 5 Points
Non-Salmon Anadromous Species Present	Using the AWC GIS data select watersheds that contain non-salmon species (whitefish, lamprey, etc.).	2 Points
Unique/Rare Fishery Resource and/or Habitat	Spawning areas for salmon and non-salmon diadromous species based on the AWC GIS data (5 pts.) and the presence of unique/rare fisheries resources (5 pts).	Potential for 10 Points