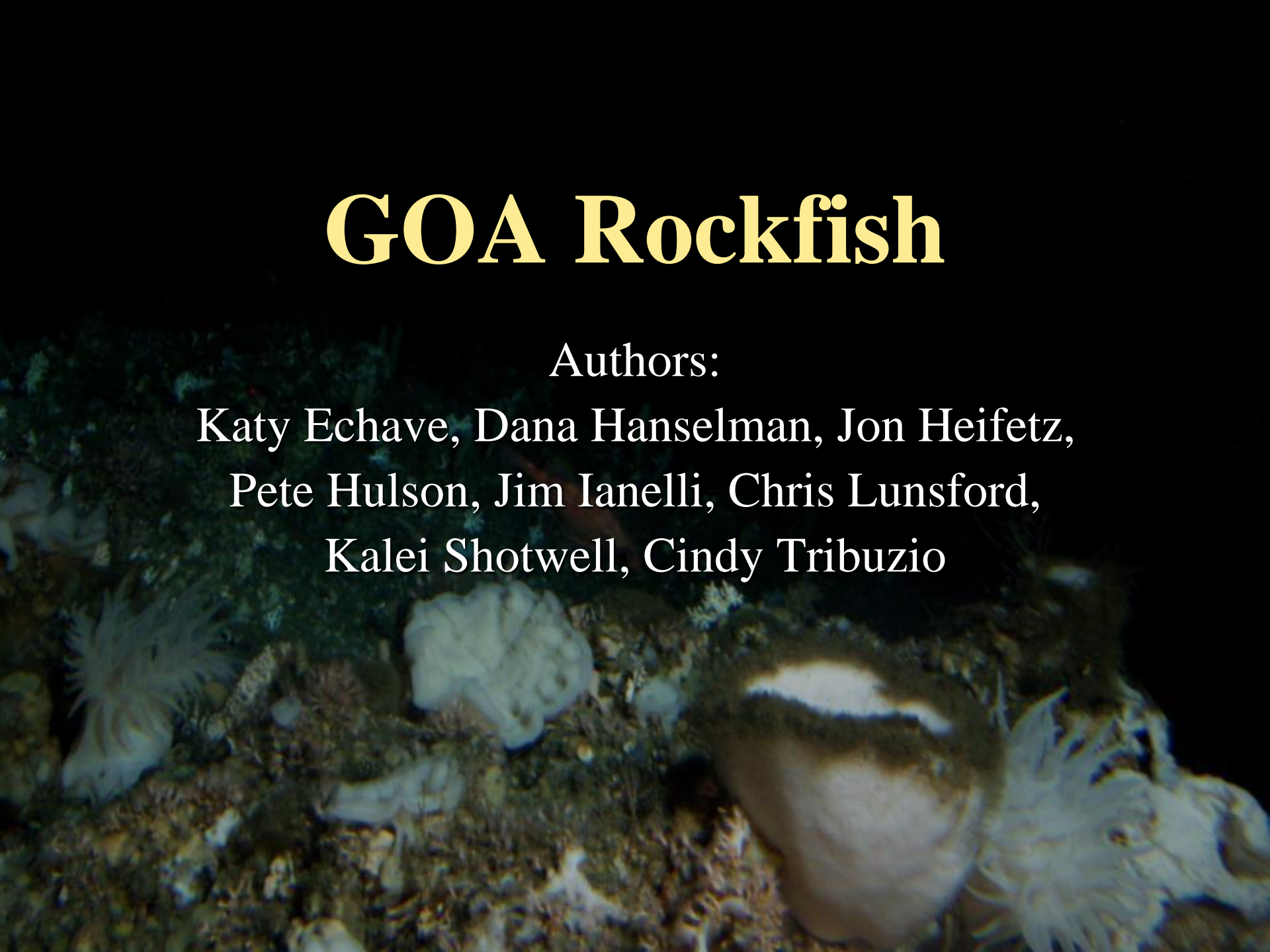


GOA Rockfish

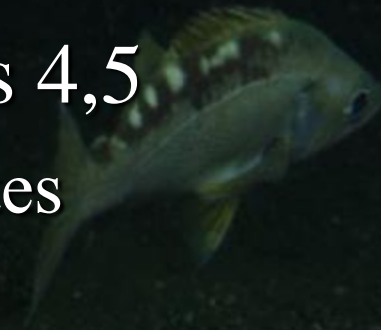
Authors:

Katy Echave, Dana Hanselman, Jon Heifetz,
Pete Hulson, Jim Ianelli, Chris Lunsford,
Kalei Shotwell, Cindy Tribuzio



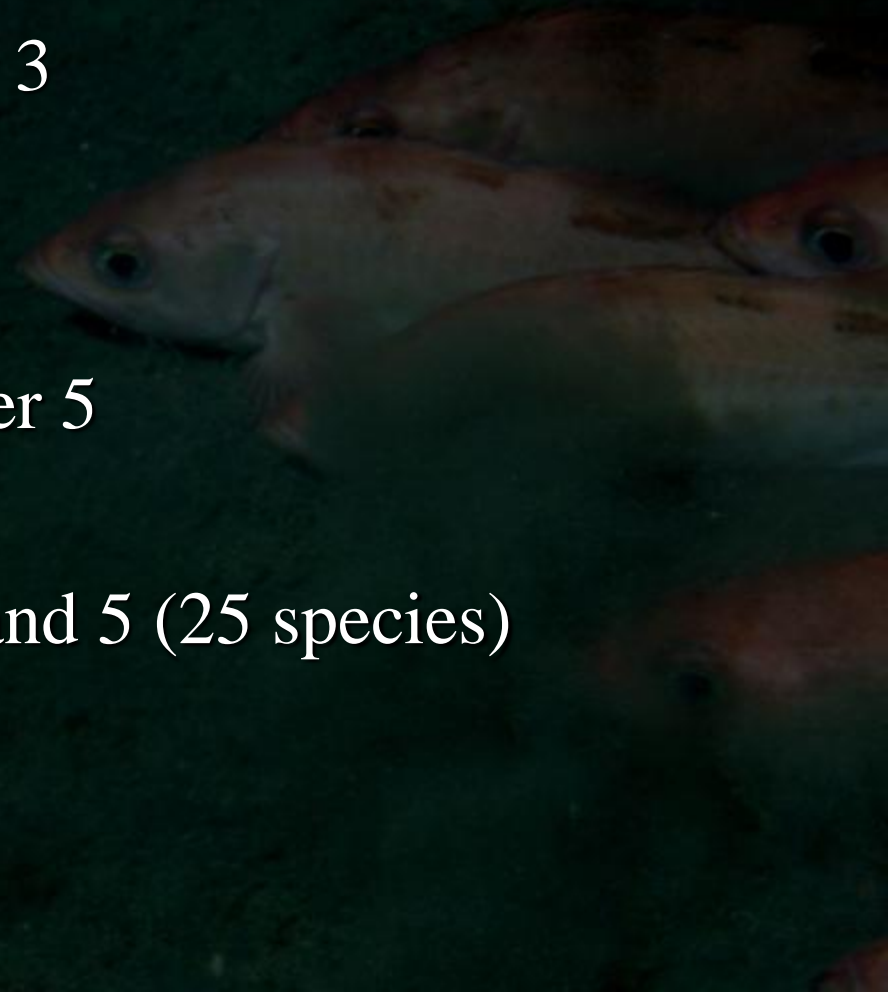
GOA Rockfish – Update SAFEs

- Rockfish assessed on biennial schedule to coincide with new survey data
 - Off-cycle year = Executive summaries
- Age-structured – Tier 3a
 - Update catch for projection model
- Non Age-structured – Tiers 4,5
 - Roll-over last year's estimates



Assessments

- Projection model assessments
 - Northern Rockfish – Tier 3
 - Dusky Rockfish – Tier 3
- Rollover assessments
 - Shortraker Rockfish – Tier 5
 - Thornyheads – Tier 5
 - Other Rockfish – Tier 4 and 5 (25 species)
- Discussion



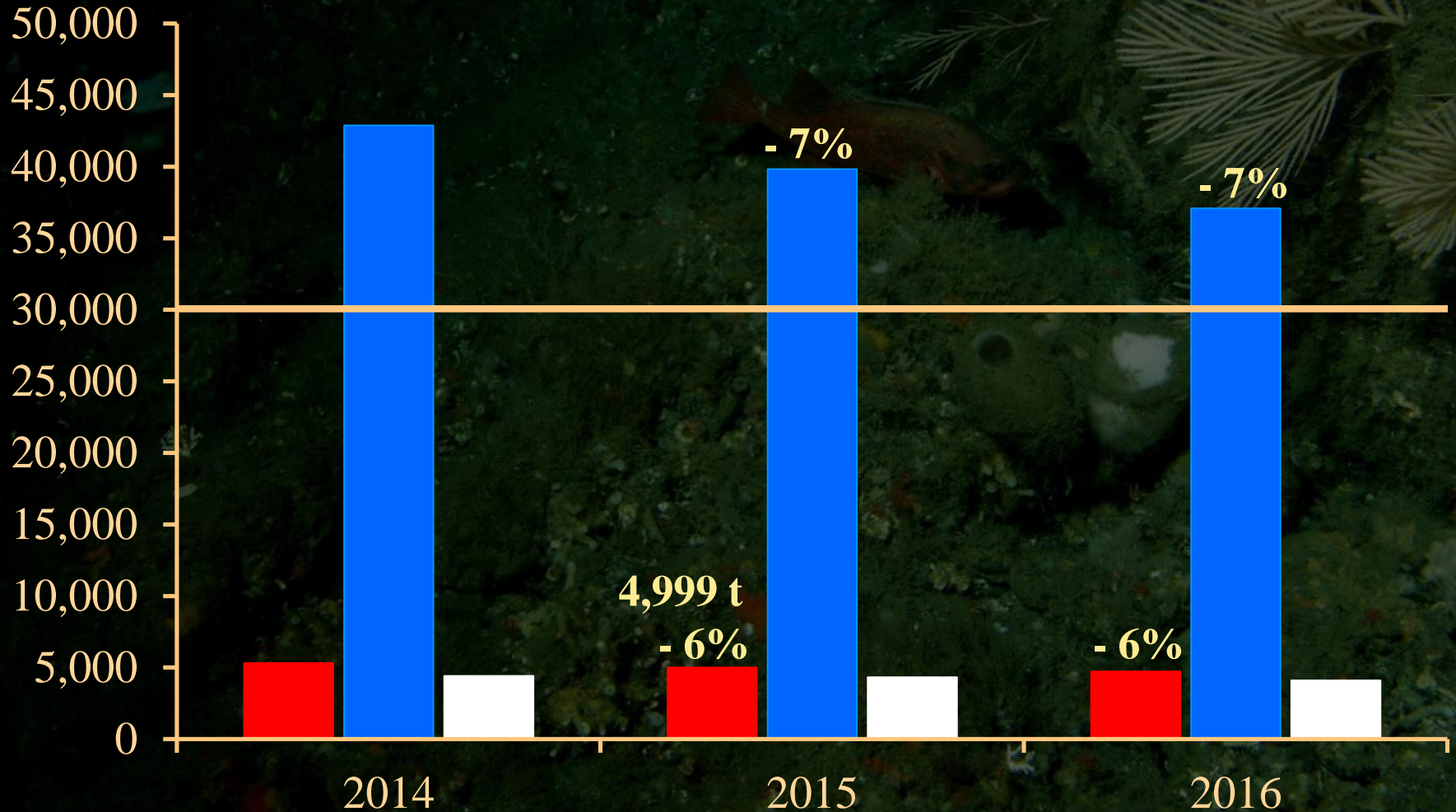
Northern rockfish



- Tier 3a species
 - Only update catches in the projection model
 - Updated 2013 and estimated 2014-2016 catches
- Catch Update:
 - WGOA fishery did not occur until Oct.15, an estimated 1,000 t was added to better reflect 2014 catch (maximum estimated catch by in-season management)
- Recommended 2015 ABC: **4,999 t**
 - ~6% smaller than last year's ABC of **5,324 t**
- Recommended 2015 OFL: **5,961 t**

Northern rockfish

■ ABC ■ SSB(t) ■ Projected Catch (t) — B_40%



Northern rockfish



■ Notables

- Projecting a decrease in ABC through 2016

■ Future

- Investigate alternative ageing error methods
- Investigate age/length input sample sizes
- Investigate alternative approaches to constructing trawl survey biomass

Dusky Rockfish



- Tier 3a species
 - Only update catches in the projection model
 - Updated 2013 and estimated 2014-16 catches
- Catch Update:
 - 2014 WG fishery opened late
 - Added 200 t to expanded 2014 catch
- Recommended 2015 ABC: **5,109 t**
 - ~7% smaller than last year's ABC of **5,486 t**
- Recommended 2015 OFL: 6,246 t

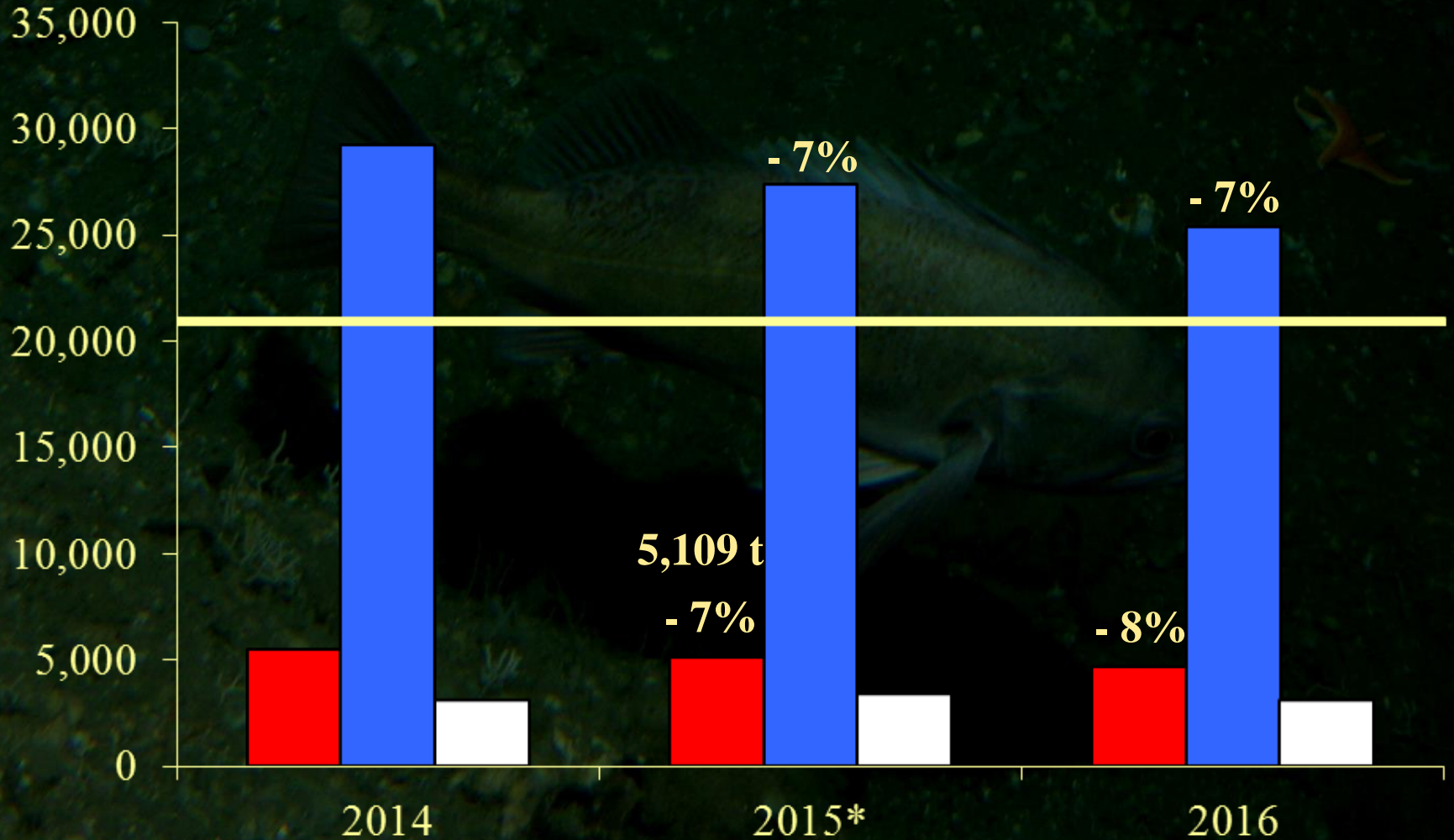
Dusky rockfish

ABC

SSB (t)

Projected Catch (t)

B_{40%}



Dusky Rockfish



■ Notables

- ABC decreased slightly (7%) and expected to continue down

■ Future

- Data evaluation for GOA rockfish (plus groups, age error matrix, input sample sizes)
- Evaluate CIE review comments
- Examine random effects model for apportionment

Shortraker Rockfish



- Tier 5 species
 - No data updates
 - No changes to assessment methodology
 - Roll-over estimates from 2013 assessment
- Catch Update
 - 559 t (as of Oct. 1, 2014)
 - Below the ABC/OFL
- Recommended 2015 ABC: **1,323 t**

WGOA	CGOA	EGOA	GOA Total
92	397	834	1,323 t

Shortraker Rockfish



- Notables
 - No overages in ABC/OFL
 - WGOA rockfish fishery did not open until October 15 of this year
- 2015-2016
 - Full assessment utilizing new survey data



Thornyheads



- Tier 5 species – represented by SST (idiots)
 - No assessment or data updates
 - Roll-over estimates from 2013 assessment
 - Includes expansion to 700-1000 m
- Catch Update (as of Oct. 1, 2014)
 - 964 t for 2014 (decrease from 2013)
 - This is 52% of ABC
- Recommended 2015 ABC: **1,841 t**

WGOA	CGOA	EGOA	GOA Total
235	875	731	1,841 t

Thornyheads



- Notables
 - Preliminary estimates state WGOA catch exceeded ABC by 2 t (AKRO, pers. comm.)
 - Few more boats fishing, expected overage ≤ 10 t
 - Catch will still be only about 62% of ABC
- 2016-2017
 - Full assessment utilizing new survey data
 - Explore random effects, CIE recommendations

Research Priorities – Overall

- Additional age at maturity estimates
- Random effects modeling
 - How best to include in rockfish assessments
 - Depth/area/etc
- Alternative survey biomass estimates methods
- Full trawl survey in 2015 – including “deep” stations

