

Management Alternatives Table Summary

The Management Alternatives table was developed by the project team based on stakeholder input at workshops three and four, and with guidance by the PDT and SSC. Four general management alternatives were selected, progressing from status quo to “all-in.”

1. Single-species assessment and management with no adjustment of reference points for underlying operating model dynamics.	Status Quo
2. Single-species assessments and catch advice with dynamic reference points (building from the groundfish MSE work).	
3. Stock complex assessments with ceilings and floors based on abundance index thresholds.	
4. Stock complex assessments with dynamic ceilings and floors.	All-In

Additional MPs build from these four, with specification of an alternate value for 1 or more decision points. Management alternatives 1 and 2 include single-species assessments with no stock complex aggregations. Alternatives 3 and 4 include stock complex assessments and will be run as trophic-and-gear-based complex aggregations as well as primarily-gear-based complex aggregations.

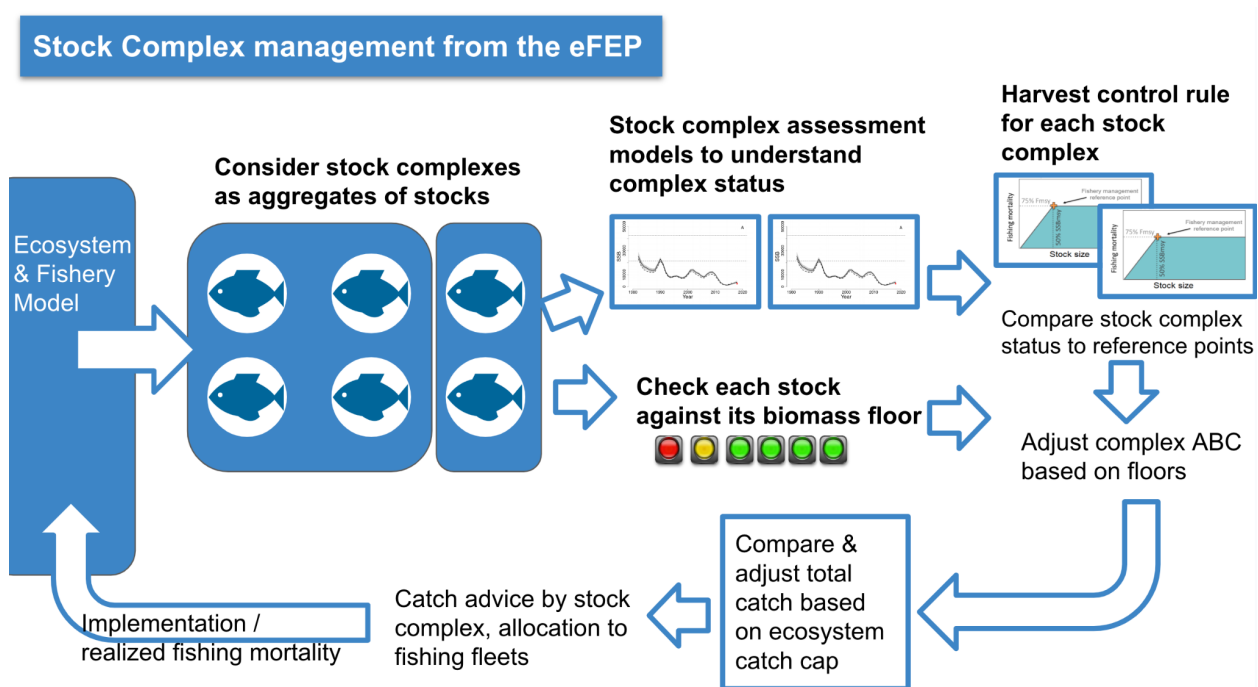
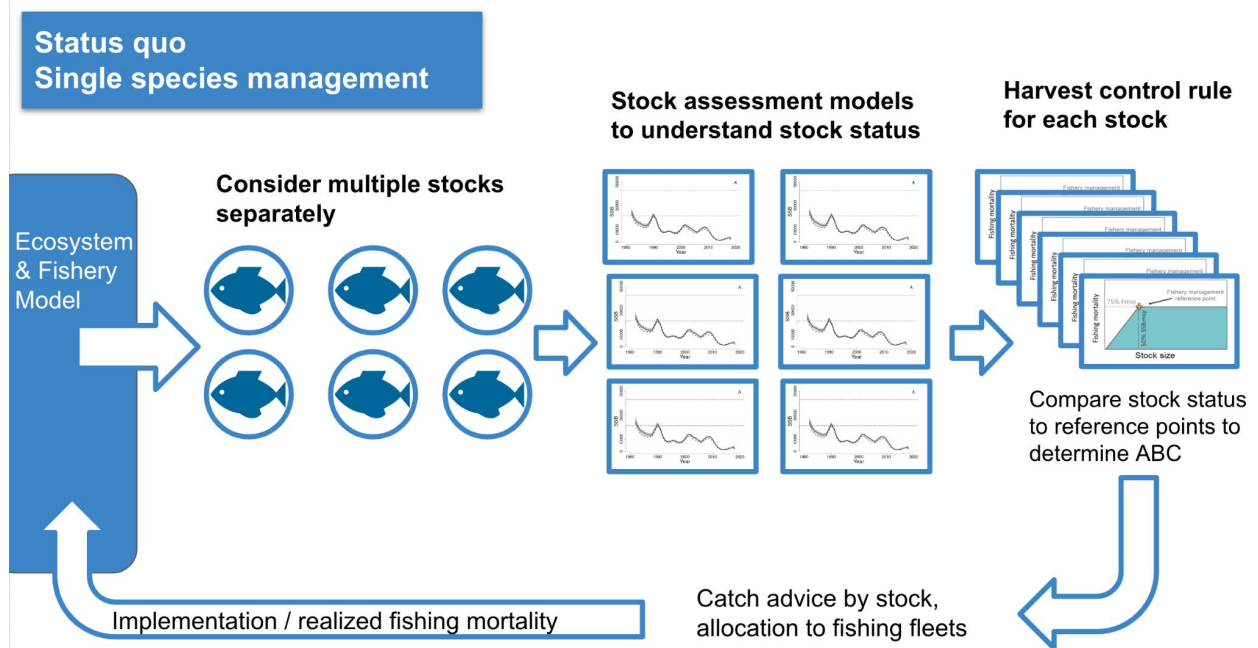
Constant across the four management alternatives:

- Observation model uses representative error with no bias.
- Advice frequency is every two years.
- Information lag between OM and MP is one year.
- No retrospective pattern adjustment of assessment results.
- Target fishing mortality rate for control rules is 0.75 FMSY (or it's proxy).
- Trigger level for ramping down F is 0.5 BMSY.
- Maximum magnitude in ramp down of F is 100% (ie F can be reduced to zero).
- The value at which the minimum F is applied will be 0.05 or 0.1 BMSY.

Ceiling and floor metrics apply to stock complex-based management alternatives 3 and 4 but are not used for single-species based alternatives 1 and 2. There are ceilings and floors at the stock complex level as well as a floor for the stocks within the complex. Floors for individual species trigger reducing F on the complex. Stock complex-based MPs include:

- Ecosystem catch cap ceilings are productivity based at FMSY (ecosystem MSY)
- Species floors are index-based thresholds.
- Value of the floor is 0.5 the historical average.

- Decision to apply floor adjustment to stock complex catch advice is one out all out, with a linear ramp to zero scaling of stock complex catch advice when a stock in the complex is assessed to be below the floor.
- An alternative procedure will remove stocks from their complexes and manage independently when assessed to be below their floors, and integrated back into the complex when the stock is above the floor again.



	Demersal Trawl	Fixed Gear	Pelagic Trawl
<i>Dogfish</i>	X	X	X
<i>Winter Skate</i>	X	X	
<i>Goosefish</i>	X	X	
<i>Silver Hake</i>	X		X
<i>Cod</i>	X	X	
<i>Haddock</i>	X	X	X
<i>Yellowtail Flounder</i>	X		
<i>Winter Flounder</i>	X		
<i>Herring</i>	X		X
<i>Mackerel</i>	X		X

Grouping 1

	Demersal Trawl	Fixed Gear	Pelagic Trawl
<i>Dogfish</i>	X	X	X
<i>Winter Skate</i>	X	X	
<i>Goosefish</i>	X	X	
<i>Cod</i>	X	X	
<i>Haddock</i>	X	X	X
<i>Winter Flounder</i>	X		
<i>Yellowtail Flounder</i>	X		
<i>Silver Hake</i>	X		X
<i>Herring</i>	X		X
<i>Mackerel</i>	X		X

Grouping 2