

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

Date: Monday, December 18, 2023

Time: 11:00 a.m. – 12:00 p.m. (PST)

Location: Microsoft TEAMS Video Conference

## Attendees:

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

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

***Ocean Resources Enhancement Advisory Panel (OREAP) Members:*** John Ballotti, Jim Hendricks, and Wayne Kotow

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

***Members of the Public:*** Steve Santen

## 1. Introductions and announcements (10 mins.)

*Valerie Taylor and Ron Zweig*

## 2. Discuss and vote on the CDFW Genetics Study Scope of Work (40 mins.)

*SAC, Bryan Barney, and Valerie Taylor*

- Matt Powell provided summary of the Request for Proposal (RFP) that the SAC RFP Genetics Subcommittee developed last year and the process by which the CDFW Genetics Lab (GRL) became involved with the RFP.
- Tanya Darden – CDFW GRL did a great job responding to the RFP; does have concerns about using Single-Nucleotide Polymorphism (SNP) panel with white seabass; high levels of contamination when assigning parentage with this technology (storage of samples, panels only single nucleotides)
  - Bryan Barney – There are ways to minimize contamination; if there were a few samples that showed heterozygote that weren't heterozygote, could flag it and re-run.
- Opened discussion for questions from the public.

- Steve Santen – Does the proposal meet all the requirements needed? Is that the consensus of the SAC?
- Matt Powell – This technique has the potential to decrease the level of uncertainty and address those questions; contamination and missing samples can be problematic; this SOW is fairly comprehensive; many are switching to SNP panels because we can generate more of them and are fairly straightforward to use and analyze; thorough and standard SOW for this work, timeline is reasonable.
- Steve Santen – Can you speak to the timeline in the SOW?
- Matt Powell – Timeline is standard; takes a while to develop fullgenome and SNPs.
- Steve Santen – Can we leapfrog using the work that Tanya Darden has done?
- Tanya Darden – No, using different panel.
- Matt Powell – Coded wire tag (CWT) data, microsatellite data will all help determine the percent contribution; SNPs will just add another data point; as a person who studies and looks at this, I appreciate all the data that people bring in; all of this data will help resolve those questions.
- John Ballotti – Is spatial distribution of sample collection important? How is that going to be managed?
- Tanya Darden – That depends on the question you're trying to answer; need to be specific.
- Matt Powell – Yes, spatial distribution among samples does help if you are trying to determine the impact or contribution in the area that you are analyzing; we don't want to collect all in one place because that can bias the data; how that sampling occurs, that's beyond what the RFP subcommittee has done.
- John – Where to collect the samples from? Fins? Heads?
- Valerie – Question to the SAC is whether to move this SOW forward, sampling protocol answers to come later.
- Matt Powell – There are many on the SAC that can help provide guidance on sampling protocol.
- Jeff Rodzen – How many fish to sample and where? Dealing with these same questions with chinook salmon; need more fish to sample for more certainty.
- Wayne Kotow– Coastal Conservation Association California is partnering with HSWRI; what are the requirements, geography, sample sizes, frozen or not? I need to be able to move my plan forward – looking for guidance from this panel.

- Bryan Barney – The smaller the percentage contribution, the larger the number we would need to sample to get a high level of confidence.
- Ron Zweig – Calls for motion to accept CDFW's proposal as submitted. Ken Cain seconds. No other discussion.
- Vote called. Motion passes (10 yeas).

### 3. Public comment on agenda items and closing of meeting (10 mins. up to 2 mins. per commentor)

*Valerie Taylor and Ron Zweig*

- John Ballotti – Speaking for the OREAP, when can we have guidance on sampling protocol?
  - Bryan Barney – For many types of genetic sampling, fin clip is sufficient, most critical component is keeping the samples separate.
- Michael Franklin – Recreational anglers fish different areas than commercial fishermen so important to get samples from both; will help us meet those numbers for the genetics survey.
- Ken Leber – Spatial distribution, don't lose sight of the fact that Catalina Island is important. High site fidelity for certain sites in the sampling strategy need to be addressed; Catalina Island left out of the paper in 2010<sup>1</sup> because of the different micro-distribution rates and migration.
- Tanya Darden – CDFW is going to take over after the Saltonstall-Kennedy (S-K) grand funded study; let us not forget that there is an ongoing project as well.
- Wayne Kotow – 120 MPAs along the coastline; distribution of take of white seabass has changed over time; should be noted in your results.
- Valerie Taylor will discuss potential timeframe of next SAC meeting with Ron Zwiieg (SAC chair) and Ken Cain (SAC co-chair).

Questions about the meeting or agenda can be directed to the OREHP Coordinator, Valerie Taylor, at [Valerie.Taylor@wildlife.ca.gov](mailto:Valerie.Taylor@wildlife.ca.gov) or [OREHP@wildlife.ca.gov](mailto:OREHP@wildlife.ca.gov).

Meeting agendas and minutes can be found at <https://wildlife.ca.gov/Conservation/Marine/OREHP/Advisory-Panel>

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<sup>1</sup>Hervas, Lorenzen, Shane & Drawbridge (2010). Quantitative assessment of a white seabass (*Atractoscion nobilis*) stock enhancement program in California: Post-release dispersal, growth, and survival. Fisheries Research 105 (2010) 237-243.