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Agenda Item F.3.a  
Supplemental NMFS Presentation 2  
June 2024

# Assessment Capacity and Demand

June 2024

Council Presentation

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Referencing:

**Analysis of Assessment Capacity and Target Frequencies  
for Conducting West Coast Groundfish Assessments**

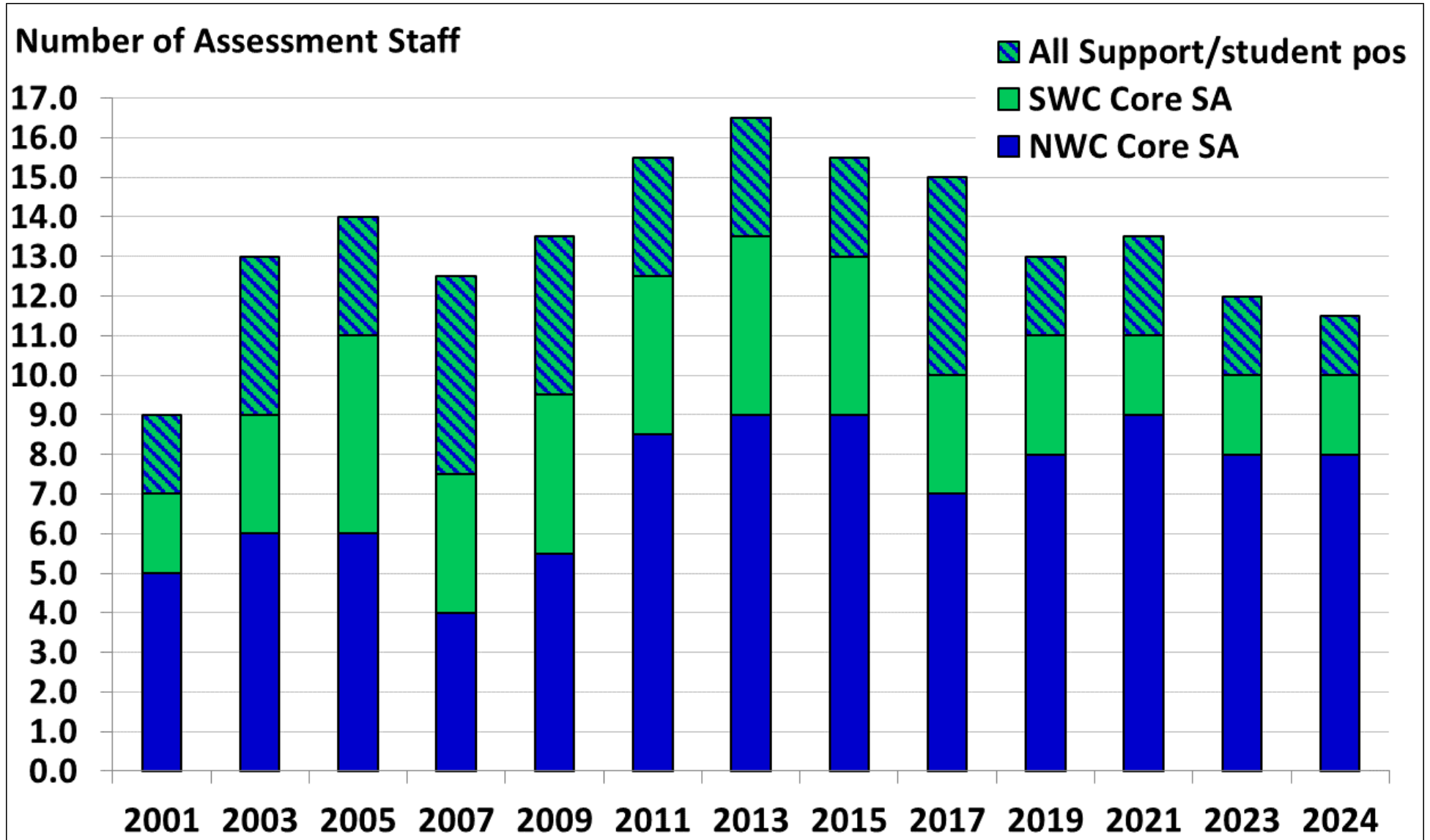
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NMFS-NWFSC Report 1

# Overview

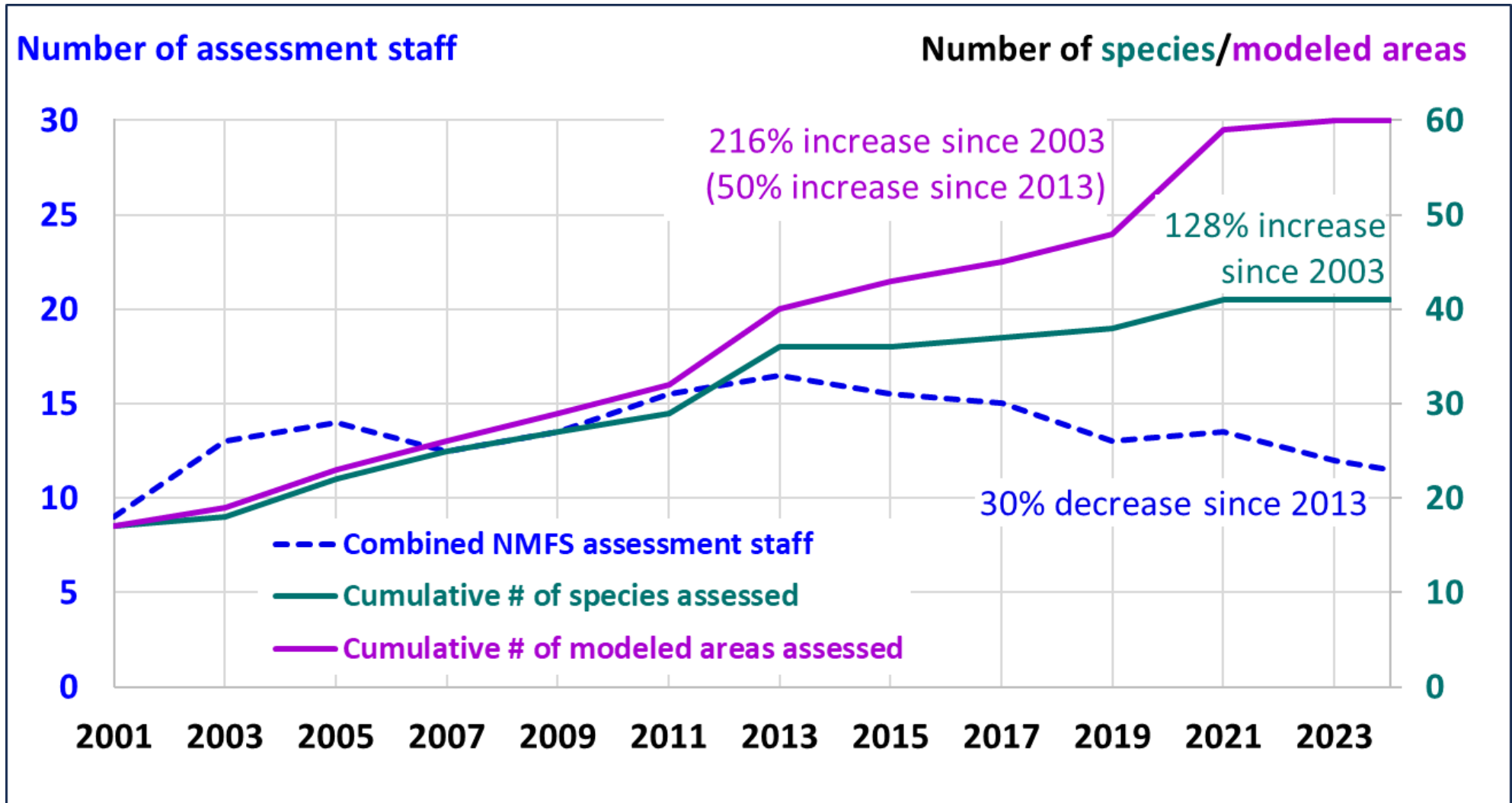
- The purpose of this report is to make the Council family better aware of the divergence between groundfish stock assessment capacity and the inventory of stocks with Category 1 or 2 assessments, which has grown over the past decade
- Target assessment frequency is an important component of the prioritization analysis
  - And achieving target frequencies is important for ensuring that scientific guidance for management is sufficiently current
- We have been increasingly challenged to assess stocks at frequencies that are consistent with targets

# History of Groundfish Assessment Staffing, 2001-2024

30% decline  
in total  
positions,  
including  
student and  
support staff,  
from 2013 to  
the present



# Comparison of Groundfish Assessment Staffing and the Inventory of Species and Modeled Areas, 2001-2024



# Current Status of Category 1 & 2 Species, with respect to Assessment Age and Target Frequency

	Target assessment frequency (years)				Total Assessed Species	% of Overall Total
	4	6	8	10		
<b>Number of species that:</b>	13	7	9	11	<b>40</b>	<b>100%</b>
Would remain within target frequency if unassessed in 2025	1	4	5	6	<b>16</b>	<b>40.0%</b>
Are currently OK, but would exceed target frequency if unassessed in 2025	1	1	1	0	<b>3</b>	<b>7.5%</b>
Already exceed target frequency	11	2	3	5	<b>21</b>	<b>52.5%</b>

# Average Per-Cycle Workload Implied by Current Target Frequencies for 40 Category 1 & 2 Species

Average number of species or modeled areas:	Species	Modeled Areas
- that would need to be assessed and reviewed every cycle to maintain <b>current</b> target assessment frequencies for all 40 species	13	20
- that were actually assessed, per cycle, during 2017-2023	9	13
- that would need to be assessed and reviewed every cycle to assess all 40 species <b>once every 10 years</b>	8	12

Maintaining current target frequencies for all 40 species would require a 50% increase in the number of species and areas modeled and reviewed every cycle from the average of the last four cycles

(If some nearshore stocks were removed from the FMP, less increase would be needed)

# Assessment Workload Has Also Been Reflected in the Increased Size of Assessment Documents

- Recent assessments have only averaged 7-8% more pages per area than in 2011, but **have nearly doubled in pages per species**
- Across all assessments, page counts increased by 66-90% in the last two cycles, relative to 2011
- These increases reflect:
  - Increases in the average number of modeled areas per species,
    - Benchmarks averaged 1.1 areas during 2003-13 & 1.5 during 2015-23
  - Additional ToR requirements for stock assessment teams (STATs),
    - 4 sentences in 2011 vs 4 pages in 2023; App B has doubled
  - Efforts to more thoroughly explore and report on assessment model exploration, sensitivity, and uncertainty.



# Where Do We Go From Here?

- The scientific rigor involved in conducting and reviewing assessments has increased greatly over the past 25 years
- However:
  - The growing inventory of species/areas needing to be maintained,
  - The workload associated with assessing and reviewing each, and
  - The number of assessment scientists available to conduct Category-1 or Category-2 assessments

have reduced the Agency's ability to deliver assessments for management use on a schedule that is consistent with identified target assessment frequencies

# Where Do We Go From Here? (cont.)

- Without some intentional action, existing assessments for several species will be deemed too old to support management
  - Nine of 40 species are being managed with assessments that are more than 10 years old, and many others are beyond target frequencies
  - Clearer guidance (from the SSC) about when assessments become too old to rely on for management would be helpful
- The Council may want to consider the merits of a comprehensive joint Council/SSC-NMFS review that considers:
  - the current assessment throughput capacity, and possible ways for increasing it, and
  - possible explicit decisions about having species revert to Category-3 assessments for purposes of informing harvest specifications.

# Questions?

# Additional Slides

# Distribution of Species Target Frequencies

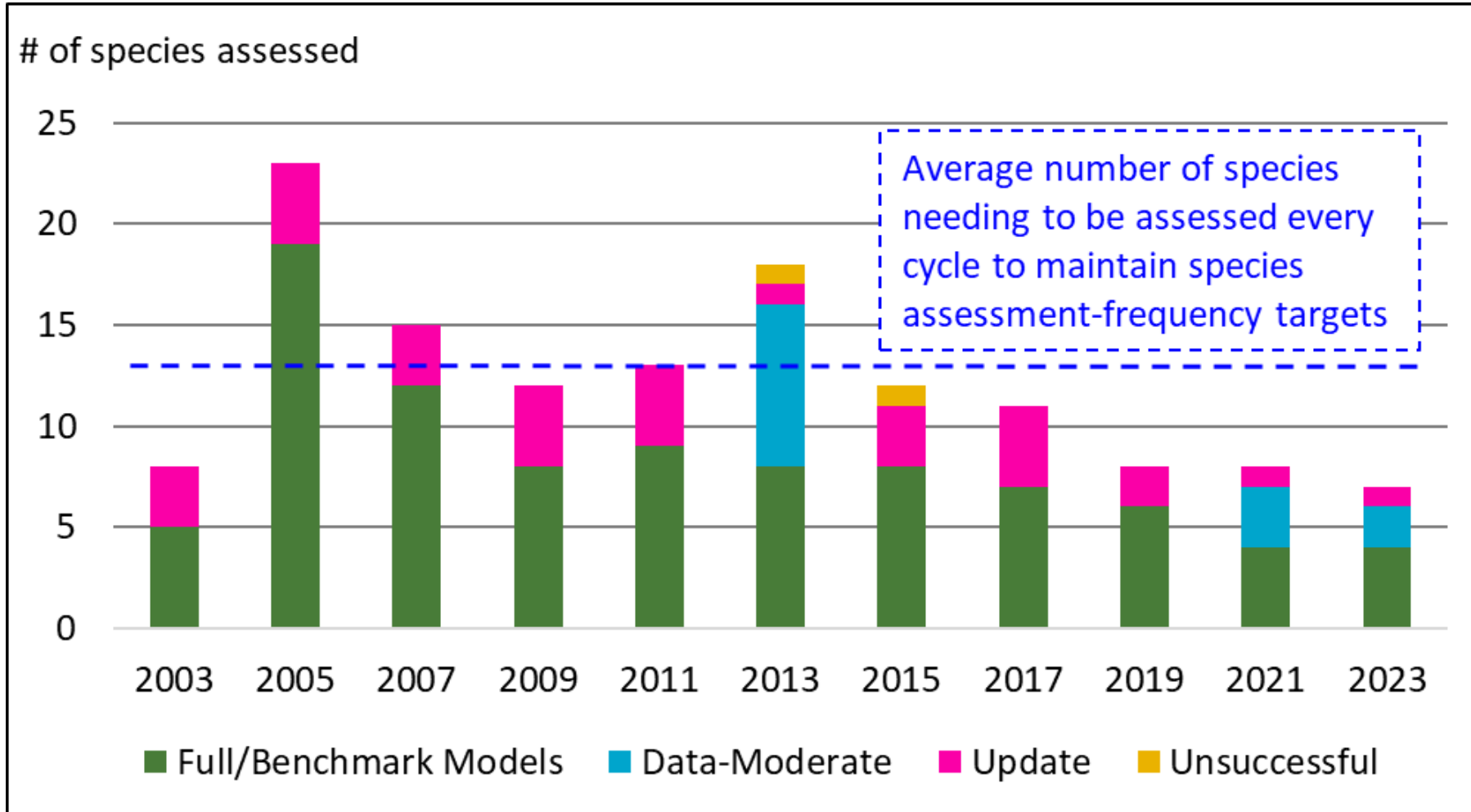
	Target Assessment Frequency (years)				Total
	4	6	8	10	
<b>As included in the <u>2024</u> Prioritization package</b>					
Species assessed with benchmark or data-moderate methods (Category 1 or 2)	13	7	9	11	40
Percentage of total	33%	18%	23%	28%	
Species assessed with data-limited methods (Category 3)	4	8	7	6	25
Percentage of total	16%	32%	28%	24%	
<b>All species included in the 2024 package</b>	<b>17</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>65</b>
Percentage of total	<b>26%</b>	<b>23%</b>	<b>25%</b>	<b>26%</b>	

# Frequency Assignments Category 1 & 2 Species

4-Year Frequency	6-Year Frequency	8-Year Frequency	10-Year Frequency
Arrowtooth flounder	Blue/Deacon rockfish	Canary rockfish	Aurora rockfish
Big skate	Brown rockfish	China rockfish	Blackgill rockfish
Black rockfish	Dover sole	Copper rockfish	Cowcod
Bocaccio	Gopher/Black-and-	Greenstriped rockfish	Darkblotched rockfish
Cabazon	Yellow rockfish	Longspine thornyhead	Greenspotted rockfish
California scorpionfish	Petrале sole	Pacific ocean perch	Pacific spiny dogfish
Chilipepper	Rex sole	Shortspine thornyhead	Quillback rockfish
English sole	Sablefish	Squarespot rockfish	Rougheye/ Blackspotted rockfish
Kelp greenling		Vermilion/Sunset rockfish	Sharpchin rockfish
Lingcod			Splitnose rockfish
Longnose skate			Yelloweye rockfish
Widow rockfish			
Yellowtail rockfish			



# Average Per-Cycle Workload to Maintain Current Target Frequencies vs Historical Species Assessments



# Average Per-Cycle Workload to Maintain Current Target Frequencies vs Historical Modeled Areas

