

measurable, the discussion did not indicate a need to modify traditional assessment methodologies until MPA effects become better understood.

3.3.4 Key Discussion Points

The discussion under each of the three topics included concepts that are applicable to California nearshore fisheries in general, as well as some specific comments regarding the focal species/fisheries (Session Topic Tables 3.1-3.3). The density ratio method was thought to be a strong candidate to help inform fishery management decisions. In addition, participants noted that logical arguments can be developed to alter the precautionary adjustment for data-poor stocks as a result of the coastwide network of MPAs, but the basis and magnitude for any such potential adjustment requires further investigation. The new network of MPAs also provides a reason to consider changing the 60-20 harvest control rule for assessed nearshore finfish to 60-10, but this concept would need to be fully explored as part of an amendment to the NFMP. Furthermore, a concern was expressed that MPAs have the potential to exacerbate effort shift and the risk of serial depletion, and consequently attention should be given to improving our understanding of effort shift.

4. Next Steps

Following Session 3, the workshop participants were asked to brain storm about what steps might be considered next to assist efforts on integrating MPAs into fisheries management (i.e., “What do we need to do next to get us where we need to go?”). The resulting discussion centered upon four themes:

- Necessity for more EFI
- Usefulness of MPA baseline survey data
- Necessity for more focused monitoring surveys that address MPA-fisheries questions
- Potential management actions

A summary of the discussion outcomes are provided below.

4.1.1 Necessity for More Essential Fishery Information

No critical MPA-fisheries management issue arose during workshop discussions in regard to the four focal species/fisheries; however, participants noted that this result could be due to a lack of data. In particular, earlier session discussions pointed out that most of the focal species/fisheries lacked some EFI needed to effectively evaluate MPA effects.

4.1.2. Usefulness of MPA Baseline Survey Data

Some MPA baseline survey data will be valuable for fisheries management, although the methods used to collect these data may limit their usefulness. Participants discussed some of the MPA baseline data that potentially could be used, the associated methodological requirements that would need to be in place for these data to be used,

and the importance of collecting baseline data immediately pursuant to when an MPA goes into effect.

4.1.3 Necessity for More Focused Monitoring Surveys

Data requirements for managing fisheries are different from those needed to evaluate MPAs. Workshop participants noted that additional monitoring surveys will be needed that specifically address MPA-fishery questions and provided some ideas on types of information that should be collected.

4.1.4 Potential Management Actions

While no urgent management actions were suggested during the workshop, several ideas were floated by participants for management consideration. These included:

- Reviewing the need for seasonal closures for nest-guarding species such as cabezon outside of MPAs
- Exploring the possibility of modifying the 60/20 harvest control rule currently used for the nearshore fishery due to additional precaution provided by MPAs

4.2 Final Considerations

First, the primary goal of this workshop was to openly elicit input from the participants on the utility and practicality of using a marine protected area network to inform fisheries management. This goal was clearly met: the participants brought to the discussions a broad range of knowledge and expertise, and provided valuable input; and the workshop, from the perspective of all participants, provided an effective forum for discussing the various aspects of this topic.

Second, this workshop represents only the first step in the CDFG's efforts to explore the integration of MPAs and fisheries management. While this workshop provides useful results, it obviously does not include all perspectives on the topic. The CDFG expects that the workshop results will serve to catalyze further discussion on this subject and is interested in receiving additional input including ideas not expressed within the workshop. Since no immediate management action is suggested by workshop participants, the CDFG will continue its steps to obtain/solicit further input and perspectives from scientists and ocean managers, fishing industry members, and the community at large.