

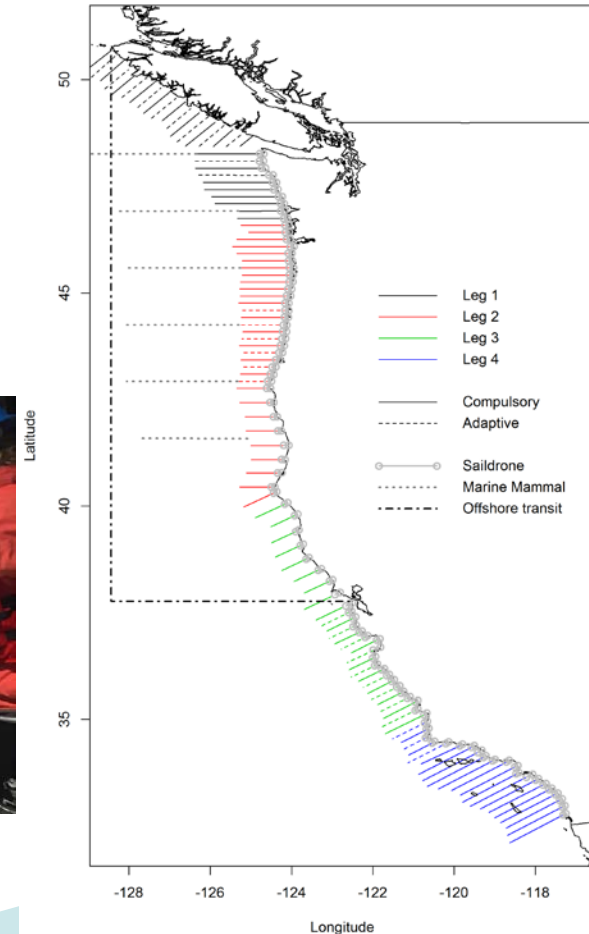


NOAA
FISHERIES

Southwest
Fisheries
Science Center

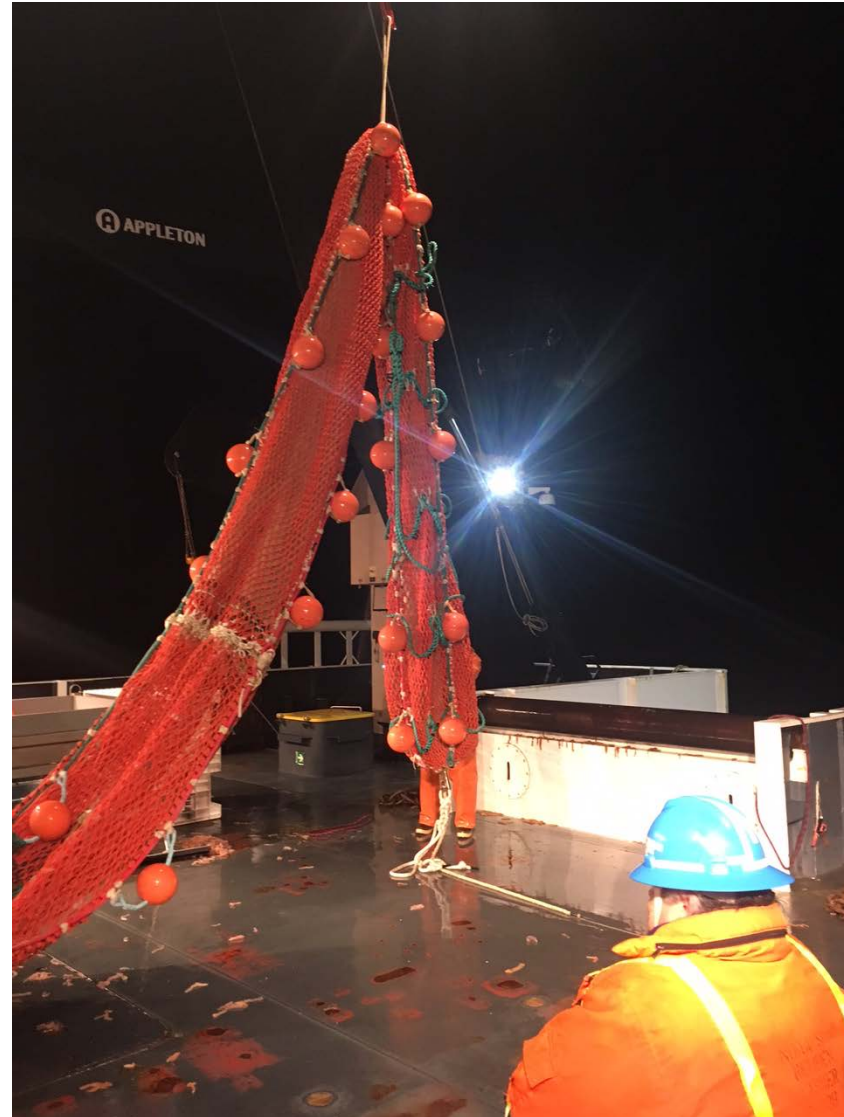
NMFS Report SWFSC Activities Coastal Pelagic Species

Gerard DiNardo
Dale Sweetnam



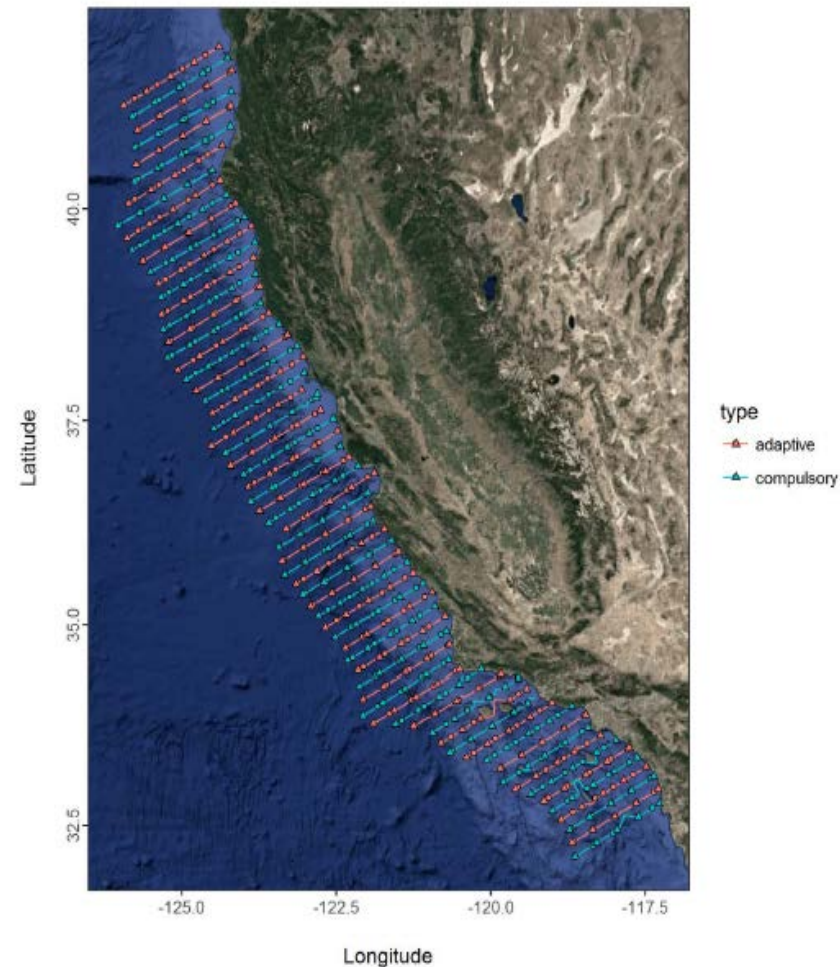
Presentation Outline

1. Research Survey Updates
 - 2017 Surveys
 - 2018 Surveys
2. Stock Assessments & Schedules
3. Research (current & future)
4. Outreach



CPS Research Surveys – 2017

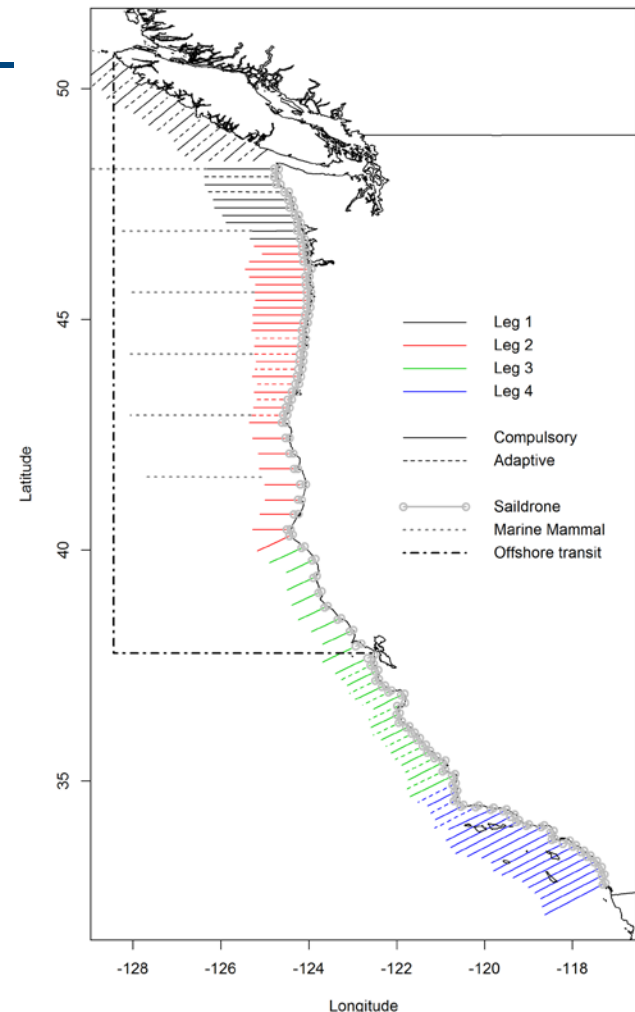
- 2017 Spring ATM CCES & CalCOFI surveys
 - samples processed
- 2017 Summer ATM CCES survey
 - samples being processed
- 2017 Fall CalCOFI survey



*“Abundance” and Distribution Results
Available in September – Guidance from ATM Review*

CPS Research Surveys – 2018

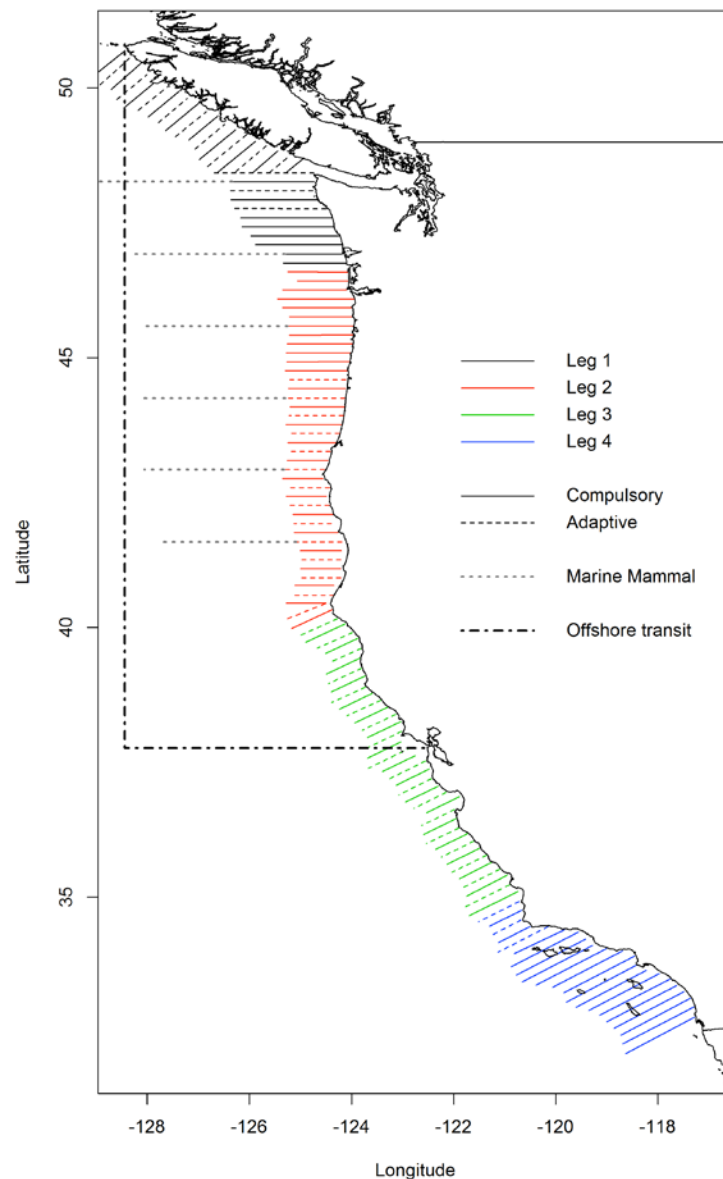
- 2018 Winter CalCOFI survey: Jan. 10 - Feb. 1- FSV Rueben Lasker
- 2018 Spring CalCOFI survey: April 4-26 – FSV Shimada
- 2018 Spring ATM CCES survey cancelled (Lasker drydock)
- 2018 Summer CalCOFI survey: June 9-24 - RV Sally Ride
- 2018 Summer ATM CCES survey: June 26-Sept. 23 (80 days) – FSV Reuben Lasker → Joint CPS Acoustic Trawl Survey & West Coast EEZ Cetacean survey



2018 CCES

Joint Summer CPS-CalCURCEA Survey

- *Goal* - Estimate abundances and distributions of CPS and cetacean stocks
- *FSV* Reuben Lasker.
- June – September 2018 (80 DAS)
- Vancouver Island, Canada-U.S. Mexico Border
- Daytime acoustic backscatter (EK-60, EK-80)-& cetacean observations, nighttime CPS trawling
- Industry-based cooperative research – near shore survey
- Sailability technology—proof of concept
- **Still in the planning phase**



What the Heck is Saildrone

Saildrones are wind powered Unmanned Surface Vehicles that carry important oceanographic research instrumentation and are controlled from shore through satellite communications.

- **Color: Orange**
- **Light: tricolor (red, green and white) at top of wing**
- **Radar Reflector: yes**
- **Distinguishing Marks/Notation: “Saildrone”**
- **Length: 23 ft**
- **Width: 2 ft**
- **Height: 15 ft above water line**
- **Draft: 7 ft**
- **Average speed: 3 knots**
- **Maximum speed: 8 knots**



<http://www.pmel.noaa.gov/itae/mariner-and-public-notice-research-platforms>

Stock Assessments & Schedule

- Update (U) Sardine Stock Assessment – April 2018 (SSC)
- Benchmark (B) Pacific Mackerel - 2019

Coastal Pelagic Species	2017	2018	2019	2020	2021	2022
Pacific sardine	B	U	U	B	U	U
Pacific mackerel (B in 2015)	U	---	B	---	U	---

Highly Migratory Species	2017	2018	2019	2020	2021	2022
Albacore	B	---	---	B	---	---
Pacific bluefin tuna (B in 2016)	---	U	---	B	---	U
Blue shark	B	---	---	B	---	---
Shortfin mako shark	---	B	---	---	B	---
Common thresher shark	B	---	---	---	?	?



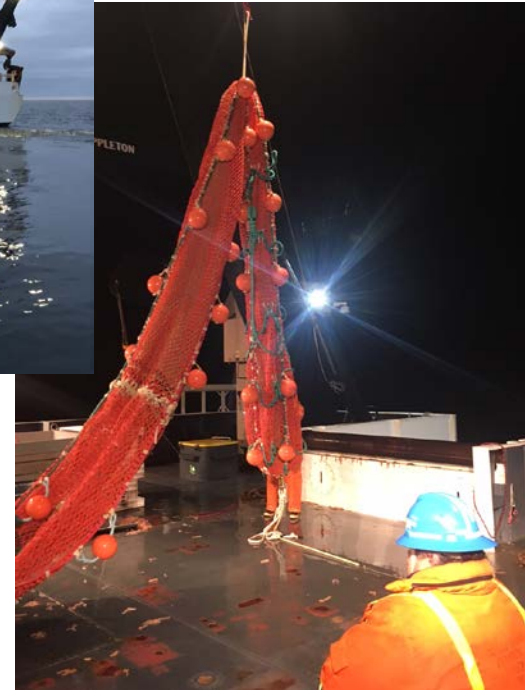
Research - Current

ATM Review

- SSC, CPSMT, CPSAS & CIE

Cooperative Research

- SWFSC supports two EFPs submitted by industry
 - Pacific Sardine STAR Panel Review
 - Aerial Survey Methodology Review
- SWFSC commends industry for being proactive



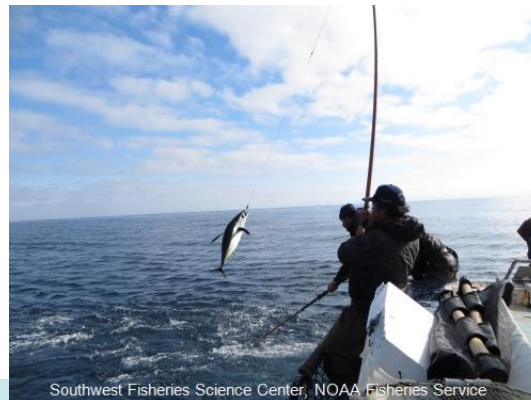
Research - Future

- ATM Review Research Recommendations
 - ATM Review Research Recommendations
 - ATM Review Research Recommendations
 - ATM Review Research Recommendations

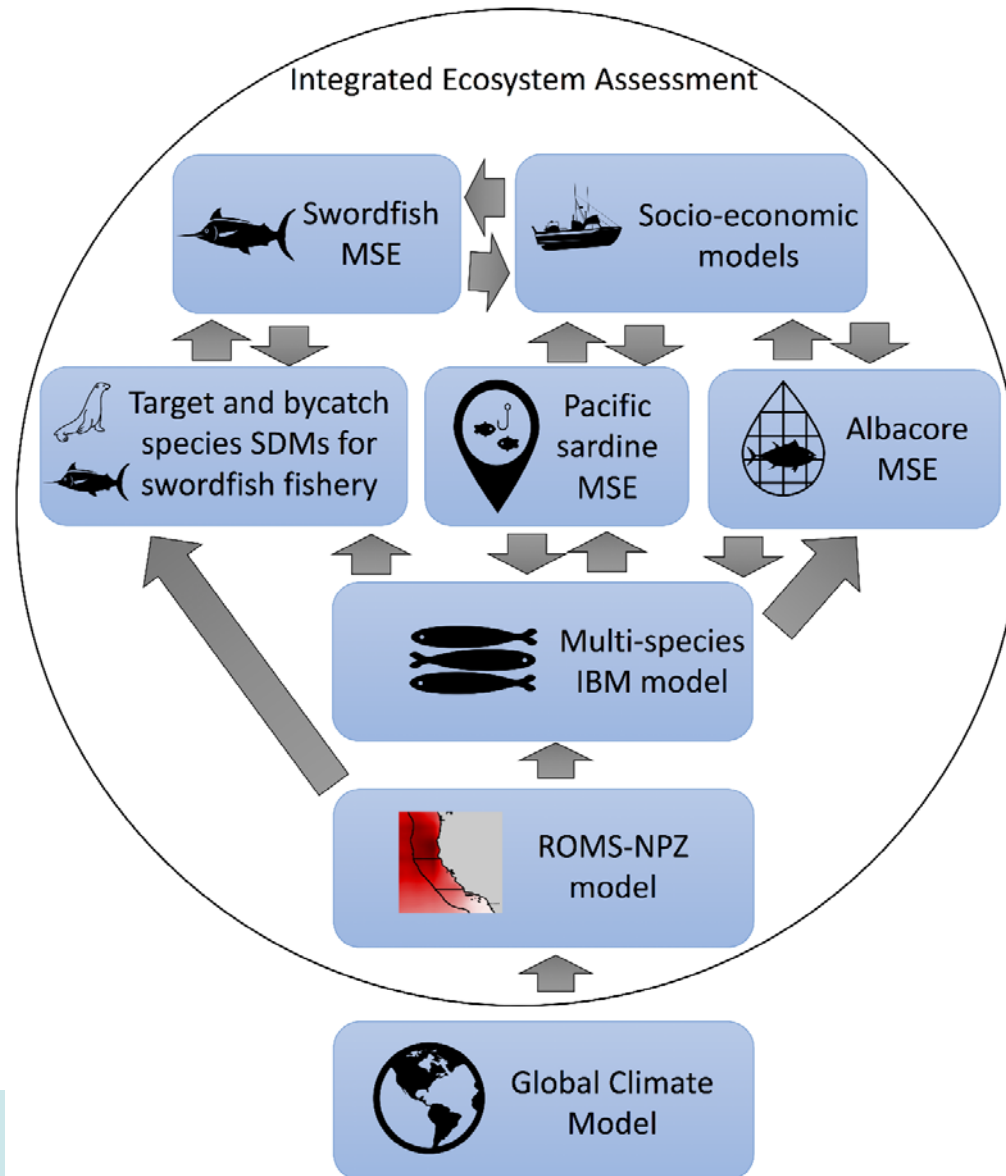
As with any survey research needs to be conducted --- SWFSC will develop a plan

From Physics to Fisheries: A Social-Ecological Management Strategy Evaluation for the California Current Large Marine Ecosystem

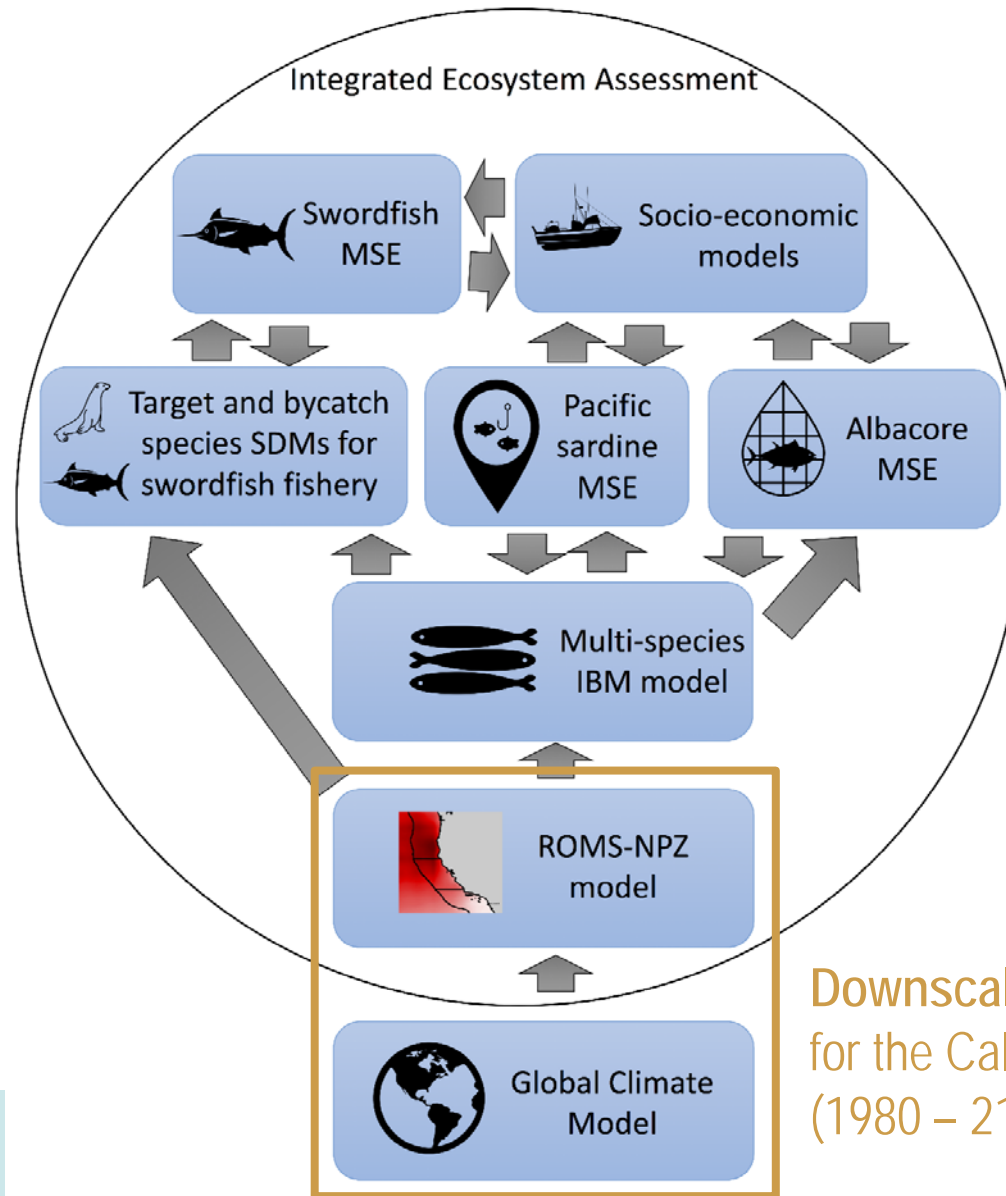
- Develop an end-to-end framework to identify climate-resilient management strategies for the California Current ecosystem
- Evaluate the impacts of climate change on US-managed marine species and fishing communities
- Focus on Pacific sardine, albacore, swordfish, and protected species



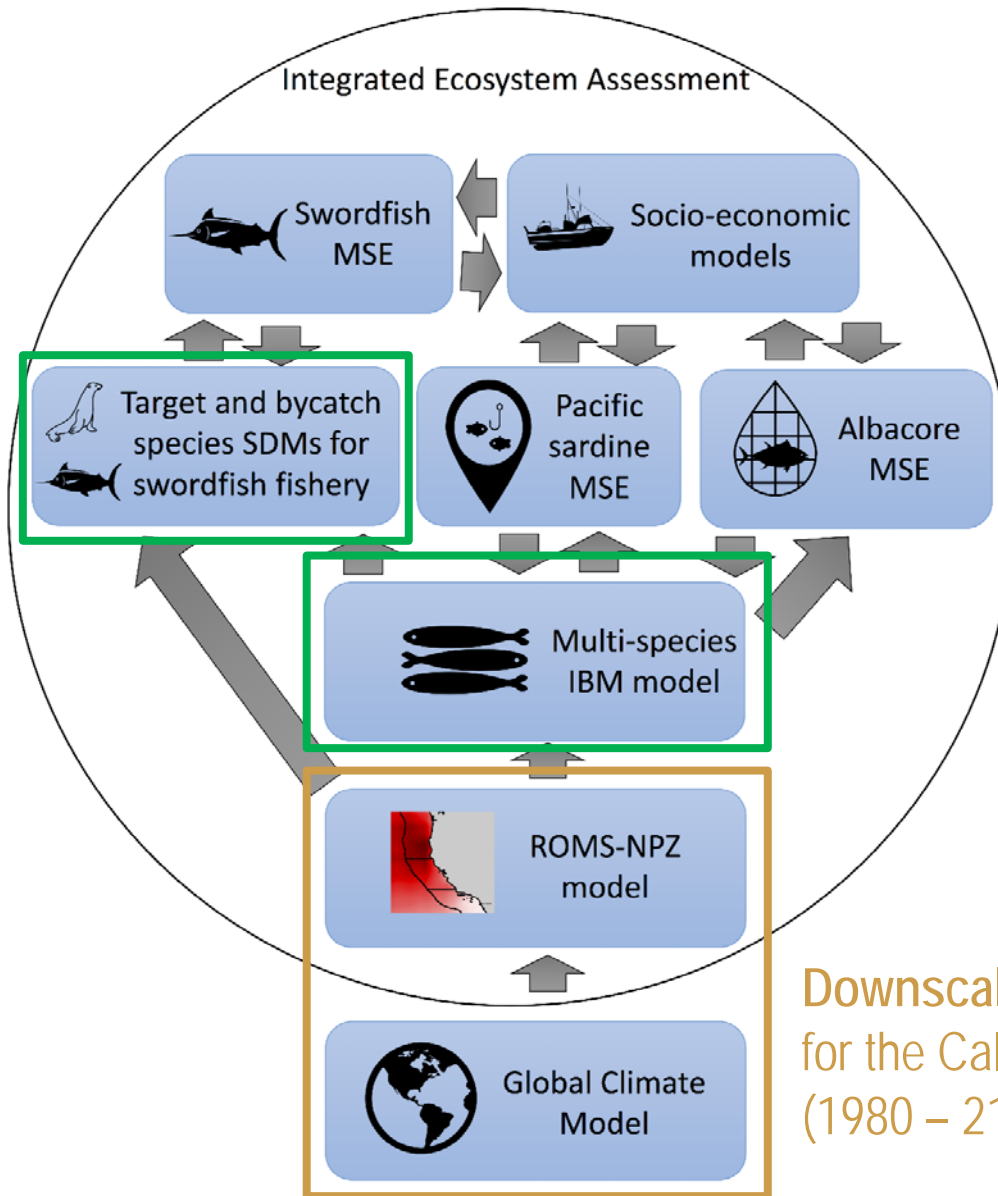
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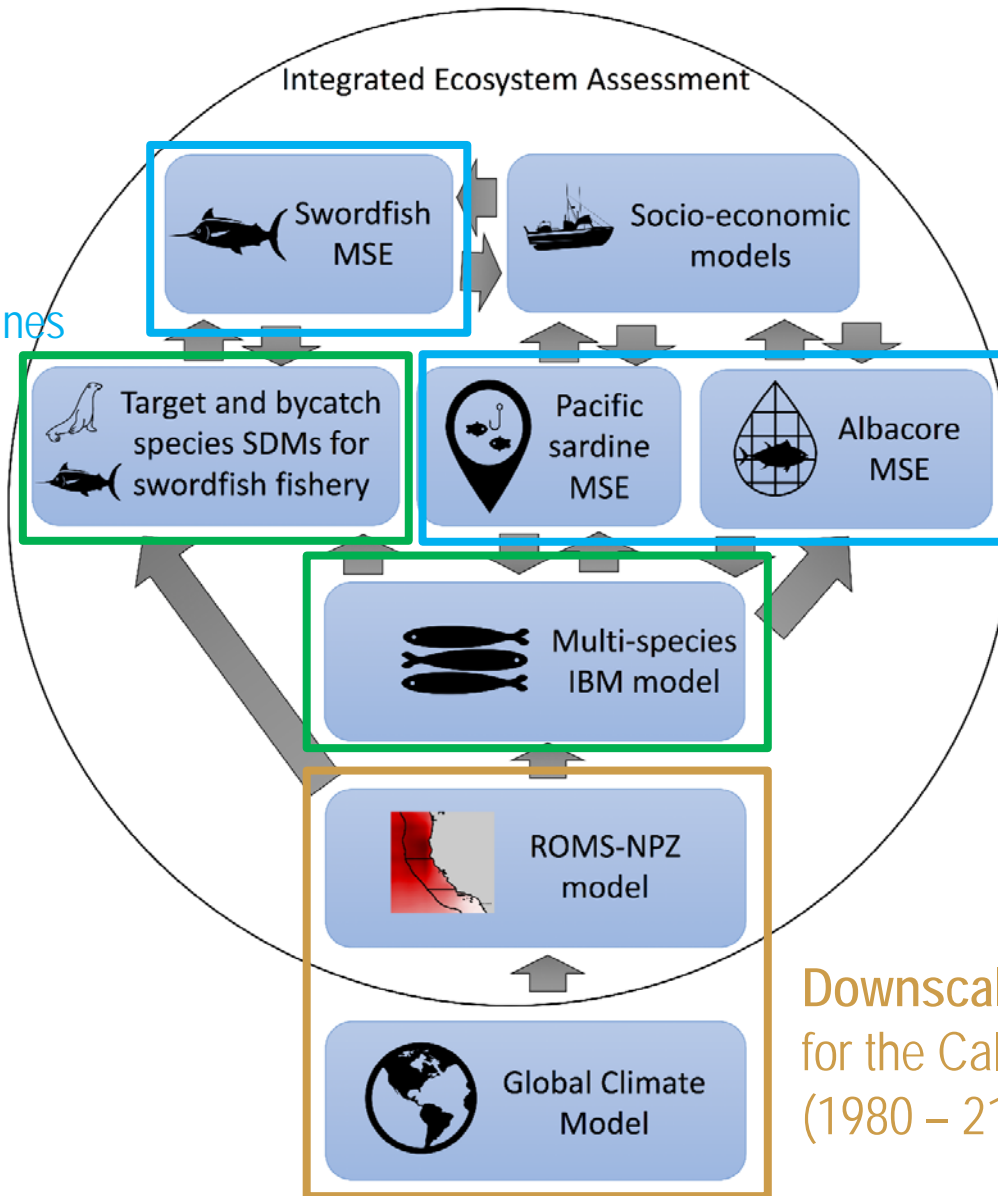


**Downscaled Ocean Projections
for the California Current System
(1980 – 2100)**

From Physics to Fisheries: A Social-Ecological Management Strategy Evaluation for the California Current Large Marine Ecosystem

Management Strategy Evaluations
(e.g., spatial/temporal closures, harvest guidelines)

Biological Models for sardine, albacore, and swordfish, and bycatch species



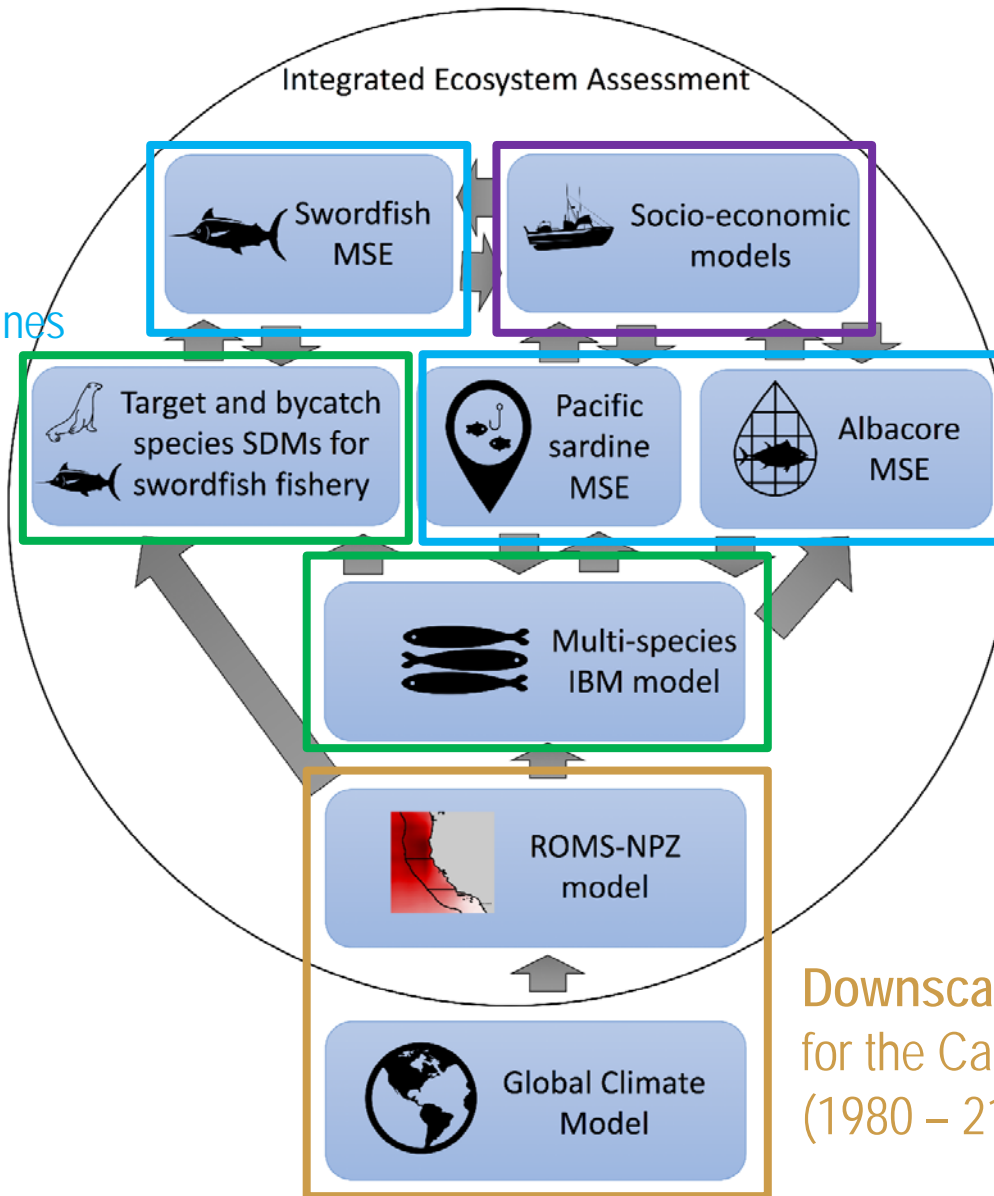
Downscaled Ocean Projections
for the California Current System
(1980 – 2100)

From Physics to Fisheries: A Social-Ecological Management Strategy Evaluation for the California Current Large Marine Ecosystem

Management Strategy Evaluations
(e.g., spatial/temporal closures, harvest guidelines)

Socio-economic Analyses (community reliance and vulnerability, economic impacts of distribution shifts and changing abundance)

Biological Models for sardine, albacore, and swordfish, and bycatch species



Downscaled Ocean Projections
for the California Current System
(1980 – 2100)

Outreach

- MSE Listening Sessions – April 18
- Quarterly Listening Sessions with Constituents
 - CPS& HMS





QUESTIONS?

