Science, Service, Stewardship



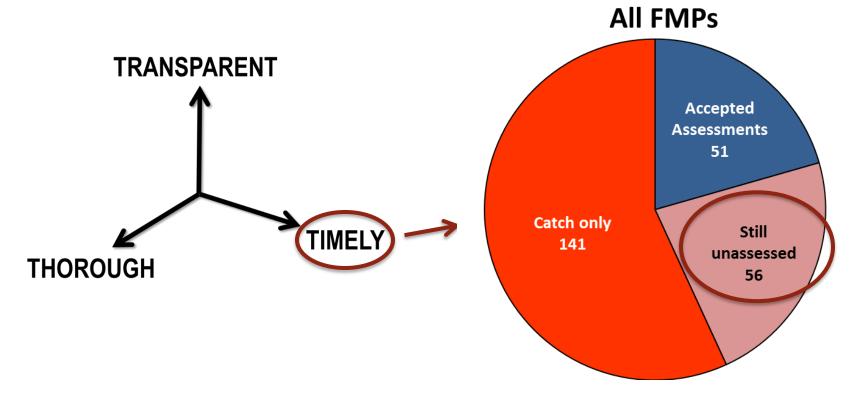
Getting the Research Track Back on the Rails (or Lay New Tracks)



NOAA FISHERIES SERVICE

The original problem: Balancing the three T's

Existing combination of benchmark, standard and update assessments was very transparent, reasonably thorough, but too slow for the demand





Old process

Benchmark Assessment

Intended to complete a thorough evaluation that accommodates the input of stakeholders and reviewers while under strict deadlines for providing management advice

Standard

Address specific concerns (expressed in the TORS) without deviating too much from previous benchmark

Update

Deviates as little as possible from previous benchmark

New process

Research Assessment

Structured like a Benchmark, but focused on concepts, data sources and model structures, not producing results and managment advice

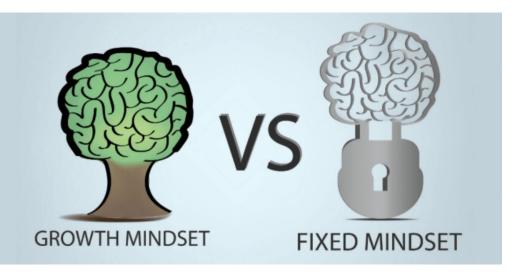
Operational Assessment

Like Standard and Update assessments: Conducted by designated analysts using a suite of previously reviewed procedures and data sets to produce timely management advice.



Research Track Stuck in a Benchmark Mindset

- Heavy focus on reviewing details of well-known data sets, requiring frequent data draws
- Tendency to favor complicated models and incorporate even relatively uninformative data sets
- Heavy focus on model diagnostics (reinforcing data calls)
- Not as collaborative (many ideas, but work generally left to lead assessment agency)





Option 1: Move back to original intent of RT

- Use previous draws/reports of well-known data sets and limit new data draws
- Employ Occam's razor: law of parsimony
 - Develop the simplest model that can deduce the essential dynamics of a system from the most informative data sets
 - Don't chase noise
- Leave model diagnostics to the operational assessments
 - Techniques well-known
 - Results may change with new data
- Assessment agency cannot investigate every angle
 - Consider SEDAR procedural workshops or CIE desk reviews for new data or analyses that go into multiple assessments

Option 2: Assessment Track Revisioning

If the original intent of the Research Track is not desirable for assessed species, then:

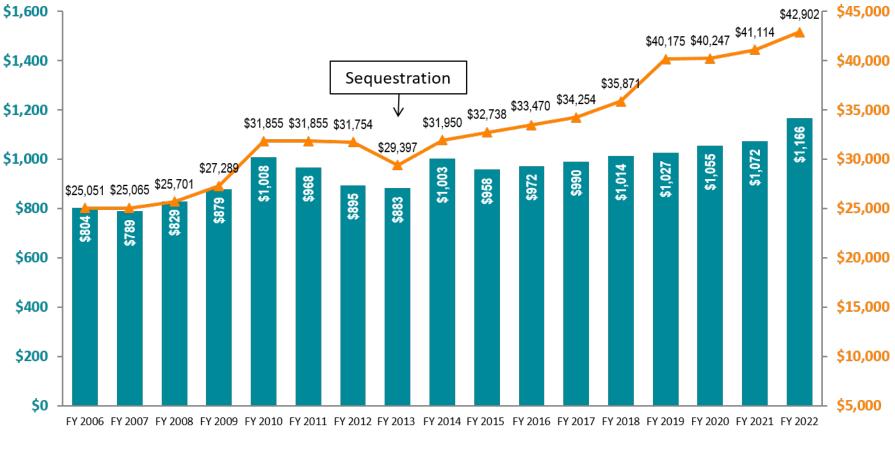
- Limit Research Track assessments to first time assessments or previous assessments that need to start from scratch.
- Retool Operational Assessments to accommodate broader range of changes
 - OAs may be as time-intensive as a Benchmark or as short as an Update, depending on the number of data or modeling issues needing investigation through Topical Working Groups
 - Use Labor Time Guide to better plan time required to complete each level of assessment

Looking forward:

NMFS

(\$ millions)

Historical Budget Trends of NMFS and Councils/Commissions PPA





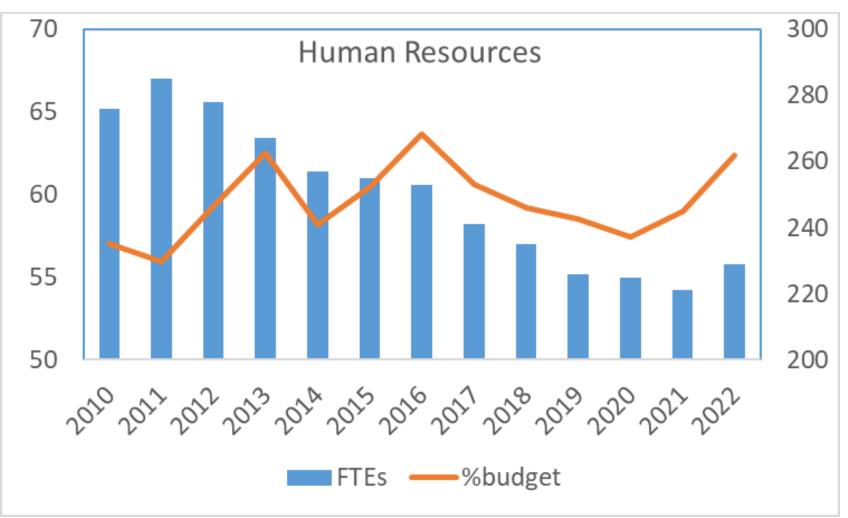
Councils & Commissions

(\$ thousands)

Total NMFS Budget (ORF + All Other)

Looking forward:

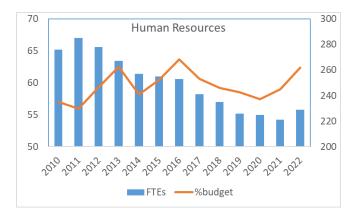
• Declining human resources at SEFSC





Looking forward:

- Declining human resources
- Increasing partners



- Increasing cooperative research and citizen science
 - Advanced technology (automated image analysis etc...)
 - Improved systems handling data (automation)
- Portfolio of approaches, including simpler methods using most informative & reliable data (Assessment 2025)



Challenges

Solutions