



Marine Life Management Act (MLMA) Master Plan Informing Development of an Online California Fisheries Portal

Focus Group Discussion, Summary of Key Themes

Tuesday, May 8, 2018 | 9:30am-12:30pm PT

Introduction

On May 8, 2018, the California Department of Fish and Wildlife (CDFW), in partnership with the Ocean Protection Council (OPC), convened a focus group discussion to inform the design and development of an online California Fisheries Portal (Portal). The goal of the webinar was to engage in a constructive discussion in the early stages of the development of an online, publicly-accessible, and user-friendly “living” library for California’s fisheries information. The idea of an online resource for California’s fisheries information was first introduced to stakeholders in February 2017 during the Marine Life Management Act (MLMA) Master Plan amendment process (more details [here](#)).

Participants were invited to share their feedback on the design, form, and function of a Portal, and provide insights on the type of user experience and fisheries information that would be the most desirable and informative. The webinar hosted 25 participants representing a diverse range of anticipated Portal users, including fishermen (commercial and recreational), divers (consumptive and non-consumptive), environmental non-governmental organization representatives, Legislative representatives, researchers, college students, and state agencies. Invited participants were community leaders, or “key communicators,” who have direct access to diverse target audiences and are interested in serving as a liaison to disseminate information to their peers and contacts. Targeted outreach was conducted in advance of the focus group to help ensure equal representation of diverse target audiences and facilitate a focused discussion.

The following summary of key themes and recommendations aims to capture the topics, key questions, feedback, and recommendations that emerged from the focus group discussion. This summary is intended to capture high-level details and key themes and serve as a reference for both participants and CDFW as steps are taken to further the design and development of the Portal. CDFW will consider all feedback received as the Portal continues to evolve and may also update the Marine Region webpage based on this feedback to support overall stakeholder needs. CDFW will also reference comprehensive notes from the webinar as they continue planning for the Portal in the coming months.

The focus group discussion was designed to support an open exchange of information, with discussion questions posed throughout the webinar in an effort to solicit focused feedback. These discussion questions are available at the end of the document as reference, along with other materials shared to support the discussion.

CDFW, in partnership with OPC, looks forward to continuing to work with Tribes and tribal communities, stakeholders, and other interested members of the public to develop an online tool that is useful and contains up-to-date information to serve the needs of a broad representation of users. Additional feedback and suggestions on the Portal are welcome at any time and can be shared with CDFW by emailing MLMA@wildlife.ca.gov or directly contacting the CDFW staff lead for the Portal Project, Tom Mason, at Tom.Mason@wildlife.ca.gov.

Background

MLMA Master Plan Amendment Process

The MLMA Master Plan for Fisheries (Master Plan) acts as a roadmap and toolbox for implementing the MLMA, California's primary fisheries management law. CDFW has been working with partners since late 2015 to amend the Master Plan to better achieve the MLMA's vision of healthy ecosystems, sustainable fisheries and fishing communities, and transparent and strategic management. The 2018 Master Plan is currently under review by the Fish and Game Commission and is anticipated to be adopted in June 2018.

Enhanced Status Reports (ESRs)

Enhanced Status Reports (ESRs), the revised approach to Status of the Fishery Reports in the 2018 Master Plan, fulfills the MLMA's requirement to communicate the status of California's fisheries and effectiveness of management based on best available information to stakeholders and the public. ESRs provide an overview of the target species, fishery, management and monitoring efforts, and research and management needs, and are intended to serve as the foundation of the Portal.

California Fisheries Portal

The Portal is envisioned to be a dynamic web-based tool that makes more effective use of ESRs by organizing and sharing information in an accessible form that can be easily updated as new information becomes available. The Portal may also provide users with tools for data exploration, visualization, and download/query, and help to implement the new strategies of the 2018 Master Plan. CDFW is hopeful that the transparency of the Portal will encourage collaborative fisheries research and focus research efforts of students and partners to fill information gaps.

Key Themes of Focus Group Discussion

The following captures high-level discussion topics shared among focus group participants. Additional suggestions, concerns, and clarifying questions made by individual participants and other stakeholders interested in the Portal are also included in the key themes summary.

Participants were supportive of CDFW developing a central online resource to organize and share California's fisheries information, based initially on the content of ESRs with the opportunity to expand upon this information to include broader interests and priorities.

- Participants confirmed the importance of having access to information on target species and fisheries as outlined in the draft ESR Table of Contents, including: species biology, fishery management tools and measures (e.g., stock assessments, FMPs, restrictions, etc.), key fishery statistics (e.g., landings, catch, value, participation, historic trends, economics, import/export trends, etc.), and important ecosystem considerations (e.g., habitat, bycatch, etc.). Maps and graphs to help convey fisheries information were highlighted as an important consideration.
- It was suggested that the Portal could also include information and/or links to information beyond the current scope of ESRs, such as:
 - Statutory and regulatory information (e.g., Fish and Game and Title 14/50 codes).
 - Relevant marine policy, such as the MLMA and 2018 Master Plan.
 - Relevant issues, such as climate change and readiness.
 - Department information, including revenues, expenses, and budgets associated with programs, current research projects, and contact information for staff.
 - Notice of upcoming public meetings (e.g., Fish and Game Commission, Marine Resources Committee, Recreational Abalone Advisory Committee, Marine Protected Area (MPA) Collaborative, focus groups, webinars, etc.) where the fishery will be discussed and pending

actions on fisheries by the Fish and Game Commission and Marine Resources Committee.

- Other resources and websites containing fisheries information, including: state agencies (e.g., harmful algal bloom information (e.g., domoic acid) via the California Department of Public Health), federal agencies (e.g., National Oceanic and Atmospheric Administration, for information on federally-managed species), OceanSpaces for fisheries data and information, CalTIP to facilitate public reporting of violations, and information that is important for ocean users, including weather and tides.
 - Resources to support fish identification (e.g., *Guide to the Coastal Marine Fishes of California* by Miller and Lea, [Fishbase.org](http://fishbase.org), etc.).
 - Information about recovery efforts CDFW is involved in to rebuild fisheries.
 - Information about inland, endangered, and/or overfished species (including impacts to/from fisheries), unfished species (e.g. limpets), marine mammals, and federally-managed species.
 - Information about partners involved in funding, research, monitoring, and gathering information.
- Another suggestion was made that the content in the ESRs was overwhelming. The Portal could contain high-level information and direct downloads of ESRs could be used for those looking for more information.
 - Colorful, high resolution/quality images and/or drawings of species, and videos of fishing operations and/or remotely operated vehicle dives were highlighted as important tools to generate interest in the fisheries portrayed on the Portal.
 - It will be important to keep the Portal simple and avoid duplication of information across state and federal fisheries management websites.
 - CDFW clarified that some of the informational interests listed above already live on the CDFW Marine Region webpage as well as other fisheries informational websites. It will be important to consider how to incorporate and share various data sources and information from the Department and other entities and consider data quality control and confidentiality.

The Portal should be considered a “living” resource and designed so that accurate, timely information can be made readily available, providing users with access to fisheries information and data as close to real-time as possible.

- While requiring resources and capacity, an online resource has the potential to be updated regularly as new information becomes available. Participants discussed the challenges with static ESRs that are able to provide relevant and valuable fishery-specific information for a limited time before becoming outdated. There was general interest in understanding how often the Portal will be updated by CDFW.
 - It is important to think about the longevity of the site and consider how to design it so a redesign will not be necessary in a year or two.
- Participants asked if the Portal would enable users to submit information and data (i.e., functioning similarly to a Wikipedia site) that could be moderated for quality control.
 - CDFW explained that the Portal information and data will be populated and posted by CDFW only, though based on and informed by discussions with stakeholders. Links to external resources are anticipated to be used throughout the Portal to ensure users have access to other helpful and complementary resources
 - While most of the information and data will be generated by CDFW, those that are

peer-reviewed or vetted by CDFW to confirm the reliability of the data source may also be included on the Portal.

- There was a brief discussion on the value of having each species/fishery page include a downloadable PDF of the ESR, with the recognition that the webpage itself may have updated information. A suggestion was also made that raw data, being mindful of confidentiality, also be downloadable with the reports so researchers can use the data for specific purposes.
 - To address the problem of limited data and information in geographically remote areas, data from nearby areas should be made available so users can extrapolate the data to inform their more localized efforts.
- Users expressed interest in the Portal having a tool to support near real-time updates on open/closed areas (e.g., [California Ocean Sport Fishing Regulations Map](#)) and status of quotas.

The Portal should be user-friendly, easy to navigate, and contain both high-level and detailed information that is based on the diverse needs of anticipated user groups. A suggested approach, supported by many, was to design the Portal in a way that information is presented in a series of steps or phases, providing higher-level information upfront with the ability to dive deeper into additional detail depending on the user's needs.

- Participants would like a tool to query, visualize, and download data, with the option to generate maps and graphs of trends over different timescales.
 - CDFW highlighted mapping information currently lives in CDFW's MarineBIOS page ([here](#)), which could be linked on the Portal.
- In addition to grouping information by fishery, information should be grouped or searchable by geography. This would help better understand where there are monitoring and data gaps (e.g. Smith River) and inform local efforts.
- The group discussed the value of quick links to access information throughout the Portal and to link to external resources. A "FAQ" webpage was also suggested by one participant.
- Users could first arrive on a Portal homepage that would provide a number of overarching categories (e.g., fishery regulations, species biology, geographic region, etc.) to help direct users to the type of information they are seeking. Each category would then lead to another page with the next level of information.
 - Grouping at this next level could be by fish or invertebrate, region, or fishing gear type. Participants requested an option for viewing a species list (including scientific, common, and commonly-use names). It was also expressed that there should be a limited number of 'sort by' categories to more easily direct the user to targeted information.
 - Participants expressed support for including a category specific to engagement opportunities to help stakeholders get more involved in fisheries management. This could include information about any regulatory processes underway for a specific fishery (e.g., FMP process and related public meetings). There also could be value in providing information on other ways stakeholders can get involved, for example through citizen science programs like Reef Check California.
 - A suggestion was made to avoid using traditional subsistence bins (i.e. commercial and recreational) to be more inclusive.
- There was support for ensuring users can access target information in as few clicks and direct a pathway as possible. Additionally, a robust search engine that is accessible on every page was recommended.
- Support was expressed for sharing summary information (e.g. number of participants, etc.) and infographics. However, the information be given context and linked to the data that was used to inform

the summary.

- The Portal should be designed to be functional on a computer/laptop, tablet, and smartphone. For those users wishing to access the Portal via a smartphone or tablet, it would be helpful to limit the number of links used on each page and prioritize the use of tabs that are scrollable to improve navigation. The information may be condensed from paragraph to bullet form, and use of images and videos reduced compared to the version for computers/laptops.
 - A tracker could be informative to help CDFW understand how many users are visiting the website and the how they are accessing the information.
 - A suggestion was made for the Department to do basic analytics on their current website to understand performance, user behavior, etc. to better inform the general approach to the Portal.
 - A Table of Contents, or an introductory paragraph, should be added to provide users with context so they understand what the Portal is and what type of information is available on the website.

Currently, fisheries information is sought out through a variety methods, including online resources, direct communications with CDFW fishery experts, and attending meetings. There is interest in the Portal acting as a one-stop-shop for available state-managed fisheries information.

- Participants shared that they access fisheries information using a variety of sources and methods, including:
 - *Websites:* CDFW, Fish and Game Commission, California Legislative Information, California and/or Federal Code of Regulations, Regional fisheries management organizations, OceanSpaces, and other websites (e.g., state and federal management agencies).
 - *Other online material:* Publications and other sources of material located by searching for keywords in Google or Google Scholar.
 - *Department Expertise:* Annual reports and fishing periodicals (e.g., Year in Review, Fishery Status reports, Fisheries Forum), and phone calls to staff.
 - *Books and Publications:* E.g., *The Handbook of Fish Biology and Fisheries* by Milton Love.
 - *Informational Meetings:* Fish and Game Commission Meetings, Recreational Abalone Advisory Committee, etc.

It may be difficult to design a Portal that meets the information needs of all stakeholder audiences who have a vested interest in fisheries management in California.

- There was an acknowledgement by a number of participants that the needs of one user may be very different from the needs of another. The Portal may be used to help inform business decisions, provide details of recent changes to management decisions or regulations, describe the biology of a species, or identify data gaps and research needs.
 - Various participants suggested CDFW better define the target audience(s), goals, and needs for the Portal.
 - It was unclear to participants if the Portal would be useful to members of the general public. There was general agreement that the high-level information on species/fishery would be more useful to a broader audience than access to a tool that would support data exploration and downloads. However participants expressed the value of having the Portal become the public's go-to place for all California's fisheries information.
 - Marketing and publicity through social media and press releases will be an important step to informing the public about the existence of the Portal and directing users to specific pages.

- Some of the recommendations related to the design of the Portal (e.g., quick links, tiered approach to sharing information, etc.) were participant’s suggested approaches to helping to navigate this challenge.

Looking ahead to future iterations, participants brainstormed on a “wish list” of additional functions and information that could be included on the Portal.

- Improved mapping information to include interactive, downloadable data layers that could include open/closed seasons, fishing locations for fisheries/areas that are open (request for pier/shore-based sites), management information (e.g., rules, regulations, governing authority), habitat types, proposed and actualized ocean and marine spatial planning projects (e.g., aquaculture, offshore wind, artificial reefs), etc.
 - CDFW will need to consider the most-appropriate fisheries information to share and the spatial scale for maps and data downloads.
- Sophisticated data query tool that would show a comprehensive picture of fishing activities of a specific species across commercial, sport, and recreational fisheries.
- Once fully functional, data generated from electronic landing receipts could be integrated into target species and fisheries information shared on the site.
- Consider adding “translate” button/feature so the Portal that can be translated into other languages.

Ongoing stakeholder input and guidance at key stages of the Portal’s development will help CDFW create a useful and functional online resource that aligns with user needs.

- Participants were appreciative of the opportunity to participate in the focus group discussion and help to inform the process at such an early stage. Of the eight participants who completed the post-webinar survey, the majority (87.5%) felt the webinar provided a productive informational exchange with the CDFW and other participants. The majority (62.5%) of participants were pleased with the level of stakeholder engagement in the early development of the Portal.
- A number of participants offered to help support CDFW with the Portal’s design based on IT expertise that they or their peers have access to. Some expressed concern that it may be difficult for CDFW to prioritize the Portal’s key functions with having so much input at this time.
- A number of participants expressed interest in helping to inform future iterations of the Portal (i.e., beta testing) and are open to participating in ongoing conversations with CDFW. There was also some interest in getting further into the content of the ESR itself, and participants welcomed the opportunity to be involved in a stakeholder review process at the appropriate time.
- At least one participant offered the suggestion that an online forum would be a useful tool for interested stakeholders to continue to provide feedback on the Portal.
- Some participants feel in-person discussions (as opposed to webinars) would better facilitate discussion and exchange of information and ideas. CDFW could consider in-person opportunities for future discussions.

Feedback on Example Websites Reviewed by Participants

Prior to the webinar, participants were asked to review a number of websites as possible models for the Portal, and during the webinar additional example sites were brought into the discussion by participants for consideration. The following provides input shared by participants on the examples sites discussed:

- [NOAA’s “Find a Species”](#): Support for aspects of the site, including the quality of the images used

throughout and the simplicity of the site's navigation. Participants liked the ability to search the list of species in addition to clicking through the images.

- [Australian Fisheries Management Authority](#): Support for the use of species lists and gear types as a user-friendly way to find high-level information on species and understand what gear is used for each fishery and the potential habitat impacts. Support also expressed for the design of the species pages (scrollable) and display of the sustainability graph. Participants agreed that this site appears to focus on commercial fisheries, and the Portal should consider both commercial and recreational fisheries. Participants highlighted the text on the site is small and difficult to read with too much content included. A key aspect to the Portal will be to not include too much information so that it becomes difficult to digest and understand.
- [Fisheries Data Explorer on OceanSpaces](#): Participants would like to see the Portal include up-to-date datasets similar to those on this site. The data querying functions are very accessible and intuitive, allowing the user to see what portions of the data they want to download by visualizing it first. The mapping functions were also highlighted as desirable features to include on the Portal.
- [NOAA's RDDAP](#): Some participants felt this site was not an intuitive way to share data since the user needs a lot of base knowledge to access the information they are querying.
- [NANOOS](#): An example of another useful and intuitive way for how to share data and make it broadly accessible. Data can be visualized on the site as well as downloaded in widely accessible formats. Site is transparent and shares the sources of all data, and has a powerful data filtering function.
- Following the webinar, participants shared the [Monterey Bay Aquarium's](#) web portal could be a useful model or resource. The "Cool Facts" for each species was highlighted as a creative and effective way to grab users' attention.

Focus Group Materials

- Webinar agenda
- Draft Enhanced Status Report Table of Contents
- List of example fisheries information websites
- PowerPoint slide deck

Questions Posed to Focus Group Participants

The following discussion questions were asked to participants at key stages of the webinar to help support the discussion and focus the feedback and input provided:

- How do you currently access fisheries information and what is your user experience?
- Why are you looking for fisheries information?
- How do you use fisheries information?
- What fisheries information are stakeholders interested in gaining access to and/or learning about, and how might this be expected to change over time?
- Does the draft Portal web page layout (see PowerPoint slide deck) provide sufficient (more/less) information based on these needs?
- Could the visual layout and navigability of the draft Portal web page layout (see PowerPoint slide deck) be improved?

- What are some successful examples of agencies, organizations, or others sharing fisheries information with the public?
- What functions would stakeholders like to see the Portal have (e.g., data visualization and analysis tools to query data and create maps, relevant marine policy information, etc.)?