

SSC REPORT SUSTAINABLE FISHERIES – ECOSYSTEM COMMITTEE

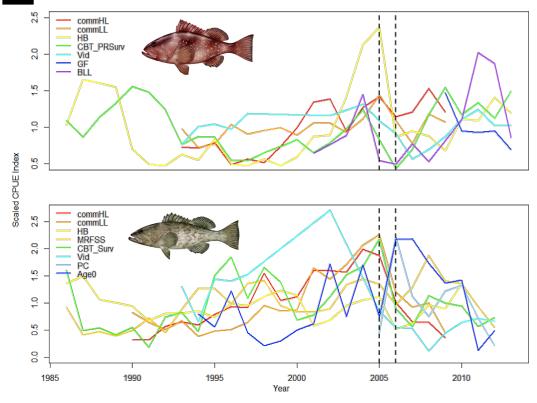


INTEGRATED ECOSYSTEM ASSESSMENT (IEA)

 Presentation to SSC on how Management Strategy Evaluation (MSE) could be applied to an ecosystem model to evaluate the impacts of various management strategies on single-species management



GROUPERS AND RED TIDE





GULF COUNCIL MOTIONS REPORT June 27 2014, Key West

 To have the GOM IEA program work with the Standing and Ecosystem SSC's to evaluate the current red grouper harvest control rule to determine if it is robust to possible future changes in intensity and frequency of episodic events of non-fishing mortality

MANAGEMENT STRATEGY EVALUATION

IEA group requested SSC feedback on:

- Developing an management strategy evaluation (MSE) approach that is beneficial to the SSC
- Key uncertainties faced by SSC
- Types of harvest control rules
- Identifying priority performance metrics



IF A SEVERE RED TIDE EVENT WAS TO OCCUR IN THE NEXT 3 YEARS...

- Are we prepared for future changes in frequency of red tides?
- Are there biological and economic trade-offs?
- Are assessment time lags important?
- How do these issues relate to creating an ABC control rule?

PERFORMANCE METRICS

Avoid overfished state

"Rebuild declining stocks whenever they occur" Reef Fish FMP

"...achieve at least 20 percent spawning stock biomass per recruit."

Reef Fish FMP

Avoid risk of collapse

Net Present Value of catch

"Maximize net economic benefits from the reef fish fishery" Reef Fish FMP



MSE AS A <u>PROCESS</u>, NOT A PRODUCT

Additional dimensions to incorporate into red tide MSE:

- Red tide magnitude & frequency
- Stock assessment uncertainty (imprecision)
- Frequency of assessment
- Implementation uncertainty (i.e. ACLs)



NEXT STEPS

- SSC discussing formation of a workgroup to increase integration with IEA group at SEFSC
- IEA group will be back in 2016 with an update based on SSC input

