Trade-off: catch/biomass

Six management procedures (MP1-MP6). Median in final year of 2020-2040 projection.

Best scores
MP3
MP2 MP4

SUMMARY OF RESULTS

Management Procedure 3 (MP3) performs best, scoring well for both performance metrics over the 20-year projection period. While MP2 scores highly, biomass is above the target reference point, and fishing mortality could be higher. MP1 and MP5 do not perform well for either performance metric as a result of overfishing.

READING THIS CHART

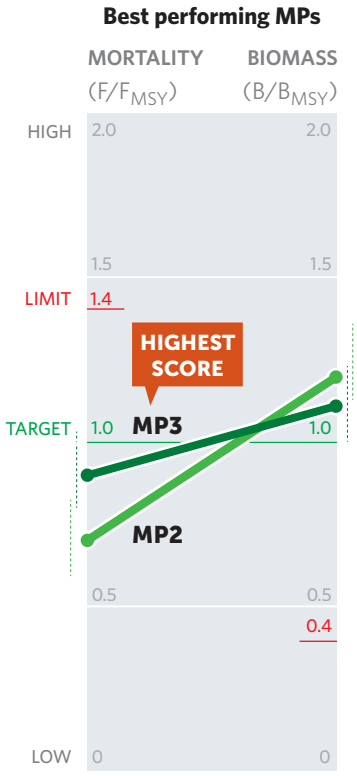
The chart compares trade-offs in **six management procedures (MPs)** for X operating models by measuring two co-dependent performance metrics: **fishing mortality** (left axis) and **biomass** (right axis). MPs are grouped in smilar pairs, from best to worst performance. A Zero Catch option is shown for comparison.

- The **dots** represent the median value for the final year of the projected period 2017-2040. **Dotted lines** next to the dots are error bars representing 90th percentiles.

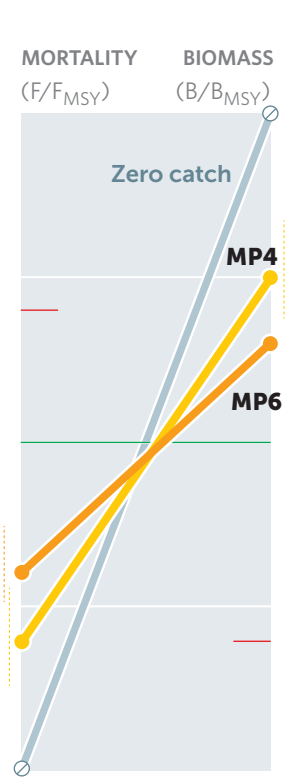
Performance metrics measured

F/F_{MSY} Fishing mortality relative to fishing at maximum sustainable yield

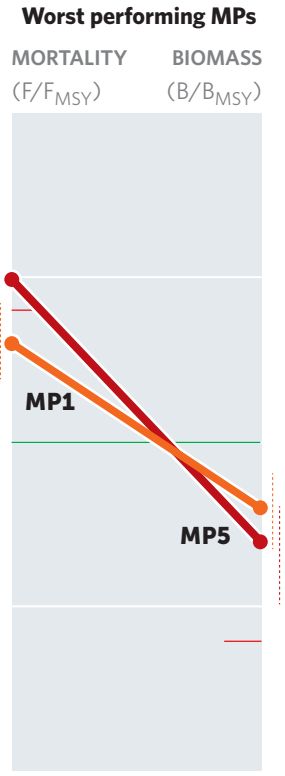
B/B_{MSY} Biomass relative to the biomass that enables a fish stock to deliver the maximum sustainable yield



Both indicators are near their targets. Lines like this (nealy horizontal and closer to the target) are preferred.



The MPs show inefficient or insufficient fishing since abundant biomass can sustain higher mortality rates.



Overfishing makes these MPs unsustainable.

RESULTS RANKING

	F/F_{MSY}	B/B_{MSY}
MP3	**0.9**	**1.1**
MP2	0.7	1.2
MP4	0.4	1.5
MP6	0.6	1.3
MP1	1.3	0.8
MP5	1.5	0.7