

Agenda Item E.3.a
Supplemental NWFSC Presentation 1
June 2018

Prioritizing Fish Stock Assessments

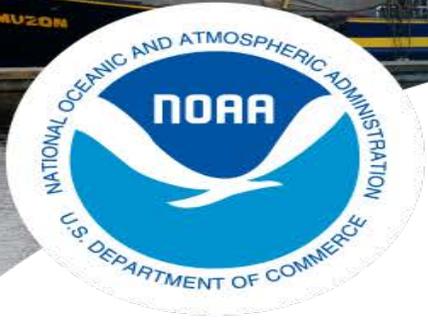
**Final Recommendations for Assessments of Pacific
Coast Groundfish Species in 2019 (and 2021)**

(Agenda Item E.3)

Dr. Jim Hastie

Northwest Fisheries Science Center

June 2018 Presentation to the
Pacific Fishery Management Council



**NOAA
FISHERIES**

Stacey Miller, Kristin Marshall (NWFSC), and Kristan Blackhart (NMFS-OST) also contributed to the 2018 analysis.

Council action in March, adopted for public review:

2019 Full Assessments: Sablefish, Cowcod, Cabezon (Oregon and California), Longnose skate, Big skate, Gopher rockfish (may be gopher and black-and yellow rockfish as a complex), and Dover sole.

2019 Update Assessments: Petrale sole, Widow rockfish.

2021 Full Assessments: Vermilion rockfish (vermilion/ sunset complex south of Pt. Conception and as a separate area model north of Pt. Conception), Brown rockfish, Copper rockfish, Quillback rockfish, Bank rockfish, Black rockfish, and Pacific cod.

Comments on the Council motion from March:

2019 Full Assessments: **Sablefish**, Cowcod, Cabezon (Oregon and California), **Longnose skate**, **Big skate**, Gopher rockfish (may be gopher and black-and yellow rockfish as a complex), and **Dover sole**.

Species with major ageing commitments for 2018

- Some compromises were made in the # of reads for sablefish for the 2015 update. Extra work is need to catch up, at this critical time.
- Both skate species require higher levels of preparation, as vertebrae must be cleaned and thin-sectioned before ageing.

Dover sole has too many ages to read, along with the other species

- 30K total since 2011;
 - 10K needed, at minimum (nearly a full reader year)
 - 16K would provide more comparable sub-sampling to prior years

If Pacific cod is not a benchmark in 2019, data-poor/-moderate approaches should be considered, to replace avg. catch OFL

Comments on the Council motion from March:

2019 Update Assessments: Petrale sole, Widow rockfish

- Petrale sole index has rebounded from the 2015 downturn in biomass estimated from the trawl survey
- Early results from research @ NWFSC have linked petrale recruitment success to a suite of environmental drivers
- We suggest not conducting a petrale update this year, since the index is up, and conducting a full assessment for petrale in 2021, in order to incorporate the results of this new research

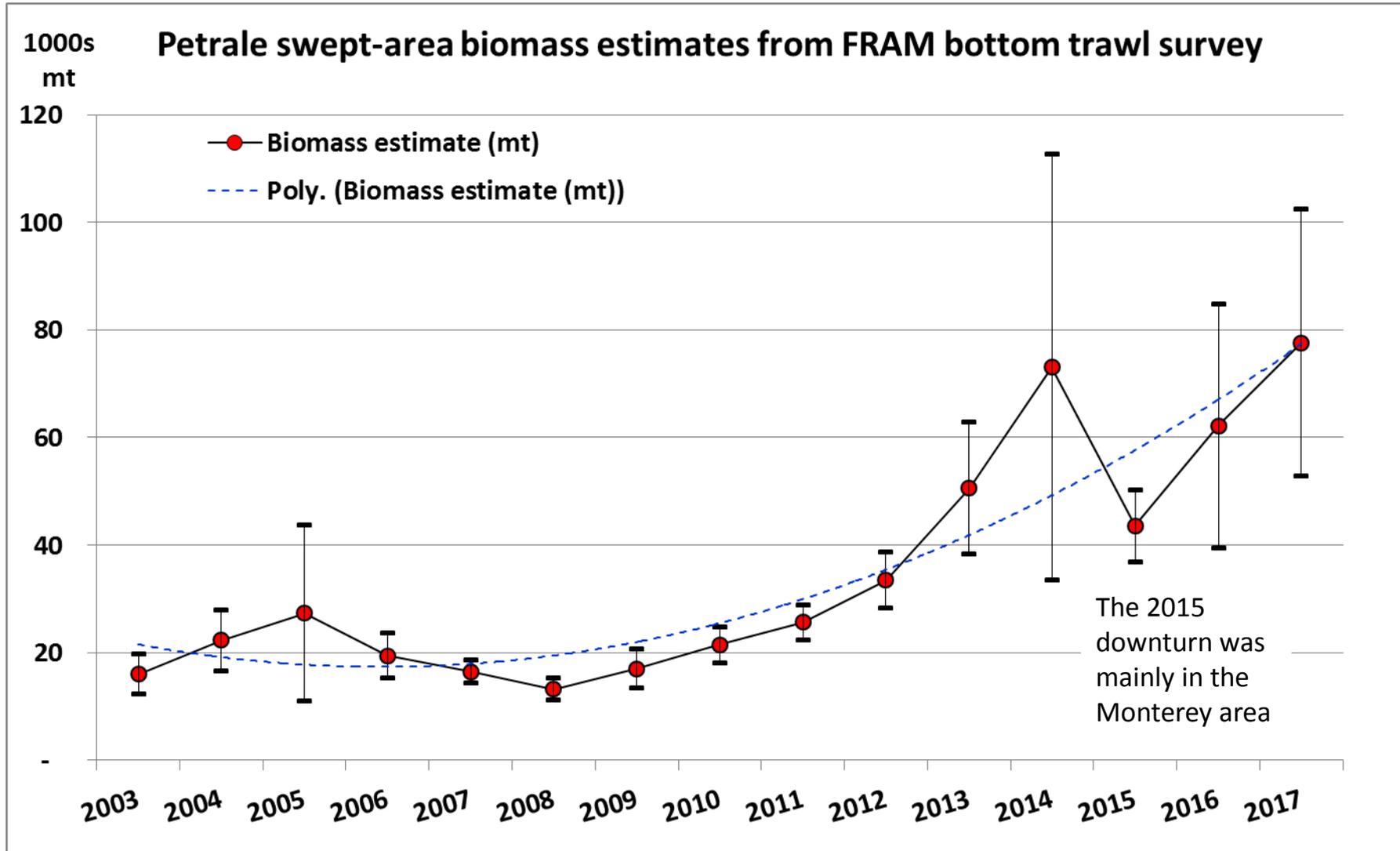
– Petrale has received a lot of assessment/review resources



2005	2007	2009	2011	2013	2015
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- Projected to remain above 32% of unfished SSB through 2023
- An update for widow rockfish is possible, although age-reading may not be as complete as desired if Pacific cod is added to the sablefish panel.
 - There is some potential for some P. cod to be aged via spectroscopy @ AFSC, as part of a trans-regional comparison

Petrale sole survey trends

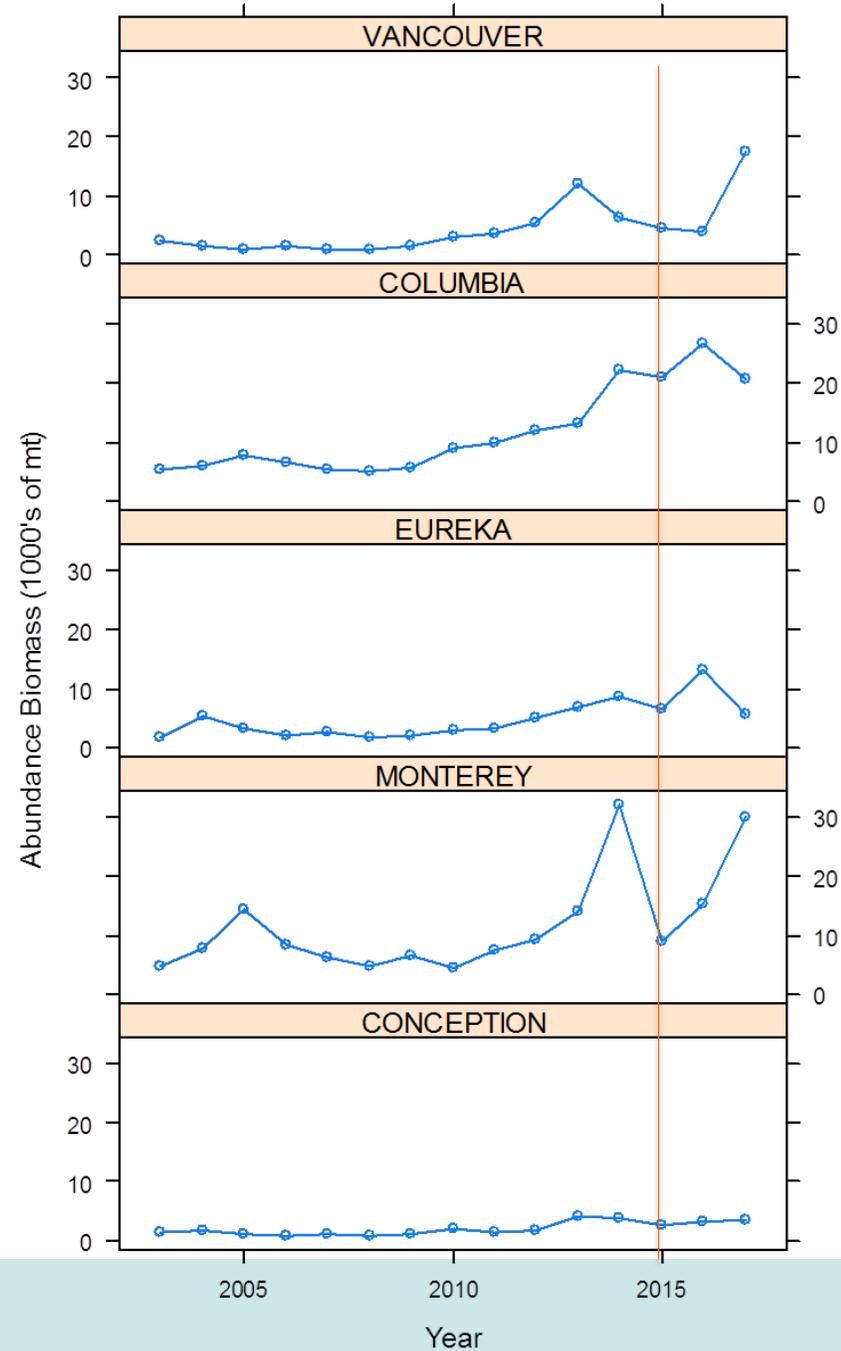


Petrale sole survey trends: by area

Large Vancouver area increase in 2017

Steady increase in the Columbia area since 2009

The 2015 downturn was mainly in the Monterey area



Comments on the Council motion from March:

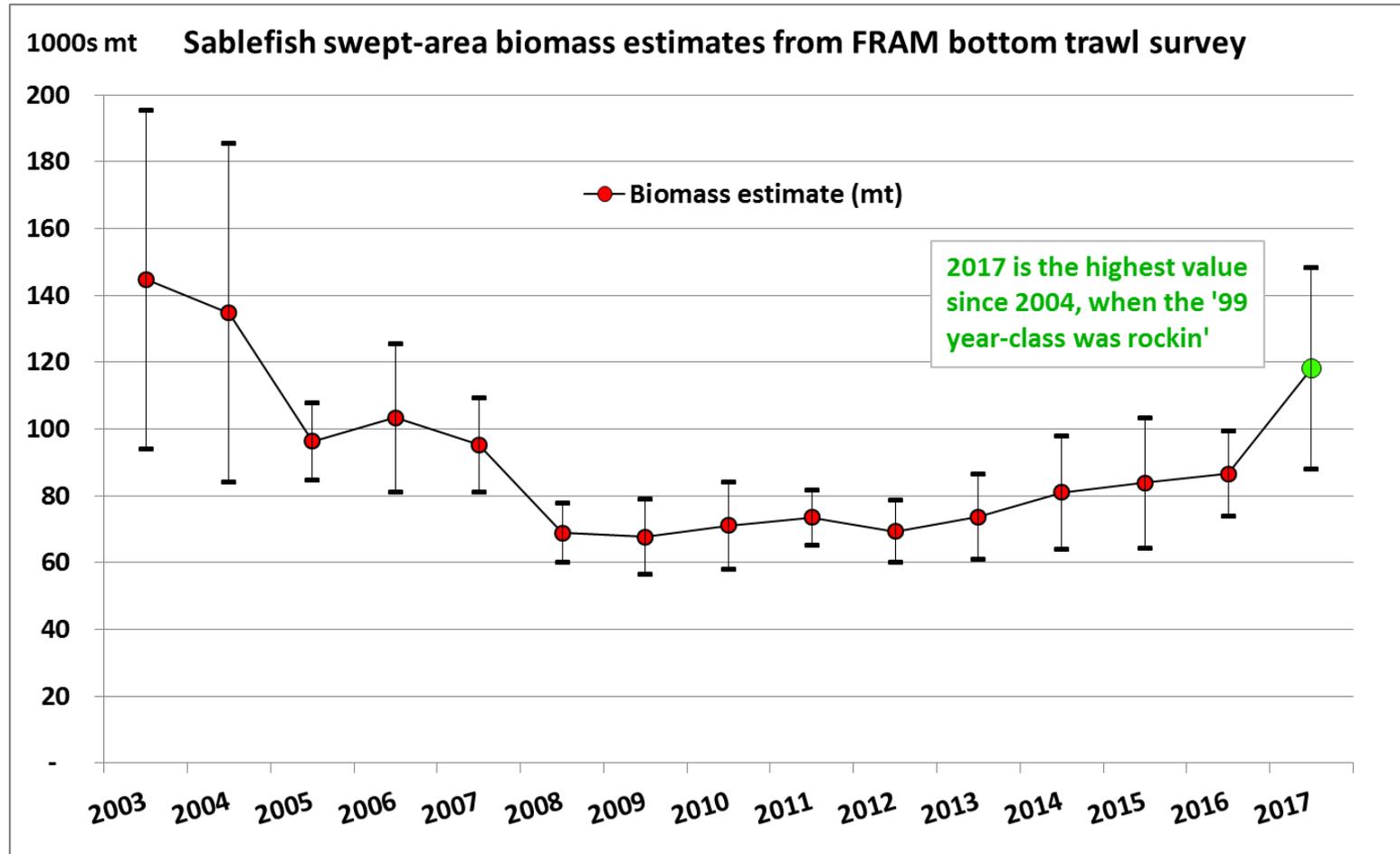
2021 Full Assessments: Vermilion rockfish (vermilion/ sunset complex south of Pt. Conception and as a separate area model north of Pt. Conception), Brown rockfish, Copper rockfish, Quillback rockfish, Bank rockfish, Black rockfish, and Pacific cod.

- It is unlikely that assessments of 5 near-shore species could be undertaken in one cycle
- The vermilion/sunset complex would seem to have the most critical need in 2021, followed by black rockfish, and then brown/copper
 - Some of the other near-shore species could be undertaken as data-moderate assessments that include compositional data
- Petrale should be a high priority for a full assessment in 2021, if not updated in 2019
- Research underway @ NWFSC may find greater genetic differentiation for lingcod than has previously been assumed
 - This research and restoring fishery ages to the assessment may elevate lingcod in 2021
- 2018 inter-lab ageing comparisons could elevate yelloweye in 2021

The sablefish trawl survey index is also up

Great news!

But in the words of Han Solo, “Don’t get cocky, kid!”



Proposed 2019 Assessment Schedule

Recommended		
Dates	Species	Location
5/6-5/10	Cabazon (OR/CA)	Seattle, WA or Newport, OR
6/3 -6/7	Longnose skate & Big Skate	Seattle, WA or Newport, OR
7/8-7/12	Gopher rf/black and yellow rf & Cowcod	Santa Cruz, CA
7/22 - 7/26	Sablefish (and P Cod or S. Yellowtail, ?)	Seattle, WA
~8/27-28	Groundfish sub-committee review	Teleconference
June Council Meeting		
6/18- 6/25	Petrale sole or widow rf Update	San Diego, CA
September Council Meeting		
9/11-18	Remaining (non-mop-up) species	Boise, ID
9/30-10/4	Mop-up (if needed)	

Proposed 2019 Assessment Calendar

May						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Council Meetings

Holidays

Prospective Briefing Book Deadlines

Possible STAR Panel weeks, for review in June **Recommended**

Possible STAR Panel weeks, for review in Sept **Recommended**

Week for additional review, if needed

Approximate timing of SSC Groundfish sub-committee review

End of Presentation

(and nary a slide from 'The Beast')