## Project Team Updates Since May 22

Updates on Modeling Work

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## Outline

- 1. Progress update
- 2. Summary of de minimis concepts, ideas, and proposals submitted by the Project Team and other interested members of the public
- 3. Obtain Project Team feedback in designing a de minimis fishery

## Progress update

- Team calls to coordinate work efforts, discuss next steps from May 22 Project Team meeting, and plan for July 18 Project Team discussion
- We have developed of a work plan with milestones and timelines
  - <u>Today</u>: continue to seek input from project team on de minimis design
  - <u>August in-person meeting</u>: Modeling team to present set of de mimimis options that will be subject to management strategy evaluation (MSE)
  - <u>September webinar</u>: Present preliminary MSE results to the Project Team

## Progress update

- Reviewed concepts, ideas, and proposals submitted by the Project Team and other interested members of the public to gain understanding of priorities and informational needs
- We have <u>completed updating of the operating model</u> to include low density dynamics, and we are prepared to conduct sensitivity runs on this issue. This was a request from the Peer Review
- Modeling team is reviewing finer technical details of the operating model, modifying if necessary, but no major changes
- Planning for an additional block of modeler calls to substantially move the project forward

# Summary of de minimis concepts, ideas, and proposals

- 8 written proposals
- Also, ideas shared during the break-out group discussions during the May 22 Project Team meeting

http://www.opc.ca.gov/2019/05/red-abalone-management-strategies-integration/

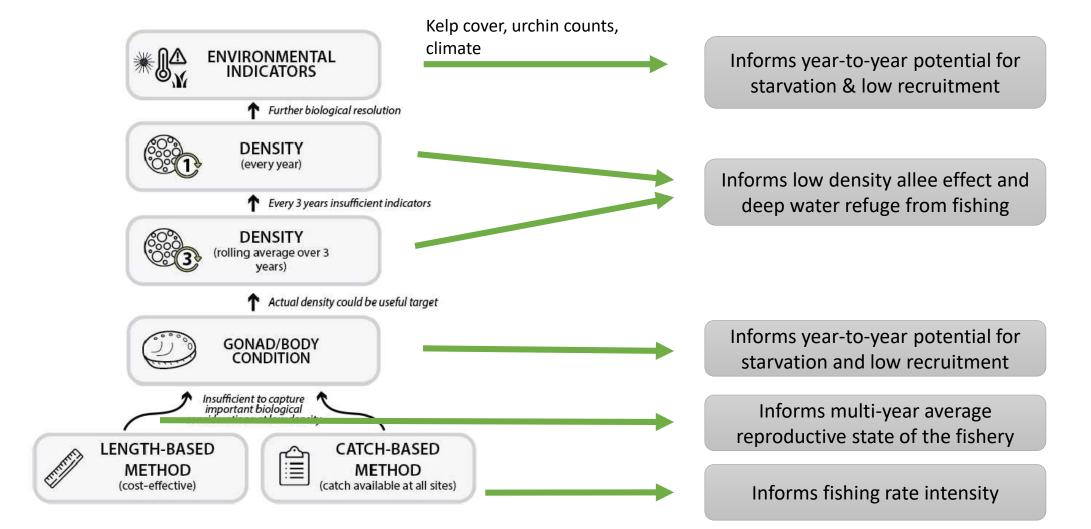
- Very detailed proposals thank you!
- We have grouped ideas into common elements we will review these details as we move through this presentation
- Your ideas will shape de minimis management strategies to be evaluated

# Project team feedback in designing a de minimis fishery

- 1) Determine which indicators to include in management strategy evaluation (MSE)
  - Which indicators will inform the de minimis fishery?
- 2) Determine the structure of the decision framework (e.g. harvest control rule)
  - · How do we define triggers for decision-making, based on selected indicators
- 3) Establish de minimis total allowable catch (TACs), and spatial areas where fishing occurs, and other regulations
  - Should we prioritize TACs based on scientific sampling needs?
  - Should we prioritize selection of fishing sites based on scientific sampling needs?
- 4) Evaluate de minimis fishery design within the MSE process
- 5) Explore the feasibility /enforcement / allocation

### Step 1: Determine which indicators to include in MSE

How does each indicator contribute to informing the question of fishery sustainability?



### Project Team Proposal Input:

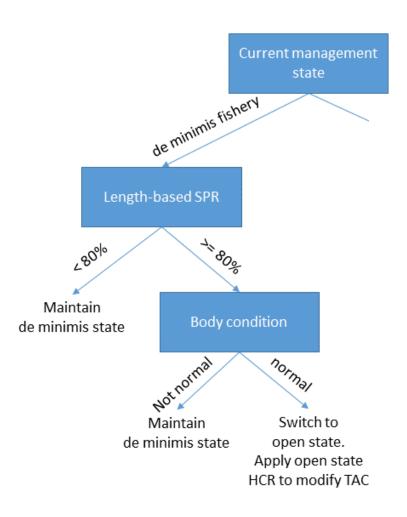
Data collection by fishers / citizen scientists:

- Restricted access design should coincide with scientific data needs
- That is, produce a fishery that provides useful data

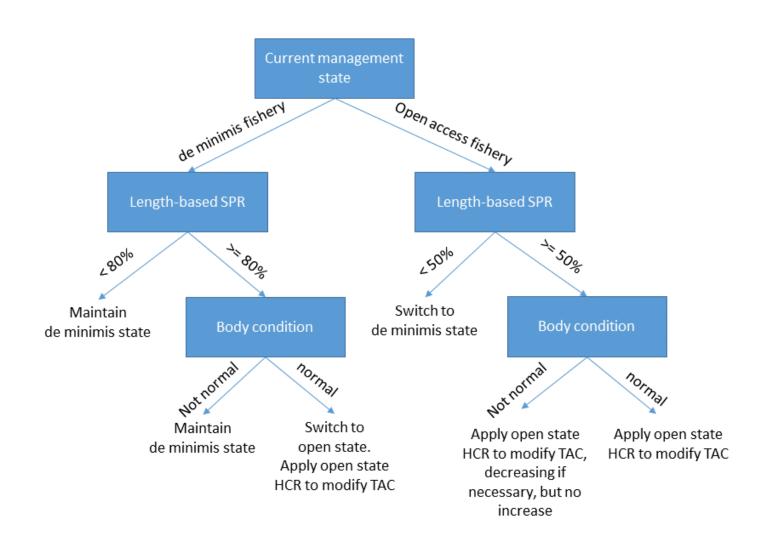
Data collection by organizations:

- Stronger scrutiny of existing data streams is a priority, before continuing their use
- Consider role of environmental/kelp/urchin data in assessing resource

## Step 2: Determine the structure of the decision framework (A motivating example)



## Step 2: Determine the structure of the decision framework (A motivating example)



## Step 3: Establish de minimis TACs, and spatial areas where fishing occurs, and other regulations

#### De minimis TACs:

- Focus on the process or rationale
- E.g., Consider TACs based on analysis of scientific sample sizes
- E.g., Consider TACs based on % of historical catch

#### Fishing sites:

- Consider selection of fishing sites based on scientific sampling needs
- Is it desirable to have consistent sites year-to-year vs. filling in data gaps through time by systematically changing sites?



### Project Team Proposal Input:

Restricted access (TACs) with Project Team and stakeholder input:

- Various TACs were proposed
- But, most proposals suggested that this was an issue for Admin/Modeling team to advise on
- Emphasis on science-driven decision-making

#### Minimum harvest length

- Current is 7 inches
- Proposals for 8 or 9 inches

## Step 4: Evaluate de minimis fishery design within the MSE process

#### Scenarios to analyze

- TAC option(s)
- Spatial configuration(s) of fished sites
- Structure of decision framework
- Indicators
- Triggers
- Minimum harvest length
- Fishing season



#### Scenario outputs

- Probable catch length composition
- Probable recovery trajectories of abalone abundance
- Informed trade-offs among scenarios



## Step 5: Explore the feasibility /enforcement / allocation

- Allocation of TAC among citizens not an issue that can be handled by MSE
- Needs further discussion in relation to de minimis fishery design

### Project Team Proposal Input:

- De minimis is the priority, and in the future, still emphasis on open access
- Importantly, maintain some access of citizens
- Restricted access (i.e., total allowable catch distributed among fishers)
- Suggested protocols for distribution of tags (lottery, fees for tags, etc.)
- Eyes on the water, regarding poaching (also, increase fines for poaching)
- Season length (good for enforcement, but may introduce fishing safety concerns)
- Sharing tags with partner diver, encourages safe diving practices
- Fishers interested in fisher-led data collection

## **Discussion Questions**

- Which indicators will inform the de minimis fishery?
- Should we prioritize TACs based on scientific sampling needs?
- Should we prioritize selection of fishing sites based on scientific sampling needs?
- What are the feasibility issues associated with site selection for fishing?
- What types of scenarios are of the highest priority for MSE?