MEETING SUMMARY AND OUTCOMES
Recreational Abalone Advisory Committee (RAAC)
Saturday, March 24, 2018
9:00 AM – 1:15 PM

Webinar:

RAAC Members Present: Joel Hendricks, Ian Taniguchi, Chris Voss, Josh Russo, Doug Laughlin, Dennis Haussler, Peter Haaker
Absent: Nancy Caruso, Brooke Halsey

CDFW Staff: Sonke Mastrup (Chair), Laura Rogers-Bennett, Cynthia Catton

Public attendance: Jack Likins, Frank Hurd (TNC), Bill Bernard, Richard Oba, Doug Jung, and unknown number of other public members

Key Outcomes and Summary:

1. A presentation and further discussion on the Red Abalone FMP management framework was held.
2. An update on the progression of the KELPRR collaborative project to enhance bull kelp recovery was given. A brief discussion followed the presentation update.
3. A socioeconomic and resiliency survey was announced by CDFW.

Notes:

1.0 9:00-9:10 Introductions & Announcements

2.0 9:10-12:15 Red Abalone Fishery Management Plan

2.1 CDFW gave a presentation on the draft Fishery Management Plan goals and harvest control rule (HCR). The purpose of the presentation was to delve into the details of the CDFW HCR proposal to educate the RAAC and the public on how the HCR operates to guide management of the fishery. A discussion of the HCR proposal by the RAAC and the public followed the presentation.

2.1.1 FMP Overview: the FMP goals and basic concepts of the management framework which were presented at the last meeting were reviewed initially. The FMP seeks to incorporate MLMA guidance and evolve abalone management by utilizing fishery knowledge and real world experience gained over the past 15+ years of the fishery. The management framework will utilize a combination of fixed and adaptive regulations to manage the fishery. Fixed regulations would apply across the entire fishery but adaptive regulations can be tailored to each of three management regions within the fishery.

2.1.2 Management Framework: The use of target catch and productivity indicators were introduced to the group at the last meeting. Further details on their use was presented here which included, how the target catch is calculated and what criteria are used for the productivity indicators that trigger action. A general timeline was presented to help visualize the steps for calculating the target catch for the next fishing season.

2.1.3 More details were provided on the management of the boundary region (Del Norte, Humboldt, and Marin Cos.). This region makes up a very small portion of the overall fishery catch (<5%) and no other fishery information other than catch exists. Thus this region is proposed to be managed with fixed annual limit of six abalone. If there is a large increase in catch then further surveys are conducted to inform fishery changes in this region if necessary.

2.1.4 Decision Tree Management Responses: The management framework proposes a decision tree approach to guide management response to fishery changes. Management responses are categorized as either fine or course tuning modes. In fine tuning mode the target catch is compared with the actual to determine if minor adjustments to the fishery in the current season (adjust season) are needed which is followed by a longer term response (adjust annual limit) in the next season. These minor adjustments are proposed to be done by CDFW director action (requires initial FGC rulemaking to establish this authority). Course tuning compares the target catch from the previous with the current year and if the change is greater than 25% then an immediate response (adjust season) is implemented followed by a long term response (adjust bag limit) which is done by FGC rulemaking. Besides fine and course tuning management modes, there is additional management responses to address emergency fishery responses (ie. oil spills, red tide, etc.) and criteria for region and site closures.

2.1.5 Fishery reopening: Since the fishery is currently closed, draft criteria for reopening either region(s) or sites were presented. Overall, before reopening on any spatial scale is considered, both environmental and abalone health (ie. body and gonad) conditions have to be normal. Additionally we want to see a broad size distribution that shows baseline percentages of sublegal and legal size abalone. Lastly we want to see minimum densities of abalone in deep water (>30 ft.) habitat (0.2 m^2) as well as on a site (0.4 m^2) and region (0.45 m^2) basis.

2.1.6 Management strategy evaluation: MSE is often used to examine the performance of a management strategy typically by utilizing simulation modeling. There are multiple ways to carry out MSE modeling. CDFW, for this particular management framework and HCR, used a hind cast simulation model that uses known fishery behavior (ie. past fishery catch data) to examine how the target catch framework would have behaved. The target catch was calculated for the years 2002-2016 using catch data for the Sonoma and Mendocino regions respectively. Comparing the actual catch to the target catch for the Sonoma region showed that course tuning could have been triggered four times starting in 2009. Mendocino, which has had a more stable catch history, showed no course tuning triggers but had a few times when fine tuning measures could have been applied (in 2009, 13, and 16).

2.2 Discussion - A broad discussion on the draft management framework ensued. The following list are the issues and topics that were captured from the discussion

2.2.1 Why is the size limit considered a fixed management tool and not an adaptive management tool? Theoretically the size limit could be an adaptive tool, but it has historically been a fixed regulation that has not changed very often along with the no Scuba and abalone iron and gauge regulations. Thus within the context of this proposed management framework we considered traditional flexible tools such as season, bag and annual limits that can easily be changed annually as guided under this proposed framework.

2.2.2 Could a measure of recruitment be used as one of the productivity indicators? Ideally yes, however recruitment is so variable and tricky to measure that we are not able to utilize it as an indicator at this time. The problem is that we are not been able to discern a pattern of early life stage recruitment that equates to a measurable contribution to the fishery when abalone reach seven inches.

2.2.3 Boundary region: How is this region adjusted if the other two regions drastically change? The boundary region since it is such a small portion of the entire fishery is meant

to be capped at an annual limit of 6 abalone per year. If catch does increase then this triggers surveys to assess that region more.

2.2.4 Fishery re-opening scenario issues:

2.2.4.1 Having a deep water density trigger as one of the criteria for reopening will prolong the time to reopen the fishery. The deep water population was a de facto fishing refuge but now we have a network of MPAs in place that can serve as this refuge from fishing. Consider the MPA network as the proxy for the deep water refuge initially for the reopening criteria.

2.2.4.2 It was pointed out that there probably still is a lag time between the decision to reopen and the actual reopening due to the Fish and Game Commission decision making process (typically 2-3 years).

2.2.4.3 Consider using the size limit as an alternative conservation harvest strategy in reopening the fishery. There are tradeoffs to adjusting the size limit, eg. Increasing the size limit is also reducing fishing opportunity. Any changes to the size limit may increase fishery mortality, so in considering such a change we should adjust the regulations to minimize this outcome (ie. require measuring abalone before they are picked).

2.2.5 A concern was voiced about the FMP being similar to the ARMP with density still the main focus. The use of density in this fashion still equates to high management costs and use of resources to get this information for management.

2.2.6 Another concern that was voiced was that this management framework does not fully utilize the best available science. There are still concerns of the baseline density trigger being too high, and that density information where it is collected does not reflect the status of fished areas outside of those sites.

2.2.7 Consider adding diminimus fishery options:

2.2.7.1 A diminimus fishery allows fishery participants to be engaged in fishery management

2.2.7.2 A diminimus fishery doesn't hurt recovery of the stock under the TNC HCR proposal

2.2.8 A comment supporting the use of forecasting models in MSE was voiced. Management of other fisheries do utilize such forward projection models.

3.0 12:15-12:50 KELPRR Project Update

3.1 Kelp recovery project update. Dr. Cynthia Catton gave an update on progress of Kelp Ecosystem & Landscape Partnership for Research and Resiliency Project (KELPRR). A more in depth description of the project and its goals was given in a presentation at the last RAAC meeting (See Jan. 2018 meeting summary and outcomes: https://www.wildlife.ca.gov/Conservation/Marine/Invertebrates/RAAC). The project update this meeting focused on the following:

3.1.1 Progress on CDFW recommendation of an emergency rule to expand the recreational purple urchin bag limit: CDFW is moving forward with proposing an emergency rule at the April Commission meeting to increase the recreational bag limit for purple urchins from 35 urchins to 20 gallons/day. This is equivalent to four 5 gallon buckets full of urchins and is considered a manageable recreational consumptive use amount per day.

3.1.2 Recreational diver opportunities to contribute to the project: The overall goal of utilizing recreational divers is to expand the purple urchin control efforts beyond just using commercial urchin divers and across a broader geographic area. A key feature to

this expansion is coordinating and focusing harvesting efforts to both track removal and to maximize effectiveness of urchin removal. The following are harvesting activities and tools to expand and develop this arm of the overall project.

3.1.2.1 Effort coordination tool: the Nature Conservancy is spearheading the development of a website for divers to report their observations of purple urchin abundance by location (on a map). This reporting tool can help recreational divers determine where they should focus their urchin control efforts.

3.1.2.2 Coordinated recreational harvest events: RAAC member Josh Russo is organizing harvest events in Sonoma county for the Memorial Day weekend.

3.1.2.3 A broader scale of urchin control measures is being planned through a Scientific Collection Permit where urchin smashing could be utilized rather than physical removal. Josh and Nancy Caruso (RAAC members) are leading efforts to submit a proposal and application for an SCP. KELPRR partners are reviewing the proposal now.

3.2 Discussion of the project and issues. The following list are the issues and topics that were captured from the discussion.

3.2.1 At one time there was talk about applying for government disaster relief funding. Did this occur and who applied and for what. The commercial urchin industry did apply for such relief to the federal government but to date they have been unsuccessful.

3.2.2 At the last RAAC meeting there was discussion and proposal to recommend an emergency rule for unlimited bag limit for purple urchins. The RAAC did approve a recommendation to the director to lift the bag limit for purple urchins through an emergency rulemaking. That recommendation along with the other recommendations made at that meeting were forwarded to the director. CDFW prefers that the allowance of unlimited take of purple urchins be done through the issuance of a scientific collection permit rather than lifting the recreational bag limit.

3.2.3 If urchin smashing is allowed, where and when is it appropriate to do it? The KELPRR group is working on determining these parameters. We want to avoid smashing urchins when they are ripe and close to spawning. The problem is that urchin gonad ripeness is highly variable throughout the year and by area so it may be difficult to determine where and when smashing could be used.

3.2.4 A comment supporting the progress of online citizen science tools was made and that interest in the webpage is growing.

3.2.5 A concern was expressed that not enough is being done to address the urchin/kelp situation. What is being developed is good but that process is slow and some worry that it may be too little too late. More opportunity to control urchins needs to happen in shallow areas so that remaining abalone have a chance. Action needs to happen now.

3.2.6 Another comment expressed is that long term engagement by stakeholders and the public is needed for this kelp restoration project to be successful.

4.0 12:50-12:55 Other Business

4.1 **Socio Economic and Resiliency Survey:** Due to limited time remaining in the meeting, a brief announcement about plans for a socio-economic and resiliency survey was made by CDFW staff. The department is conducting this survey to gather information related to the 2018 fishery closure. By gathering this data the department hopes to gain a better understanding of the impacts to local coastal communities and to explore options to help coastal fishers and businesses adapt and cope with the closure.

5.0 12:55-13:15 Public Expression and meeting wrap up

5.1 Public expression: Most of the comments made during this time pertained to the urchin control/kelp recovery discussion so those comments were incorporated into section of the meeting summary above.

5.1.1 A question was asked if there is a place where the public can access published studies on abalone density. CDFW is working on such a place on a web page. Possibly as part of the status of fisheries portal under MLMA.

5.1.2 A request was made to have the meeting notes available for this meeting as soon as possible.

Next meeting: TBD

Meeting adjournment