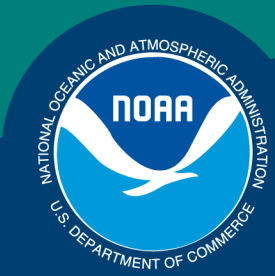
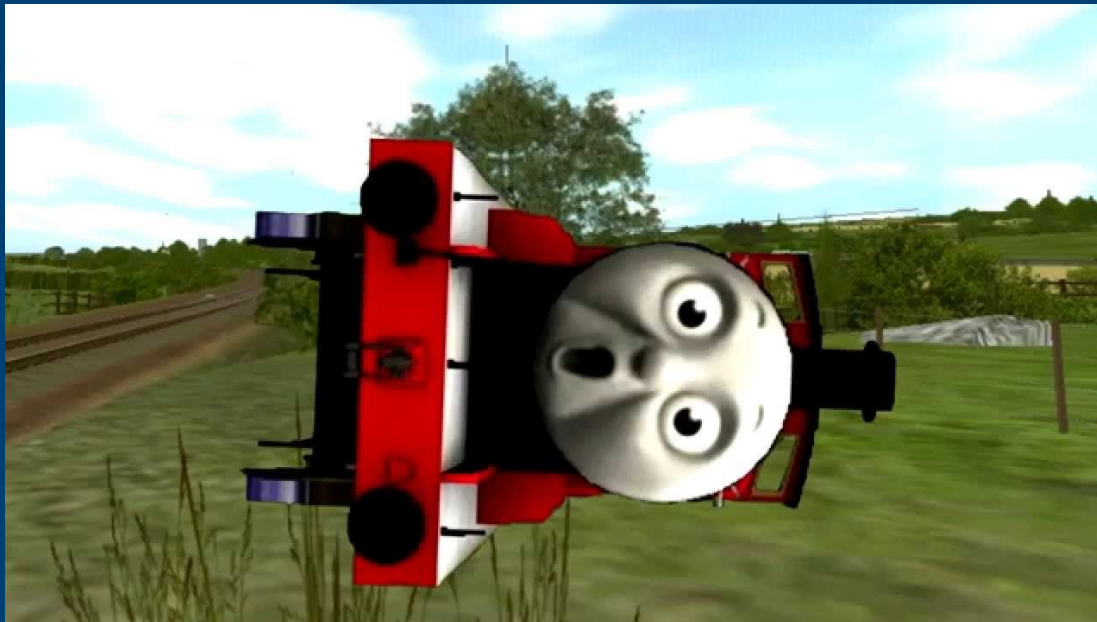


*Science, Service, Stewardship*



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

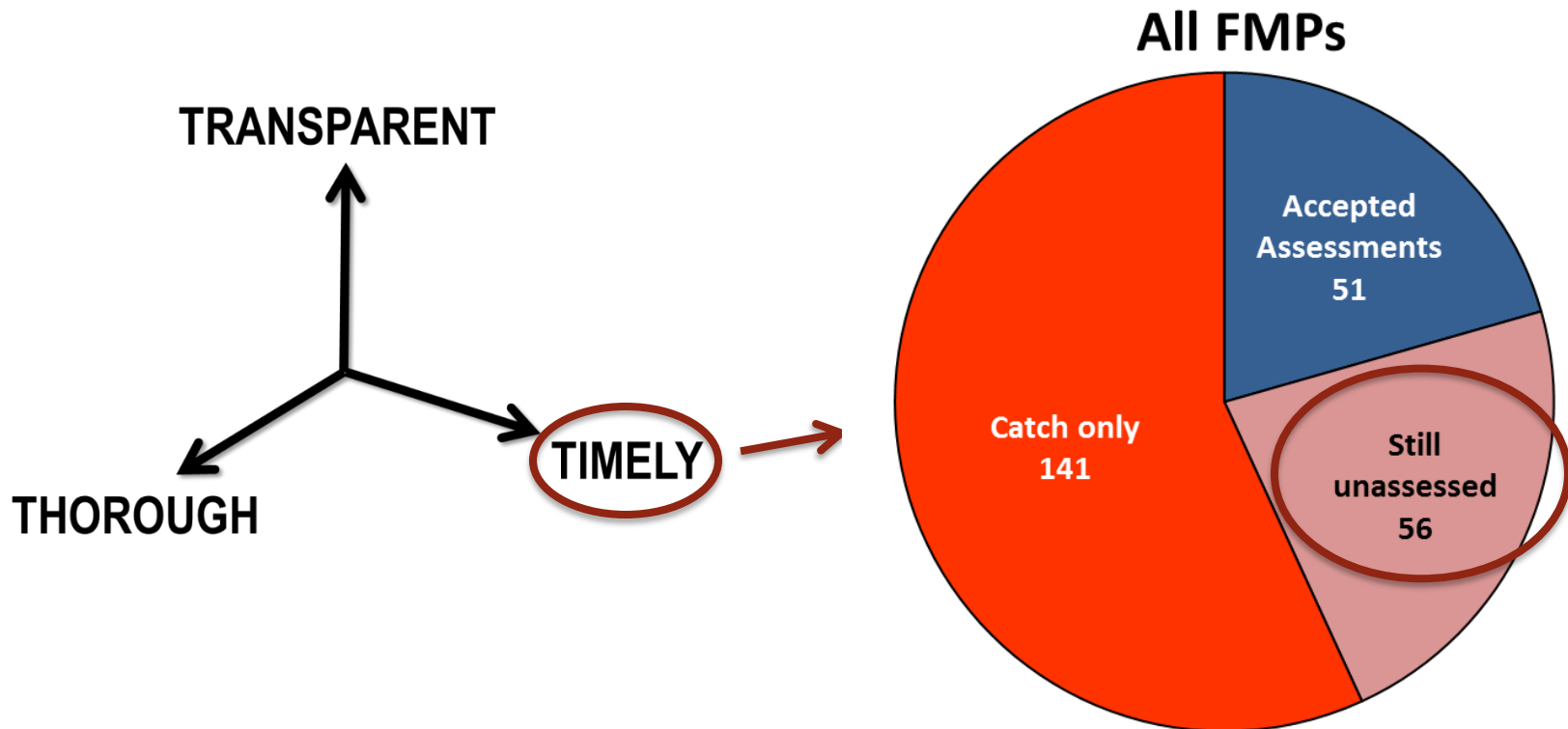
NOAA



**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

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## Benchmark Assessment

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



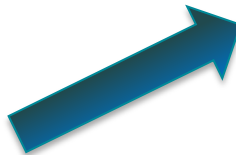
## Standard

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

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## Research Assessment

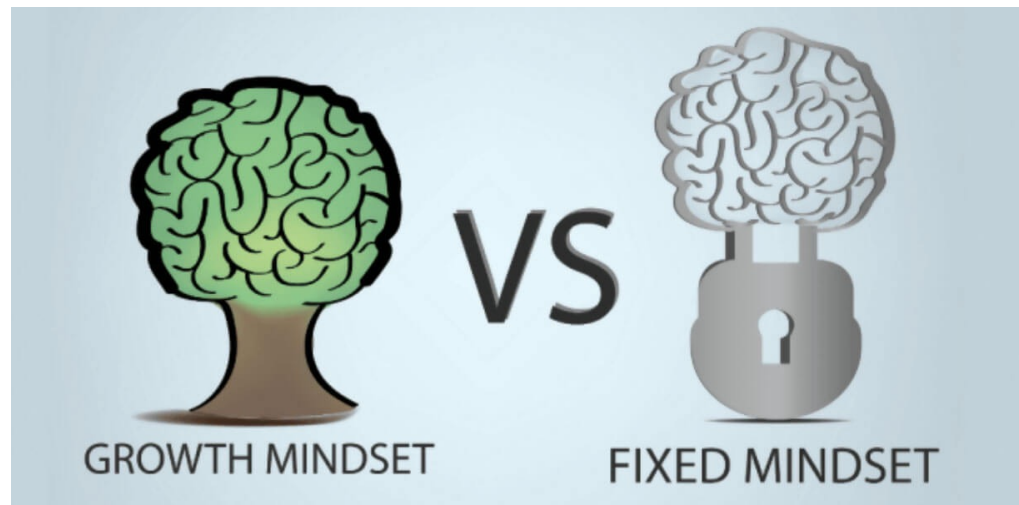
Structured like a Benchmark, but focused on concepts, data sources and model structures, not producing results and management advice

## 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:

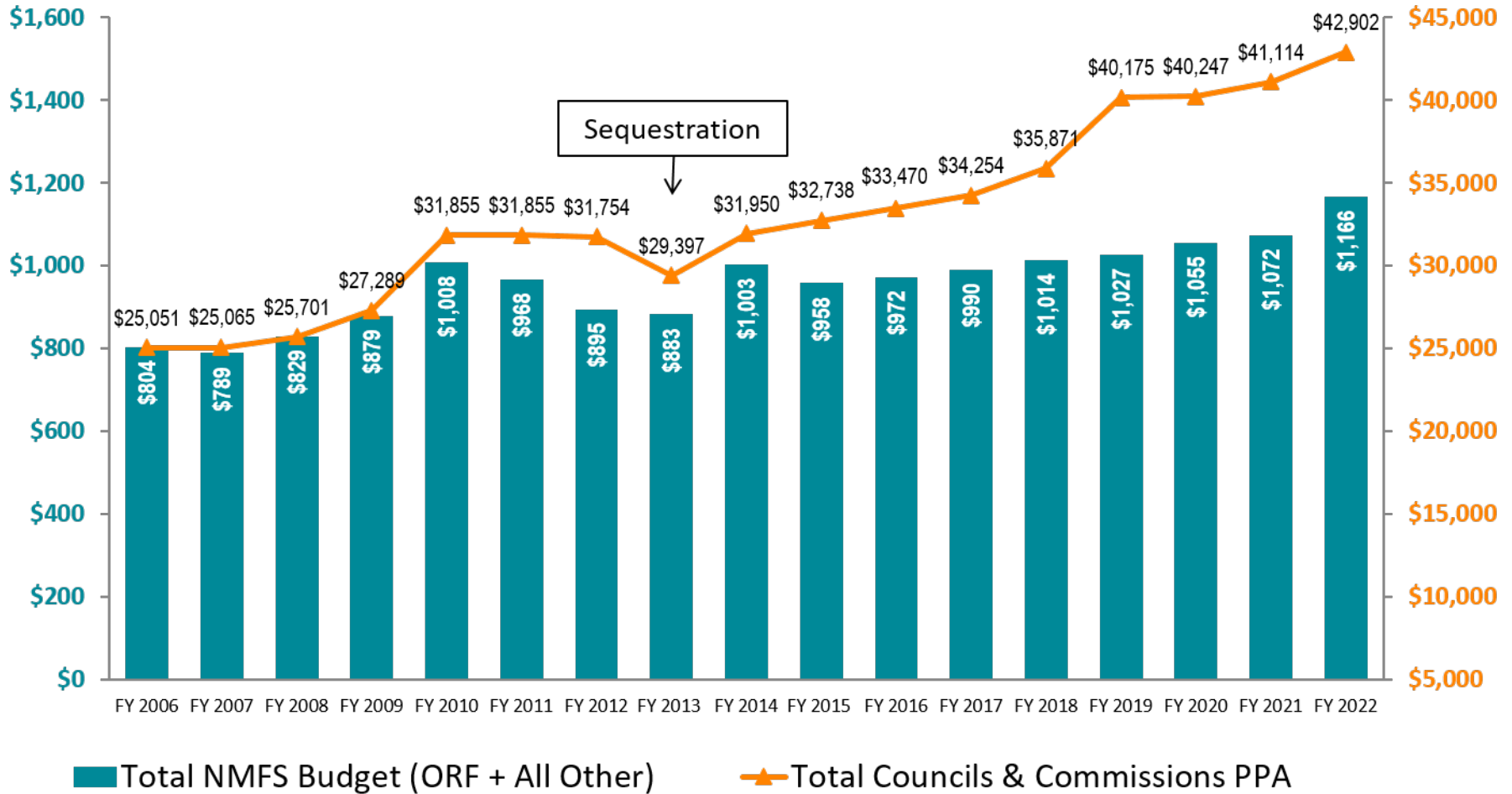
- Limit Research Track assessments to first time assessments or previous assessments that need to start from scratch.
- Retool Operational Assessments to accommodate broader range of changes
  - OAs may be as time-intensive as a Benchmark or as short as an Update, depending on the number of data or modeling 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)

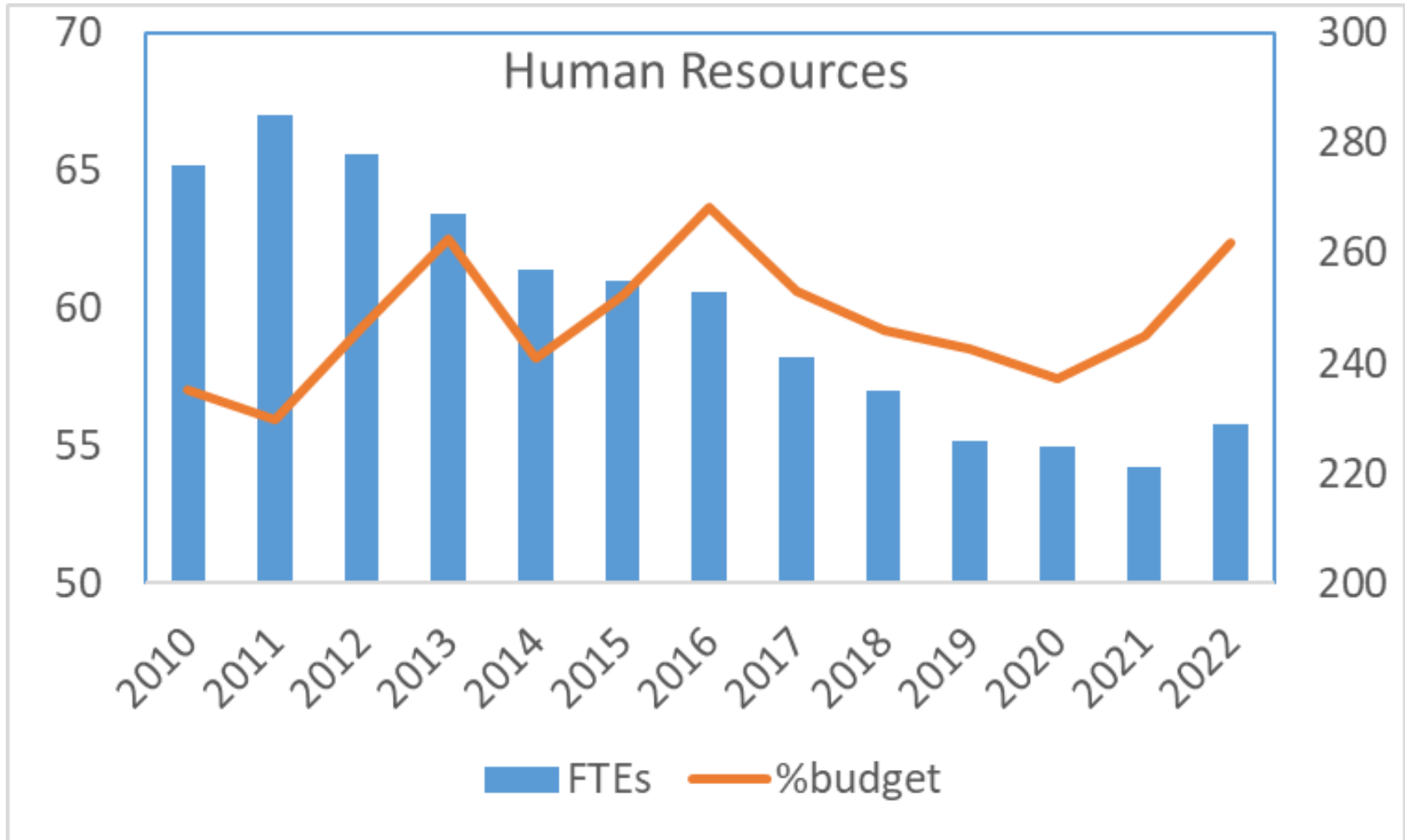
## Historical Budget Trends of NMFS and Councils/Commissions PPA

Councils & Commissions  
(\$ thousands)



# Looking forward:

- Declining human resources at SEFSC

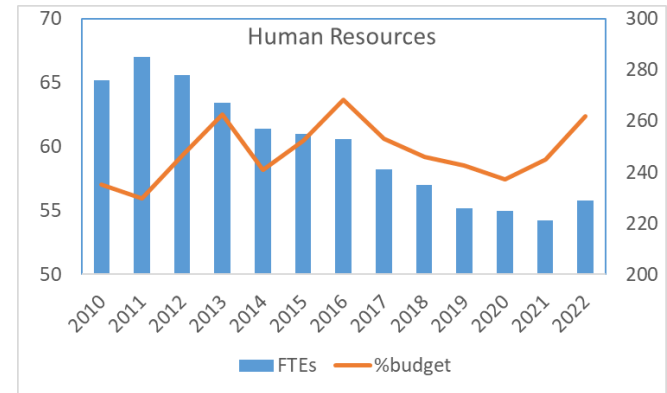




# Looking forward:

## Challenges

- Declining human resources
- Increasing partners
- Increasing cooperative research and citizen science



## Solutions

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