

*Core Watersheds of Biodiversity  
Value for Conservation of*

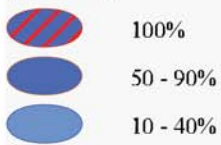
**Pacific Salmon and  
Steelhead**

**in Southeast Alaska\***

For the purposes of prioritizing sites for conservation of biodiversity, we used the Marxan Decision Support Tool to identify the set of watersheds that contain the highest percentage of habitat for all species of Pacific salmon with minimum total area

*\* Only portions of transboundary watersheds within Southeast Alaska were considered in this analysis.*

**Frequency of selection using Marxan Spatial Optimization Tool**



We conducted 100 repeat trials of 10,000,000 annealing iterations. The frequency with which any watershed was selected as part of the "best" solution was interpreted as an index to the irreplaceability of that watershed in a conservation strategy for salmon in this region.

**Goals:**

Representation goals were based on relative rarity of salmon species such that each species had equal influence on overall portfolio.

- King salmon (80%)
- Sockeye salmon (70%)
- Steelhead (60%)
- Coho salmon (40%)
- Chum salmon (40%)
- Pink salmon (35%)

**Cumulative Distribution of Salmon Species:**  
A tool for setting conservation goals

