

# Ocean Resources Enhancement and Hatchery Program Scientific Advisory Committee Meeting Minutes

Date: Monday, December 5, 2024  
Time: 10:00 a.m. – 12:00 p.m. (PST)  
Location: Microsoft TEAMS Video Conference

## Attendees:

**Ocean Resources Enhancement and Hatchery (OREHP) Scientific Advisory Committee (SAC) members:** Lee Blankenship; Ken Cain, Ph.D.; Tanya Darden, Ph.D.; Mike Franklin, Ph.D.; Jackson Gross, Ph.D.; Ken Leber, Ph.D.; Kai Lorenzen, Ph.D.; Nicole Williamson; Greg Wiens, Ph.D.; and Ron Zweig.

**California Department of Fish and Wildlife (CDFW):** Bryan Barney, Kathryn Johnson, Jeff Rodzen, and Valerie Taylor

**Ocean Resources Enhancement Advisory Panel (OREAP) Members:** John Ballotti

**University of Florida (UF):** Susan Hervas Aviles Ph.D.

**Hubbs-SeaWorld Research Institute (HSWRI):** Mark Drawbridge, Ruairi MacNamara, and Mike Shane

**Public:** Katie Cieri (Ocean Protection Council) and Mike Raabe

## 1. Introductions and announcements

- No announcements

## 2. Receive presentation from California Sea Grant on the results of the ORHEP Stakeholder Engagement Visioning Process and discuss next steps

- CASG and UF presented the results of their “Developing a vision, criteria and options for the future of OREHP: A collaborative planning process” study. The presentation can be requested by e-mailing [ORHEP@wildlife.ca.gov](mailto:ORHEP@wildlife.ca.gov).
- Questions and comments:
  - Jackson Gross asked if there was a general hypothesis going into the study and how was it different from the results.
    - Survey was primarily aimed at gathering information rather than testing specific hypotheses. Information gathered from the situation assessment and focus group guided the questions for the survey.
  - Ron Zweig commented that the study was informative and found it interesting that the survey results concluded that the value of the program for stakeholders lies in its varied contributions to research,

fisheries and ocean management, stewardship, and education as much or more than its role in enhancement.

- Tanya Darden asked if CASG and UFL considered the potential for socioeconomic biases due to only emailing the survey, and if they considered doing a mail survey to capture the input of other participants.
  - The response rate was approximately 6-7%, which is typical for these types of surveys.
  - The study did not include mail surveys to capture a broader demographic, so there may be some socioeconomic biases.
  - Survey questions regarding the willingness to pay were primarily about stewardship rather than direct benefit; more about the value of the different aspects of the program – increased harvest opportunity vs. change in the population – than about trying to see if participants would pay more.
- Tanya Darden commented that the ethnicities represented in the study may not accurately reflect the population of California and that the study will need to stand up to a scientific review.

### **3. Receive update on the CDFW white seabass genetics study**

- Bryan Barney provided an overview of the progress that CDFW has made on the white seabass genetics study, which aims to better understand hatchery contributions to wild white seabass populations. A copy of the presentation can be requested by e-mailing the OREHP Coordinator at [OREHP@wildlife.ca.gov](mailto:OREHP@wildlife.ca.gov).
- CDFW has contracted Dr. Mark Christie from Purdue University to provide modeling support for the genetics study at a cost of \$10,000.
- Questions and comments:
  - Greg Wiens asked if CDFW was close to getting a sex determining single nucleotide polymorphism (SNP).
    - CDFW does not have this data yet, but it is of future interest and potentially available in the SNP dataset.

### **4. Receive update from the Post-Release Survival Subcommittee**

- Nicole Williamson, co-chair of the Post-Release Survival Subcommittee, provided an update on the subcommittee's activities.
  - Subcommittee has been discussing the following topics:
    - Size at release studies - use smaller white seabass (2-6 inches total length) and new sampling methods (trawl, faster tow speeds) to investigate potential domestication effects and inform cost/benefit scenarios.
      - Information lacking on where smaller wild white seabass are located. Need this information to inform us of release locations.

- Release habitat studies – release fish in different habitats (bays vs. coastal, include Catalina Island as a habitat type) over the next three years to assess survival.
  - Re-implementing a fishery independent sampling program for subadults (gill net sampling).
  - Revising OREHP’s fishery dependent sampling program in terms of sample sizes, fisheries, locations, size and age classes, etc.
- Questions and comments:
  - Kai Lorenzen asked if trawl surveys have caught juvenile white seabass (4-6 inches in total length).
    - Limited data available - very few white seabass in that size range have been caught by current and past trawl surveys.
  - Michael Franklin expressed support for bringing back the gill net sampling program and trawling areas where juvenile white seabass might be located.
  - Tanya Darden highlighted that in addition to having a better understanding of what habitat juvenile white seabass reside in, having a way to capture those fish at a younger age would allow OREHP to assess survival quicker than having to wait for them to recruit to the commercial and recreational fisheries.
  - Kai Lorenzen commented that it will be useful to explore trawling for juvenile white seabass as well as bringing back the gill net sampling program.
  - Ron Zweig cited that the survival rate was better for fish released at a larger size.
  - Tanya Darden supports exploring the release of younger fish again with the additional tools that allow for comparison of earlier release sizes and smaller release sizes.

## **5. Receive update from the Fish Health & Welfare Subcommittee**

- Greg Wiens, chair of the Fish Health & Welfare Subcommittee, provided an update on the subcommittee’s activities.
  - Subcommittee have reviewed presentations from CDFW and HSWRI on both infectious and noninfectious diseases.
  - Subcommittee has reviewed the deformities/malformation screening procedures conducted by HSWRI and CDFW.
  - Subcommittee recommends that HSWRI continue their current screen procedures and is proposing hypothesis testing to identify factors that reduce deformities, ideally through double-blinded studies, as well as perform studies in conjunction with efforts to optimize diet, water quality, and rearing environment.

## **6. Discussion on adding Subject Matter Experts (SMEs) and revising the scope of the Genetics RFP Subcommittee to review OREHP genetics studies and broodstock management**

- Nicole Williamson called a motion to form a Genetics Subcommittee. Motion seconded by Michael Franklin. Motion passed unanimously.
  - Genetics Subcommittee will focus on reviewing ongoing OREHP genetic studies and broodstock management.
  - Members: Kai Lorenzen, Greg Wiens, Matt Powell, Michael Franklin, and Tanya Darden.
  - Subject Matter Experts: Bryan Barney, Jeff Rodzen, Mark Drawbridge, and Ruairi MacNamara.

## **7. Public comment on agenda items and closing of meeting**

- John Ballotti raised concerns about the importance of sample location distribution for valid conclusions in the CDFW genetic study.
  - It was noted that broader sample collection would yield better insights into study.
  - Valerie Taylor stated that most genetic samples will include location information, either latitude/longitude or CDFW block numbers, as well as length data.
- Ken Leber suggested that the Genetics Subcommittee and the Post-Release Survival Subcommittee collaborate and share recommendations on releases for enhancing post-release survival strategies.
- Next SAC meeting is scheduled for January 28, 2025 to discuss CASG and UFL stakeholder study recommendations.
- Meeting adjourned at 11:56 a.m.