Appendix 5

Mean population growth and extinction probability surfaces for simulated resource population growth rates of 0.1 and 0.3.

Predicted patterns of management outcome for different combinations of management bias and user compliance are similar to those shown for a population growth rate of 0.2 in Fig. 3 in the main text. This indicates that predicted patterns are not sensitive to choice of resource population growth rate.

![Fig. A5.1](image)

**Fig. A5.1.** Mean population growth and extinction probability over a 10-year management period as a function of decision-making bias and user compliance for simulated intrinsic population growth rates ($r$) of 0.1 and 0.3. Decision-making bias ranges from entirely pro-user (-1, harvest is always unregulated) to pro-conservation
(+1, harvest is always banned), with 0 representing a scenario in which manager quota decisions cannot be lobbied. When user compliance is 0, users will always partake in illegal harvesting while a value of 1 ensures users will fully comply with the quota put forward by the manager (post-lobbying). The 2D contour surfaces were obtained from generalized additive models with decision-making bias and user compliance specified as tensor product smooths. Dashed vertical lines (light grey and red) denote unbiased management decisions.