CDN-Yukon harvest-diversity simulations

2019-08-25

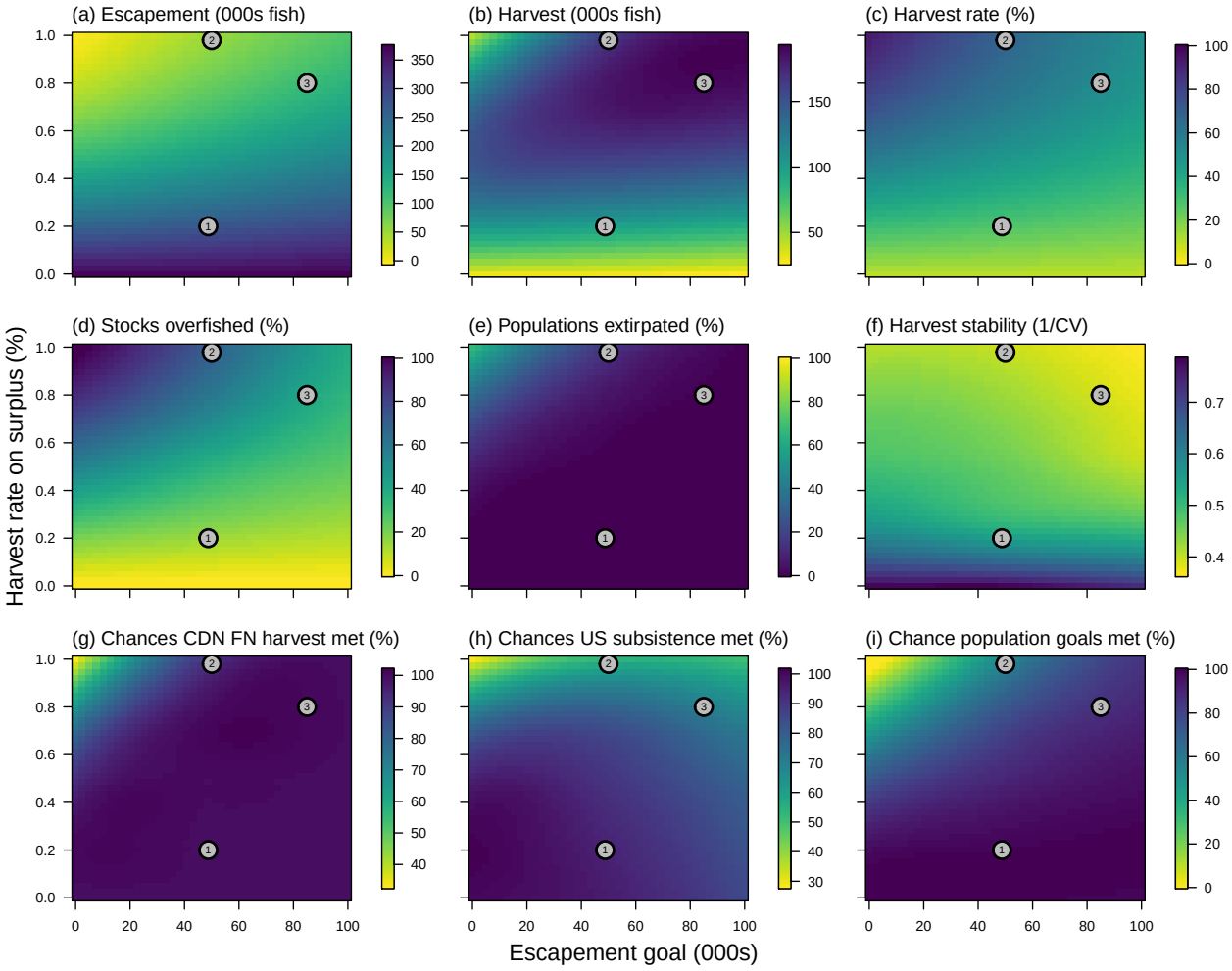

Figure 1. **Predicted consequences of alternative harvest policies**. Each policy is defined by a combination of basin scale harvest (y-axis) and escapement goals (x-axis). Performance measures (z-axis) are calculated over the last 20 years of each Monte Carlo trial (500 in total), which project stock dynamics 50 years forward in time, and correspond to (A) median harvest (in thousands of Chinook salmon), (B) harvest stability (1/ coefficient of variation [CV] in harvest), (C) proportion of sub-stock tributaries with spawner abundances that exceeded a tributary specific spawner target (S_{MSY}) and (D) proportion of sub-stocks extirpated. Three illustrative harvest policies are overlaid on each panel: (1) a policy that seeks to maximize yield, (2) a fixed harvest policy corresponding to minimum subsistence needs and (3) a policy that seeks to reduce biological risks to sub-stocks while also achieving relatively high harvests.

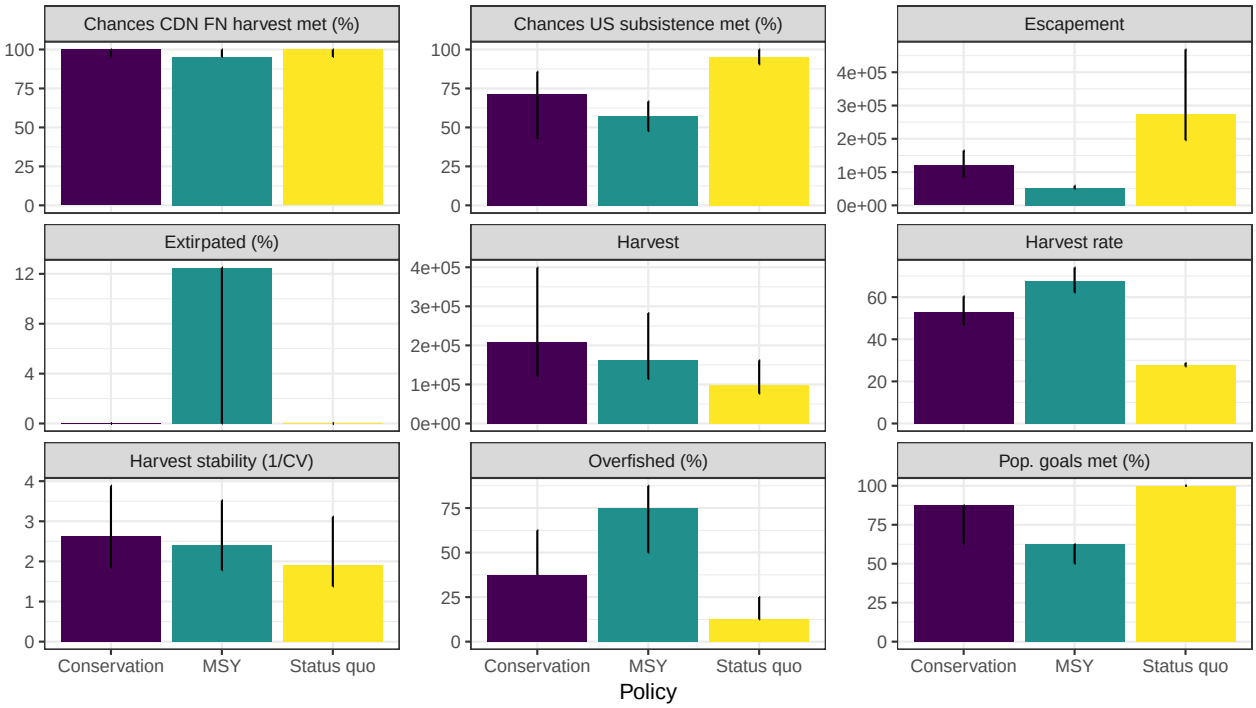

Figure2. **Harvest policy performance**.