



Implementing the MLMA Master Plan

Prioritizing Key California Invertebrate Fisheries



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Fishery Prioritization

Goal: Identify state-managed fisheries with the greatest need for management attention to inform implementation of the MLMA Master Plan scaled management approach

*Focus CDFW's limited resources on greatest management need

Prioritization Method

Prioritization process consists of 2 components:

1. Productivity Susceptibility Analysis (PSA): Assess productivity of a species and its susceptibility to current fishing practices
 2. Ecological Risk Assessment (ERA): Assess impacts of fishery on bycatch and habitat
- Scores from PSA, Bycatch, and Habitat added to get total score/ranking

Productivity Susceptibility Analysis

- Developed through collaboration between CDFW and partners (2015-2016)
- Applied to 45 state-managed fisheries with greatest catch or landings (15 invertebrates)
- Interim priority list in 2018 Master Plan based on PSA results only

Ecological Risk Assessment

- Iterative tool development, involving partners and stakeholders
- Tool further refined by CDFW to be more streamlined and intuitive

Fishery Prioritization Status

- Finfish
 - Prioritization results presented to Commission in Fall 2019
 - High priority fisheries ran through scaled Management Approach and results provided to FGC in Feb 2020
- Today- Prioritization for 15 invertebrate fisheries

Results: Combined PSA and ERA

Species	Sector	Gear	Rank Total	PSA Rank	ERA Rank Bycatch	ERA Rank Habitat
Giant Red Sea Cucumber	Comm	Trawl	5	2	2	1
Ocean Pink Shrimp	Comm	Trawl	7	3	3	1
Ridgeback Prawn	Comm	Trawl	7	4	2	1
Spiny Lobster	Comm	Trap	7	2	3	2
Spot Prawn	Comm	Trap	9	4	3	2
Kellet's Whelk	Comm	Trap	9	4	3	2
Dungeness Crab	Comm	Trap	10	5	2	3
Spiny Lobster	Rec	Hoop net	10	3	4	3
Warty Sea Cucumber	Comm	Dive (Hand)	10	1	4	5
Red Abalone	Rec	Dive (Hand/Iron)	10	1	4	5
Rock Crab	Comm	Trap	10	5	3	2
Dungeness Crab	Rec	Trap	11	5	3	3
Pacific Geoduck Clam	Rec	Shovel	11	3	4	4
Red Sea Urchin	Comm	Dive (Hand/Rake)	13	4	4	5
Pismo Clam	Rec	Clam Fork	14	5	4	5

PSA Results

Species	Sector	Gear	PSA Rank
Warty Sea Cucumber	Comm	Dive (Hand)	1
Red Abalone	Rec	Dive (Hand/Iron)	1
Giant Red Sea Cucumber	Comm	Trawl	2
Spiny Lobster	Comm	Trap	2
Ocean Pink Shrimp	Comm	Trawl	3
Spiny Lobster	Rec	Hoop net	3
Pacific Geoduck Clam	Rec	Shovel	3
Kellett's Whelk	Comm	Trap	4
Spot Prawn	Comm	Trap	4
Red Sea Urchin	Comm	Dive (Hand/Rake)	4
Ridgeback Prawn	Comm	Trawl	4
Rock Crab	Comm	Trap	5
Dungeness Crab	Comm	Trap	5
Pismo Clam	Rec	Clam Fork	5
Dungeness Crab	Rec	Trap	5

ERA Results

Species	Sector	Gear	Ecological Risk	ERA Rank Bycatch	ERA Rank Habitat
Ridgeback Prawn	Comm	Trawl	3	2	1
Giant Red Sea Cucumber	Comm	Trawl	3	2	1
Ocean Pink Shrimp	Comm	Trawl	4	3	1
Dungeness Crab	Comm	Trap	5	2	3
Spot Prawn	Comm	Trap	5	3	2
Rock Crab	Comm	Trap	5	3	2
Spiny Lobster	Comm	Trap	5	3	2
Kellet's Whelk	Comm	Trap	5	3	2
Dungeness Crab	Rec	Trap	6	3	3
Spiny Lobster	Rec	Hoop net	7	4	3
Pacific Geoduck Clam	Rec	Shovel	8	4	4
Warty Sea Cucumber	Comm	Dive (Hand)	9	4	5
Red Sea Urchin	Comm	Dive (Hand/Rake)	9	4	5
Red Abalone	Rec	Dive (Hand/Iron)	9	4	5
Pismo Clam	Rec	Clam Fork	9	4	5

Priority for Scaled Management

Consider for Scaled Management

Ridgeback Prawn

Ocean Pink Shrimp*

Giant Red Sea Cucumber

Spot Prawn

Rock Crab

Warty Sea Cucumber

Red Sea Urchin

In progress/other considerations

Red Abalone* (FMP in progress)

Spiny Lobster* (FMP in place)

Dungeness Crab* (complex management system)

Implementation: Scaled Management

- Scaled management addresses the questions:
 - What happens next for fisheries identified as higher priority?
 - What is the appropriate management action?
- Seeks to match the level of management effort with the management needs and complexity of the fishery
- During process, also will address fisheries or factors not contemplated in the prioritization process (e.g. emerging fishery or resource concerns)

Next Steps

- Determine what scale of management is appropriate
- Update the MLMA Work Plan and provide an update to the Commission





Thank You

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