

Briefing: Proposed Rule to List the Sunflower Sea Star as Threatened Under the ESA

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The Sunflower Sea Star

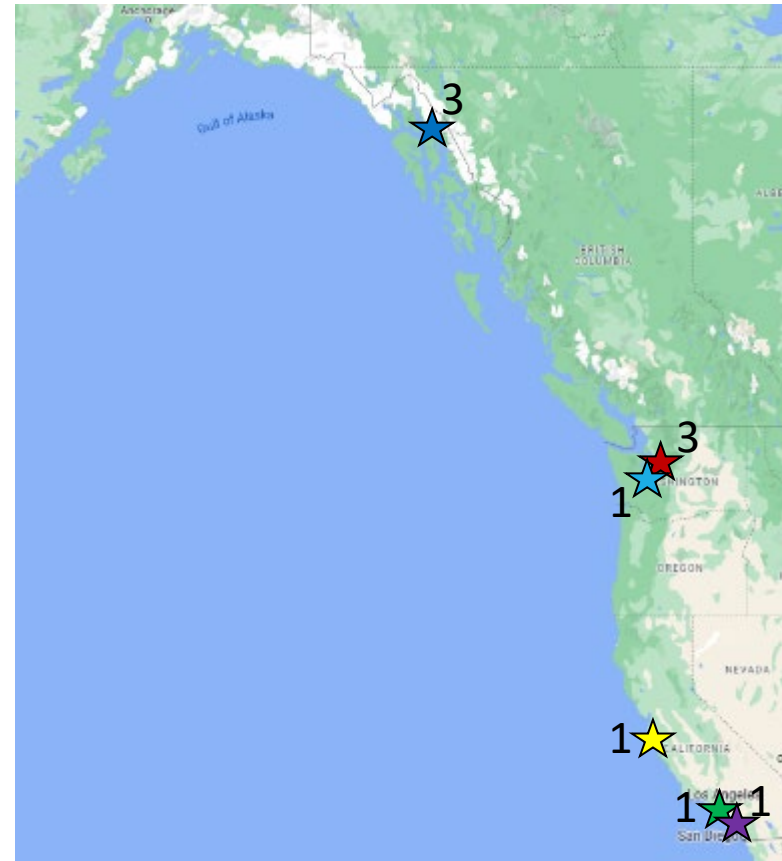
Pycnopodia helianthoides

- Occurs from Unalaska Island, AK, to Bahia Asunción, MX, over various substrates shallower than 435 m
- Abundance center off northern B.C. and Southeast Alaska
- Species status uncontested
- Human consumption not documented
- IUCN 2020: Critically Endangered largely due to Sea Star Wasting Syndrome pandemic from 2013-17, and climate change
- Estimated population loss >90% across whole of range, >98% from Cape Flattery, WA, southward
- Petitioned for ESA listing August 2021



Status Review Team

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- ★ Dr. Melissa Neuman NMFS, **WCR**, Long Beach, CA
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- ★ Dr. Nick Tolimieri NMFS, **NWFSC**, Seattle, WA
- ★ Dr. Steve Lonhart NOS, **MBNMS**, Santa Cruz, CA
- ★ Dr. Sarah Traiger **USGS**, Juneau, AK



Status Review Conclusions

- Disease, specifically sea star wasting syndrome, and climate change represent the two major threats to *P. helianthoides*, affecting abundance, productivity, and distribution. There are no significant portions of the range in which overall extinction risk is elevated. **As such, overall extinction risk for *P. helianthoides* is moderate now and into the foreseeable future.**

Determination: Threatened

- Given a moderate, range-wide extinction risk, a moderate extinction risk in the only portion of its range assessed as significant, and barring substantial conservation actions that would preclude the need for listing, we find that the sunflower sea star should be listed as Threatened.
 - Federal Register notice published March 16, 2023

Critical Habitat

- Sunflower stars are habitat generalists, so establishing essential physical/biological features not currently possible
 - Data availability also an issue: need systematic randomized surveys

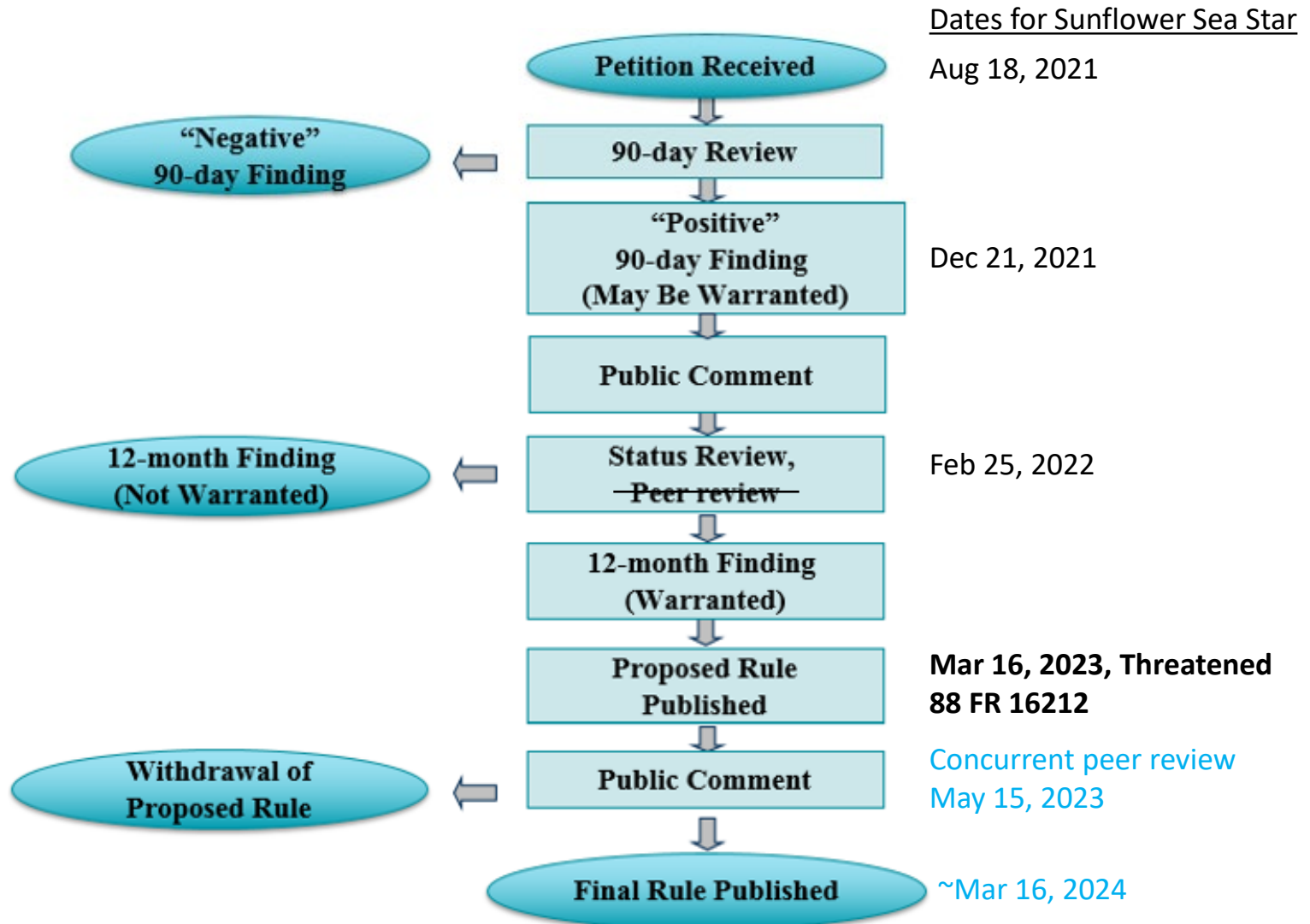
Protective Regulations (4[d])

- If Threatened, take not prohibited. Section 7 consultations still required, so not “lacking protection”
- Threats are disease and climate change, so regulating other actions unlikely to affect conservation, but add process burden
 - No 4(d) rule now, or in foreseeable future, unless additional data cause likely impacts from specific concerns to rise up
 - Separately, develop handling recommendations and species-specific reporting guidelines to help fill data gaps

What about Fishery Impacts?

- Any fishery with a federal nexus employing bottom contact gear will require consultation to evaluate risk of jeopardy
 - From Aleutian Islands to California, but not Bering Sea
 - Benthic trawling
 - Pot-based fisheries for fish and shellfish
 - Other fisheries occurring in <450 m of water
- Section 7 Action Plans developed with SFD staff (Keeley Kent [WCR] and Doug Duncan [AKR])
 - List proposed action and anticipated fisheries interactions
 - Coordinates consultations to ensure no disruption to fisheries
 - Complexity of consultation will result on nature of the fishery and ability to document or predict impacts

ESA Listing Process





Questions and Comments?

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