



**NOAA
FISHERIES**

NW Fisheries

Science Center

Balancing Assessments, Research, Science Engagement -NWFSC

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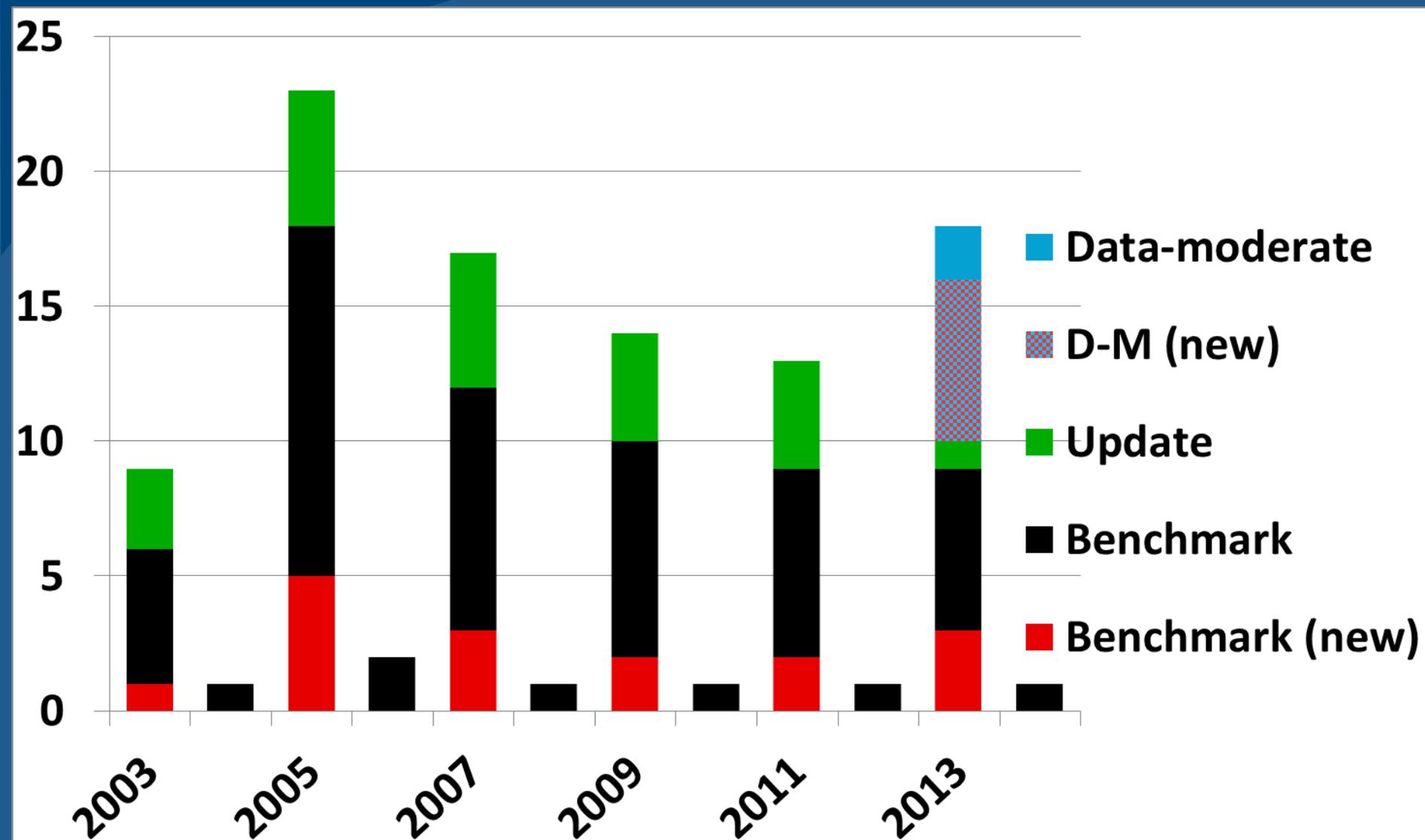
Overview

- Assessment scientists do assessments (!)
- Assessment scientists do more than just assessments (!!)
 - General and assessment-improvement research
 - Scientific engagement:
 - Council process
 - Agency committees
 - Other Service

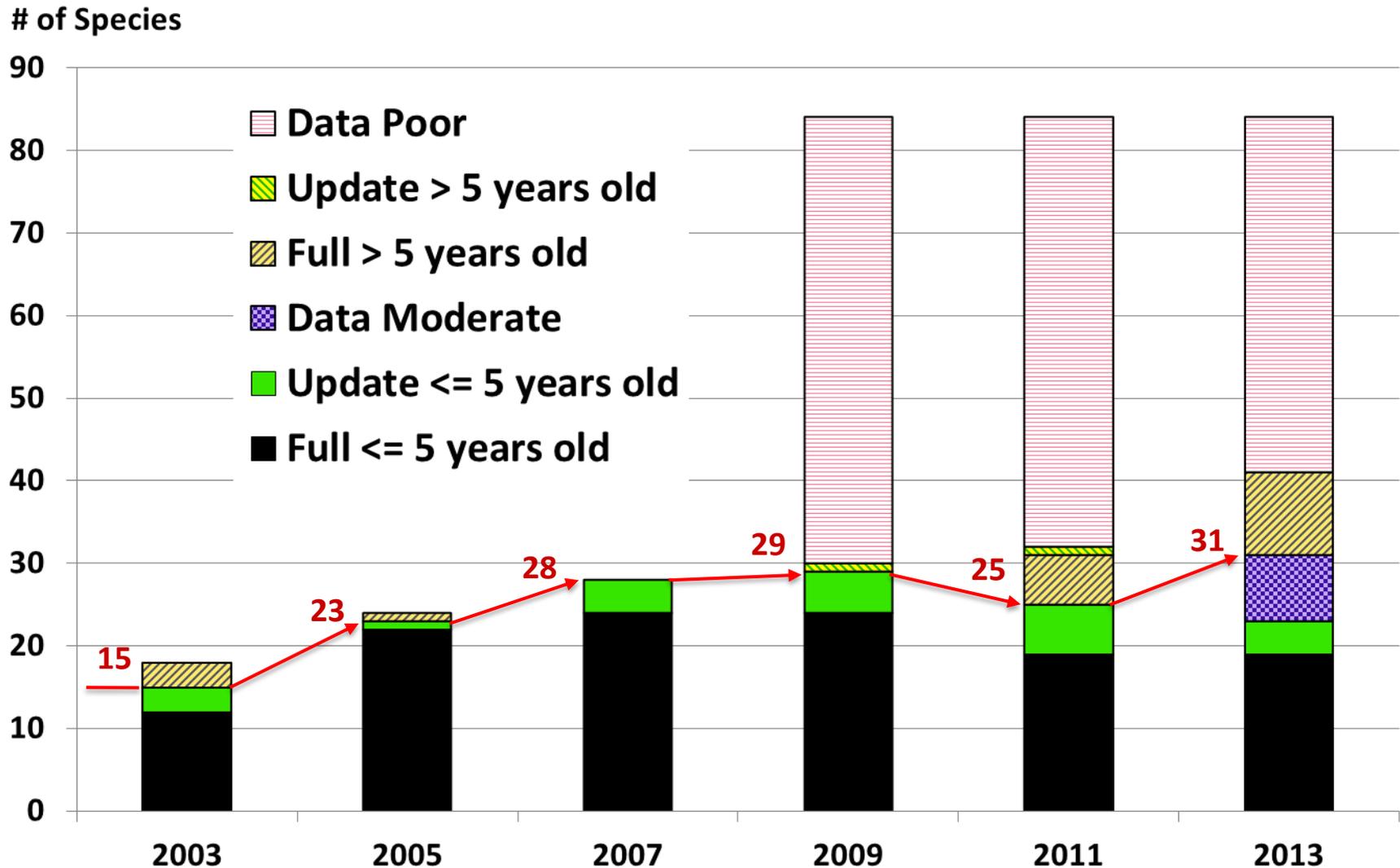
Are we striking a good balance?

- **Assessments**
 - Considerable strides have been made
 - #s of adequate assessments & other OFL support
 - Continuous progress on assessing new species

Annual Assessments, by Type



Assessment Freshness and Type



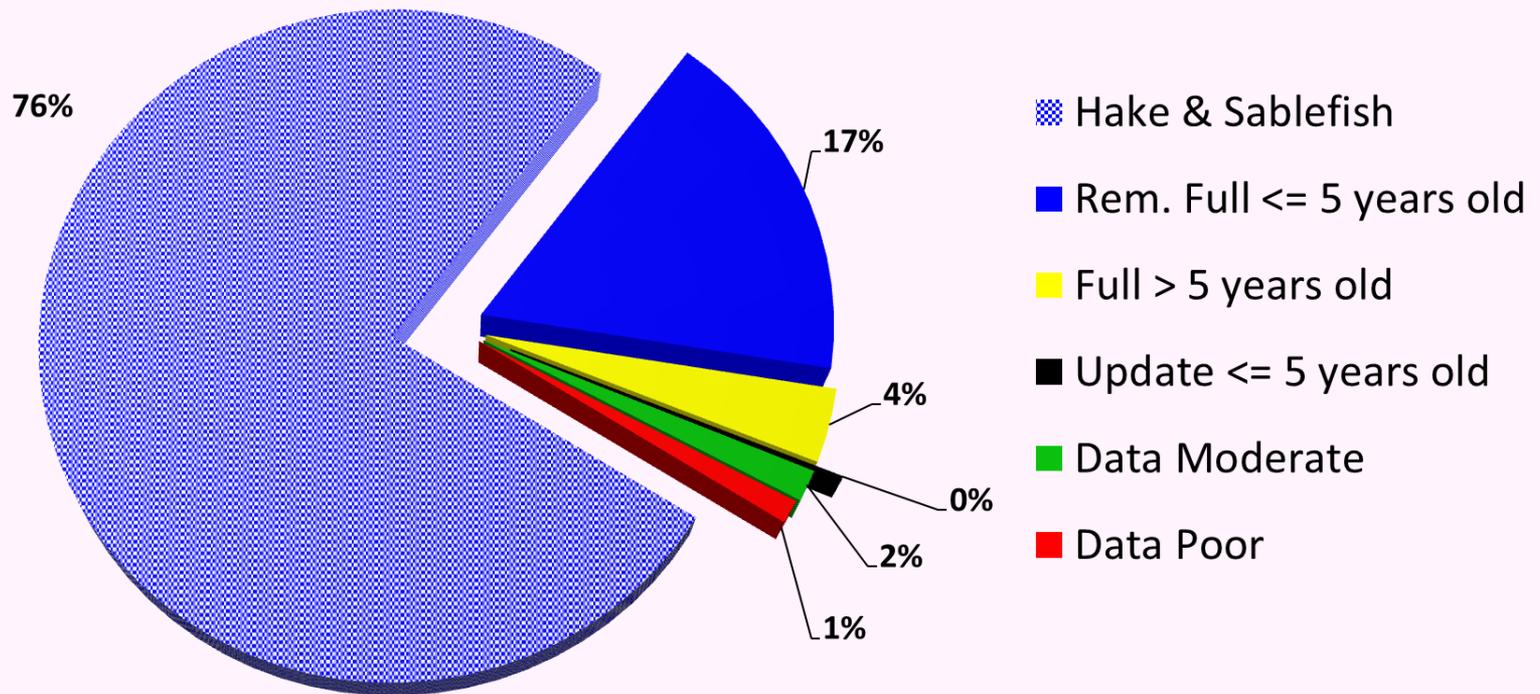
'Type' assignment based on most recent assessment at each point in time
Number of species with "adequate" assessments <=5 years old shown in red

Are we striking a good balance?

- **Assessments**

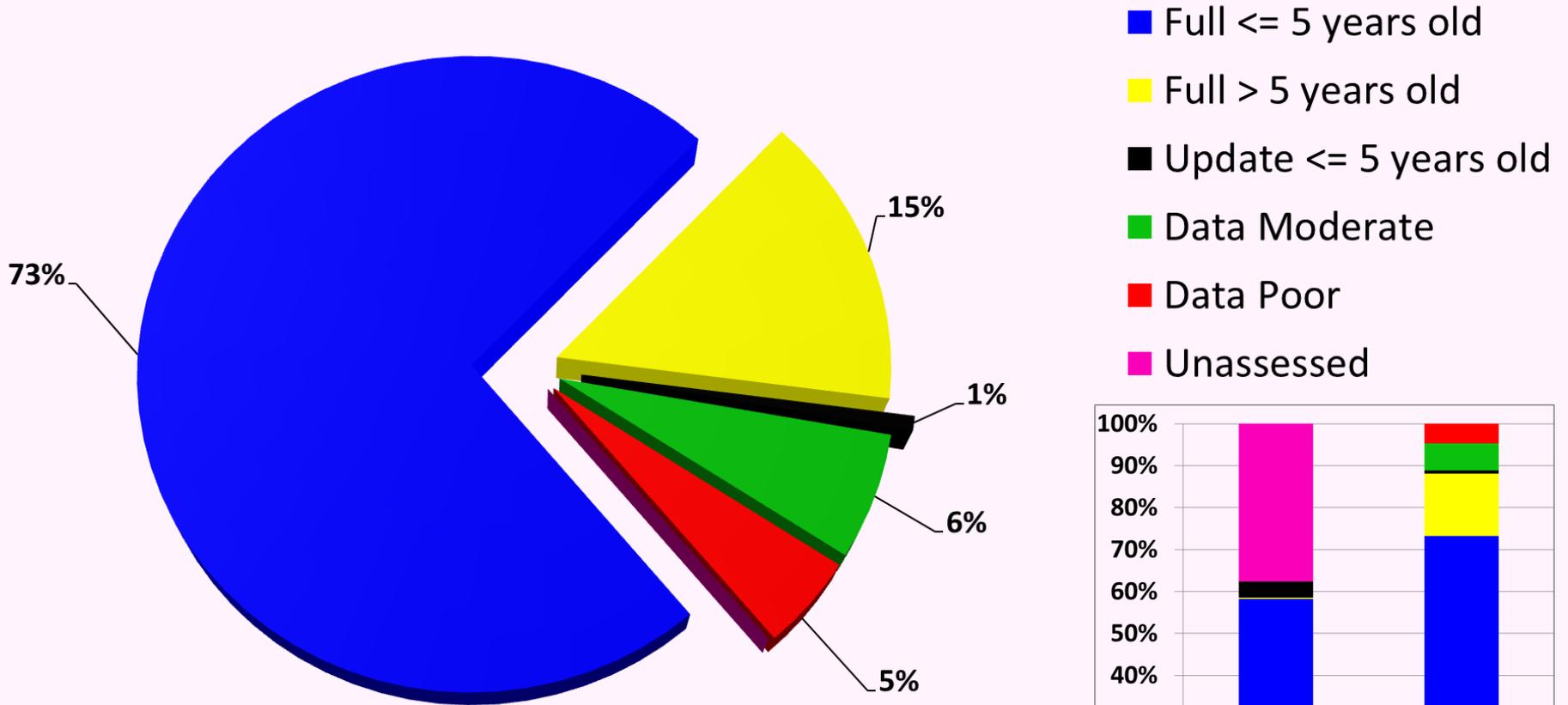
- Considerable strides have been made
 - #s of adequate assessments & other OFL support
 - Continuous progress on assessing new species
- Fresh, adequate assessments cover the vast majority of commercial value and recreational lbs

% of 2008-12 Average Commercial Revenue, By 2013 Assessment Status



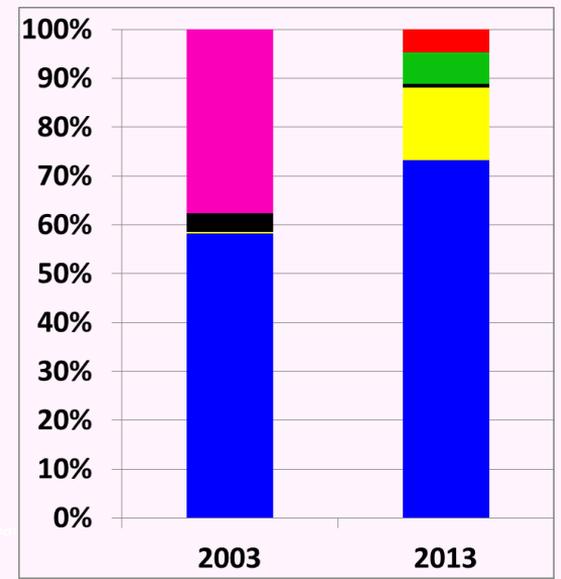
95% covered by adequate assessments <= 5 years old

% of 2008-12 Average Commercial Revenue (w/o Hake & Sablefish), By 2013 Assessment Status

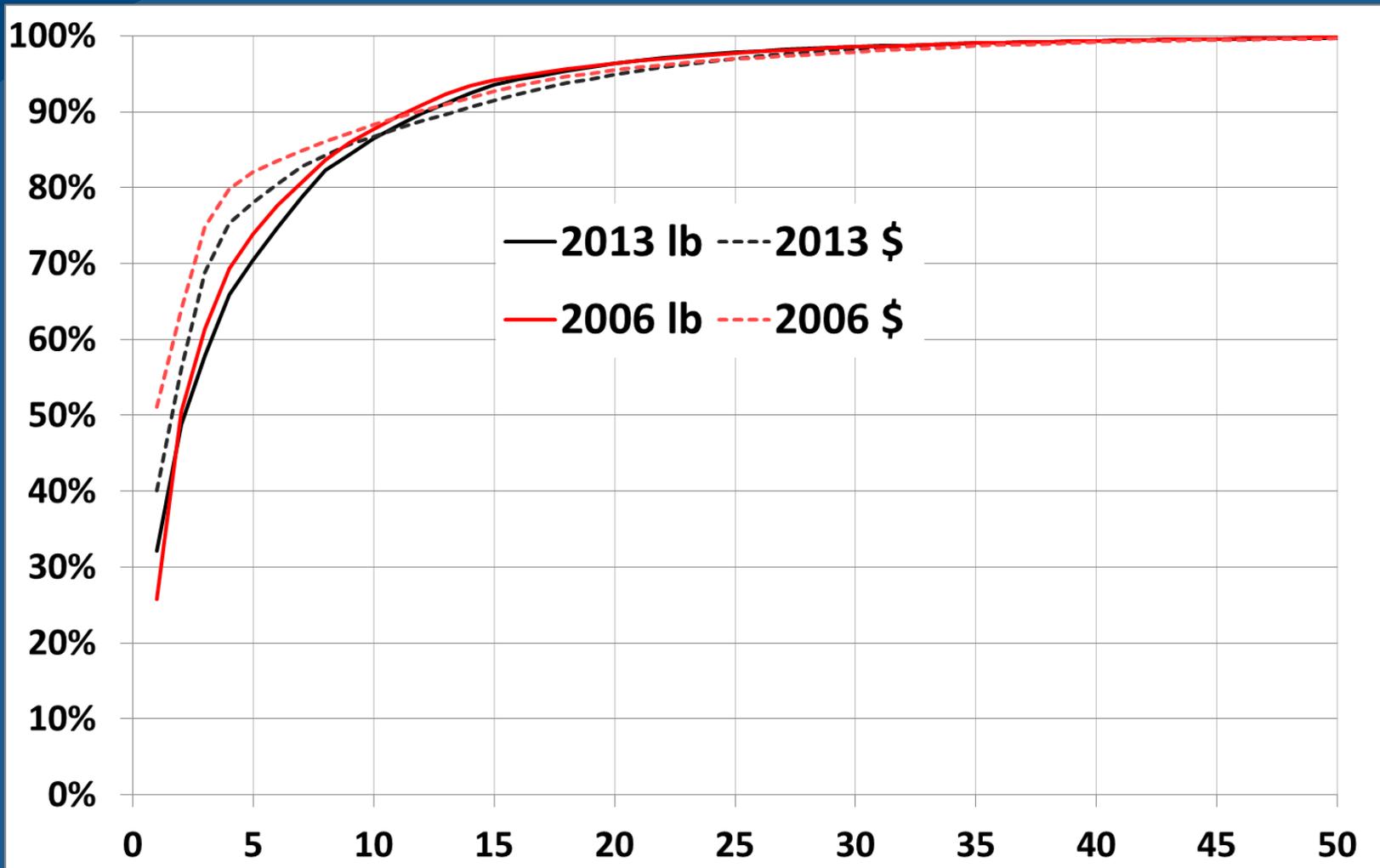


80% covered by adequate assessments <= 5 years old

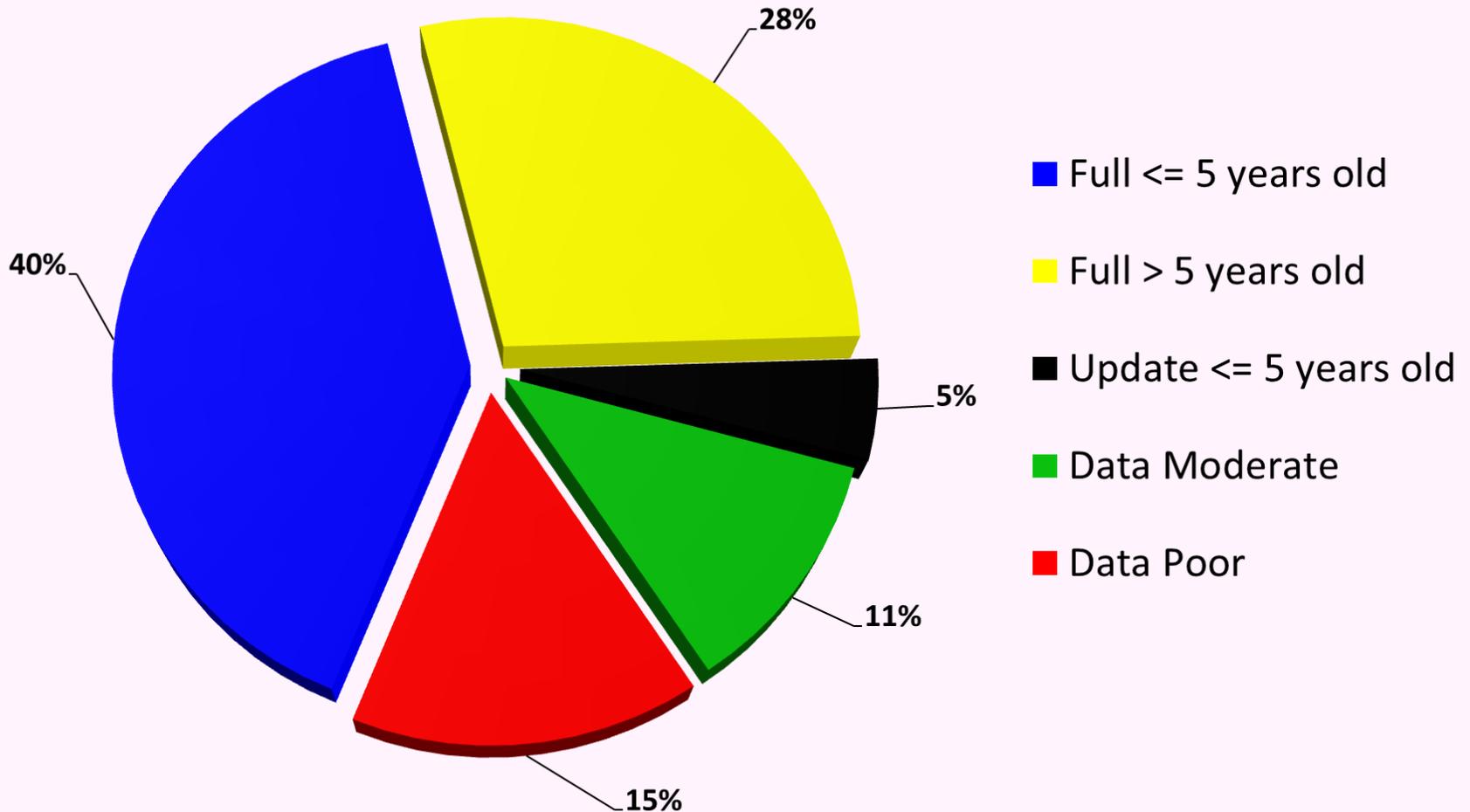
- Full <= 5 years old
- Full > 5 years old
- Update <= 5 years old
- Data Moderate
- Data Poor
- Unassessed



Cumulative Distribution of Commercial Landed Catch and Revenue



% of 2008-12 Average Recreational Catch, By 2013 Assessment Status



56% covered by adequate assessments <= 5 years old

Are we striking a good balance?

- **Assessments**

- Considerable strides have been made
 - #s of adequate assessments & other OFL support
 - Continuous progress on assessing new species
- Fresh, adequate assessments cover the vast majority of commercial \$s and recreational lbs
- Increased use of Updates and D-M assessments will allow more progress to be made

Are we striking a good balance?

- **Research**
 - Group discussions of research priorities
 - Particularly at close of assessment season
 - Over 80 peer-reviewed articles in last 5 years, by NW & SW assessment staff
 - Lead authorship on 48
 - 17 on improving assessment methods
 - 8 on data preparation
 - 29 more papers in review

Are we striking a good balance?

Research

- Considerable focus on addressing research needs
(below, from 2008 PFMC Research & Data Needs for groundfish)
 - Develop methods to assess/manage stocks where data are inadequate to fit age-structured models.
 - Develop/evaluate methods for jointly modeling age/length data
 - Evaluate the statistical properties stock assessment models
 - Conduct further ageing-error analysis for hake.
 - Conduct MSE of hake harvest control rule
 - Reconstruct historical catch histories for groundfish.
 - Other issues, as identified by STAR reviewers

Are we striking a good balance?

- **Research**
 - Involvement in performance testing of SS and new data-limited models
 - **72** new SS versions tested since 12/2009
 - 10-year development and expansion of R4SS
 - Programming for consistent & statistically-sound assembly/preparation of input data

Are we striking a good balance?

- **Science Engagement**
 - Our mission is **not** doing science *for its own sake*
 - We are trying to “optimize the benefits of living marine resources to the Nation *through* sound science”
 - In addition to assessments and publishing, this requires:
 - Supporting management decision-making
 - Helping to shape/inform agency policy,
 - Supporting the broader growth of assessment-related science

Science Engagement

- **Pacific Fishery Mgmt. Council**
 - Five 6/7-day meetings, annually
 - 2013 Committee Service
 - Scientific & Statistical Comm. (2, concurrent)
 - including Chair & Groundfish Sub-Comm. Chair
 - Groundfish Mgmt. Team (1)
 - Ecosystem Plan Dev. Team
 - In 2011-12: 4 NW staff, avg. ~20% of their time
2 SW staff (SSC + GMT)

Science Engagement

- **NMFS Science & Technology:**

Service on \geq **15** committees since 2008

- ABC Working Group (WG) ; SAIP revision WG
- Assessment Methods WG ; Vulnerability Evaluation WG
- National Standard 1 & 2 WGs ; IQA Committee
- MSA reauthorization: Rebuilding WG
- FATE Steering Comm. ; Assessment Forum
- Stock Assessment Prioritization WG
- Bio-sampling Prioritization WG
- Habitat Assessment Prioritization WG
- Fishery Info. Systems: Prof. Mgmt. Team; FOSS PSG

Science Engagement

- **Other NMFS:**
 - NWFSC IEA Working Group: 5 staff
 - averaging 15% of 2012 time, each
 - Puget Sound Rockfish Biological Review and Recovery Teams
 - Eulachon Evaluation Team
 - NWFSC Research Planning Team
- **Other Committees:**
 - CA Collaborative Fisheries Research Program
 - Olympic Coast Nat. Marine Sanctuary Collaborative Research, Assessment, and Monitoring WG

Science Engagement

- Scientific Review and Training

Activities over 2012-13	
Reviews for Professional Journals	112
Book Reviews	3
Research Proposal Reviews	147
Student Committees	7
Assessments with student co-authors, 2009-13	5
Assess./Methods Review Panels	7
Chaired	3
SS QA/QC & development, R4SS	
Comprises 10% of 3 Staff Performance Plans	
Five-day SS trainings conducted	5
Sweden, U. Wash., [Argentina, Chile, Australia: 2014]	

Are we striking a good balance?

- **Assessments**

- Adequate assessments for most important species
- Improved OFLs for data-limited species
- Emphasis on process with high-quality review

- **Research**

- Lots of publications, many on improving assessments
- Other work to improve assessment QA/QC

- **Scientific Engagement**

- Strong support for Council & Agency committees
- Support for and training of students and peers