



# Strengths/Successes and Weaknesses/Challenges in Fish Stock Assessment

(from Day 2)

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External Review of Fisheries Stock Assessments

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(Day 2)

## Strengths/Weaknesses: Prioritization & Process



- Have ACLs in place for all managed stocks/complexes
- Existing ACLs can serve until replaced with improved values
- Interact with Council regularly to agree on some (not all) priorities
- Work collaboratively with international, state, and territorial partners to provide trans-boundary assessment and science advice
- Need a formal process like the NRCC where PIC and Council heads prioritize and schedule benchmark & update assessments
- Have too many federally “managed” (ACL) stocks and stock complexes that have little or no exploitation in federal waters
- Need formal process for federal consultation with State and Territorial managers on the direction and execution of management measures for trans-boundary stocks



(Day 2)

## Organization and

# Strengths/Weaknesses: Accomplishments

- Have succeeded in recruiting new staff to do stock assessment
- Created University of Hawaii professorship to build stock assessment capacity through education
- Attracting high quality grad students screened by NMFS
- Using graduate students at the U of Hawaii and HI Pacific University to conduct stock assessments
- Need a national training program
- New staff require mentoring and this mostly involves our own more-experienced, busy staff
- The Universities lack actual stock assessment expertise, and so require assistance of our staff
- Many other demands on our stock assessment staff (regional science planning, solving data issues, designing surveys, time consuming participation in international meetings)

## Strengths/Weaknesses: Stock Assessment



- Thorough and insightful exploration and interpretation of data and structurally and statistically sophisticated modeling to produce HMS and bottomfish stock assessments
- Well documented, reviewed stock assessments, with alternative assumptions, sensitivity analyses, and risk assessment provided to fishery managers
- Recreational catch estimates support prev. assumptions
- Lack of fishery-independent information on abundance and mortality of insular species that could be provided by surveys, age structure, and tagging data
- Perhaps too few degrees of freedom for output in assessments relying exclusively on fishery-dependent data
- Need for simulation studies to verify that outputs are credible
- Need to assess individual species and use size frequency information in bottomfish assessments.
- Recreational catches still uncertain

(See specific powerpoints for SWOT on striped marlin and deep 7 assessments)