

# STAC MEETING - DISCUSSIONS SUMMARY

April 13, 2017

## **STAC Members:**

Jack Barth  
Gil Silvia  
Elise Granek  
Jan Hodder  
Bill Jaeger  
Shelby Walker  
Craig Young  
Selina Heppell

## **ODFW Staff:**

Dave Fox  
Cristen Don  
Kelsey Adkisson  
Lindsay Aylesworth  
Jessica Watson  
Wolfe Wagman  
Tommy Swearingen  
Haley Epperly  
Caren Braby

## **Additional Attendees:**

Andy Lanier (DLCD)  
Laurel Hillmann (OPRD)  
Ashley Knight (Fellow)

## **Meeting Objectives and Background Info** (10:30 - 10:50 am)

Lead: Cristen Don

- What are the potential outcomes after the 2023 evaluation? Is there potential for reserve deletions, additions, alterations, or emphasis change?
  - All are potential outcomes. Legislature may decide reserves are to go away, new ones added, alterations to existing sites, and/or make changes to current marine reserve goals.
  - Default is the 5 reserves will continue as is (status quo).
- Need clarification on SB 1510 (passed in 2012) vs HB 3013 (passed in 2009); which sections in HB 3013 are now superseded by SB 1510.
  - ODFW will provide a copy of the statutes combined, so it is understood which sections of HB 3013 are no longer relevant (or only pertained to the planning of the reserves).
  - Note that the OPAC Policy Recommendations (2008) were adopted before either marine reserve bill was passed; where there are discrepancies between the OPAC Recommendations and the statutes, the statutes supersede.
- SB 1510 refers to pilot reserves, reserves, MPAs, and Seabird Protections area for the evaluation. Are all of these factored into ODFW's current program?
  - Yes, with the exception of ecological monitoring where the reserves are the only focus. Combination of feasibility and limited budget; for the MPAs/Seabird Protection Area there wasn't a way to differentiate anthropogenic changes.
  - The only exception is at the Redfish Rocks MPA where some monitoring (ROV) is also occurring, as the protections in the MPA compliment the protections in the reserve.
- What happened to the potential site at Cape Arago/Coos Bay referenced in HB 3013?
  - The community team, led by the Port of Coos Bay, recommended "no marine reserve".

- Different community team process than that for Cape Perpetua, Cascade Head, and Cape Falcon led by ODFW.
- Should STAC be familiar with the administrative rules (OARs) adopted by the agencies as a result of the marine reserve bills?
  - ODFW will provide copy of the marine reserve/MPA OARs adopted by ODFW, Department of State Lands, and Oregon Parks and Recreation Department.
  - OARs spell out the site boundaries and the specific prohibitions and allowances for each site.
- Consider adding a STAC member with background in public policy. Could use the expertise for addressing SB 1510 section 4(2)B.

## Management Plans, Compliance, and Enforcement (10:50 - 11:00 am)

Lead: Cristen Don

### **Management Plans:**

- Would be helpful to know the truly site specific management strategies and issues vs those that apply to all sites (the system).
  - ODFW will create a master management plan that provides the boiler plate strategies that are applied to all the sites (the system).
  - Is STAC going to look at each reserve, or relative to other reserves? Is there a construct for evaluation?
  - ODFW currently evaluates site specific strategies, with input from local communities, and updates plans every 5 years. Strategies may be adapted in order to better meet the implementation “Principles and Guidelines” provided by OPAC.

### **Compliance and Enforcement:**

- Enforcement questions and comments:
  - Do you know if it is the same people consistently not in compliance (i.e. repeat offenders)?
  - What is the actual law breaking that’s still occurring? Who are you not catching? Are people adjusting ... finding ways to break the rules? Look at how the enforcement is being done. Does the fact that fewer people being caught correlate with our effort to catch them or are people figuring it out?
  - What is the effort by surveillance method (land vs. sea)?
  - Because of marine reserves surveillance, Oregon State Police now present in some communities they were previously absent/little presence
- Enforcement analysis that could be helpful for evaluation:
  - Compliance rate over time - by year and by site. Is it getting better over time?
  - How many people are not being caught?

- Future considerations for enforcement: Acoustic/radar techniques.

#### **Program Highlights and Reports:**

- Annual program highlights, plus addition of biennium program reports, are useful

### **Communications, Outreach, and Community Engagement** (11:00 - 11:30 am)

Lead: Kelsey Adkisson

- Communications and outreach evaluation:
  - How will you evaluate your efforts? Will you have a communications evaluation plan? Would be helpful for the program evaluation in 2023.
  - Some of the existing human dimensions research can feed into your evaluation (e.g. resident perceptions surveys/reports). Provides more than what can be determined by website and electronic newsletter metrics.
  - Evaluate if you did indeed change the understanding and awareness of the public.
- How does ODFW determine “bang for your buck?”
  - Look at our internal team expertise, capacity, and resources available. What makes sense for us to do internally vs. better for another entity outside of ODFW/our team to potentially do?
- A strategic community engagement plan would be useful for the 2023 program evaluation.
- Any plans for making data available publically? Perhaps a data repository/portal?
  - ODFW has an interest and is open to the discussion.
  - Andy Lanier (DLCD) has been working on a platform that might be used. ODFW staff will explore this idea further with Andy.
- ODFW provide brochures to Craig Young for the Charleston Marine Life Center (OIMB)
- Who does the Oregon Marine Reserves websites?
  - ODFW contracted a firm to develop the website. Cristen and Kelsey provide and manage the content.
- What about Valley/Portland/statewide audiences? Strategic places for outreach, such as seafood restaurants, OMSI, zoo?
  - ODFW does not specifically target these audiences. Our focus is on coastal residents, ocean users, site visitors.
  - Some of our collaborators (e.g. Oregon Marine Reserves Partnership) are more focused and connected to these audiences.
- How does ODFW decide which scientific studies/reports to develop easily digestible (geared for general public) materials for?
  - ODFW has tried to develop materials for most of them. As long as it’s practical. Kelsey tries to provide a good balance between human dimensions and ecological research.

- ODFW might consider engaging more university undergrads.
- What about engaging K-12?
  - The marine reserve mandates purposefully left out education. The ODFW marine reserves program isn't involved in, and team does not have expertise in, education.

## Ecological Monitoring (Noon - 1:20 pm)

Leads: Jessica Watson and Ashley Knight

- ODFW to add all the academic collaboration leaflets to Google Drive.
- Is longline being considered for use at the other reserve sites to increase community structure information?
  - Currently no. Outside of the south coast, there aren't vessels that use longline to catch nearshore species. ODFW hook and line (rod and reel) sampling is reflective of sport and commercially caught species in these other areas.
- Temporal replication - issues with sampling different sites different years? Sampling all the reserves all at once (all in same year) would allow better detection of site specific and reserve-wide changes over time.
  - Staff capacity issue - don't have capacity to do every site every year (or all 5 sites in one year). If there are ways to overcome capacity issue, this could be considered in the future.
- Trifecta study:
  - Variability: All sampling tools/sampling done within one hour of each other to reduce variance.
  - Use variance as response variable.
  - ROV was not included in the study due to shallow water (too shallow for ROV).
- Emphasis on the importance of replication.
- Taxonomic resolution?
  - You're not getting species richness.
  - SCUBA surveys: Confined list of species.
  - ROV surveys: Invertebrates limited to video quality. Since video is stored, it is a living record (can go back and analyze at finer taxonomic scales).
  - Could potentially repeat the benthic extraction surveys conducted during baseline.
  - Consider adding GoPro camera facing downward in lander/SCUBA surveys.
- Oceanographic data:
  - ODFW adding use of casting CTDs to hook and line surveys. Closest resolution can get is 1 per drift in each cell.
  - Add HOBO temp loggers to landers.

- Year to year analyses that would be helpful to see in biennial reports?
  - Plot time series together. Use climatology and plot years on top of that. You need to know if something is grossly different.
  - Once ODFW gets a template in place, can just plug and play data each year.
- Suggestions for additional monitoring:
  - Marine debris and trash.
    - Currently noted in lander video review (entered in database).
  - Mammals and birds. Don't focus on forage fish - too hard. Collect fecal samples or conduct visual surveys.
    - OSU PhD student's pinniped predation study (ODFW marine reserves scholarship recipient)
  - Fish productivity.
    - Age structure (mostly requires extractive methods).
    - Sex ratios and maturation - can be done without killing fish (being done in California). Outside your abilities now but can be done with hook and line surveys.
    - Fish diets.
  - Look to partners with expertise to assist/conduct these studies. Some already are being conducted (e.g. bird observation surveys) - look how these might feed into evaluation.
- Reliable metrics to show differences:
  - Hard and variable = no good
  - Not related to fishing = no good
- Methods refinement:
  - Consider that continuing methods refinement shortens your time series.
  - ODFW is careful when refining methods, to ensure data are still comparable with past data collected - and when possible comparable with data being collected elsewhere along the U.S. West Coast (i.e. California and Washington).
- Is ODFW using any of their methods to monitor and see potential differences in any developed areas?
  - Not currently, maybe towards 2021/22 there may be opportunities to sample some of these areas that have been developed (e.g. wave energy).
  - Wave energy is typically developed in soft bottom habitat areas, which has not been a major focus of marine reserve monitoring. ODFW has identified soft bottom habitats as a gap in monitoring.
- Greater impact in the literature:
  - Focus on getting more published in the peer reviewed literature, beyond just methods papers. You're generating a lot of data that can have broader marine ecology/marine biology implications.
  - Good opportunity for graduate students, to conduct these additional types of analyses and assisting in, or lead, authoring papers for submittal to journals.

- Cost effectiveness and limitations:
  - Helpful for ODFW to document where they've been able to reduce costs (make more cost effective) and where they've been able to leverage funds.
  - Helpful to document what hasn't/can't be done because of limited budget/capacity too.
- Document where ODFW's methods have been adopted elsewhere. Demonstrates the utility of your work.

## Human Dimensions Research (1:40 - 3:00 pm)

Leads: Tommy Swearingen and Haley Epperly

### Specific Questions and Comments:

- Fishing community profiles:
  - ODFW included the 3 profiles previously completed by OSU (Conway and Package) that were conducted before marine reserves implementation.
  - The "Salmon River community" refers to sport fishermen who fish out of the Salmon River in the ocean. During planning for the Cascade Head site these fishermen wanted to be heard and seen as a community.
- Political ecology? Coastal decision makers is a community that hasn't been looked at yet.
- Consider expanding visitor surveys beyond just marine reserve sites.
- ODFW provide more details for each study/project than what is currently provided in the project list.
- ODFW provide copy of STAC Economics Workshop Report from 2008.

### Holistic Synthesis Discussion Points:

- How will ODFW provide summaries or a synthesis for each of the human dimensions categories for 2023? How will you put everything together to address questions?
- What are the key cultural, social, and economic metrics and at what units of analysis?
- Can you pull out the effects derived from the marine reserves, distinct from other economic and social influences?
- Include any benefits derived from the reserves too.
- Consider modeling detection of economic changes to that used to detect changes in the marine reserves ecological monitoring:
  - Reserve communities and control communities. Comparative economic capabilities. Given the way the economy is changing over time, without a control group you won't be able to say what changes occurred over time.
  - Long-term monitoring/data collection of specific metrics (e.g. income, employment).
  - Standardization of methods.
  - Data mining for retroactive data.

- Need to couple with the social science component. Perhaps STAC needs another sociologist/social scientist.

## **Further Discussion and Feedback** (3:15 - 4:00 pm)

Lead: Shelby Walker

### **Human Dimensions Subgroup/Formal Economics Advisory Committee**

- Within next couple of months Bill and Gil convene a human dimensions research subgroup, of STAC and ODFW, to discuss what already exists and what is still needed for the future.
- Consider forming formal economics advisory group, as was recommended in the STAC Economics Workshop Report from 2008. Advise ODFW to address these big (economic) questions.

### **Who Prepares the Syntheses?**

- ODFW leads/puts together the syntheses to be evaluated by university.
- ODFW work with STAC on what the syntheses for evaluation should include/look like.
- “RFP” written by STAC should reflect evaluation of the syntheses - providing guidance to the university on what is to be evaluated.
- ODFW will need to be prepared that the university may want access to data.

### **Selecting University**

- The process, who, and guidance to university team = STAC’s role. STAC lay out guidance in “RFP”.
- When thinking about choosing a university, what kind of guidance does STAC want to give in terms of expertise needed?
- Different universities have different strengths. Look at potentially having multiple universities.
- STAC pick an Oregon university to lead, then the university puts together team drawing from institutions anywhere based on expertise.

### **SB 1510 - Section 4(2)(b)(B)**

- STAC members discussed potential concerns about the section of the bill, related to the university report including recommendations for administrative actions and legislative proposals. STAC identified this as a topic warranting further discussion by STAC members in the future. Discussion points included:
  - May need someone with strong public policy expertise to give STAC advice on this section.
  - University could take the stats and analyses and produce predictive outcomes and give advice on how that outcome effects things. Don’t need to say policy needs to change, but can say objectively, this is what the data is tell us—as experts.
  - Could ask University team to review alternatives for recommendation.

## Conflict of Interest

- There is no way to avoid conflict of interest of STAC members being a part of the university that is chosen for producing the report, as there are representatives from all the universities.
  - May consider making a consensus agreement.
  - Write down criteria and rank them. Be transparent about how STAC makes these choices.
- Avoid review of STAC member's "own" work or "personal monetary gain."
- The statute is silent on conflict of interest. There are principles STAC will look to follow to ensure bringing scientific rigor and to objectively advise. STAC does not need to add burden that isn't there in the statute.

## University Report and STAC's Role

- STAC members discussed if/what STAC's role might be once they receive the report from the university before STAC submits it to the Legislature. This was identified as a topic warranting further discussion by STAC members in the future. Discussion points included:
  - STAC may have a review step, organize meetings, help organize the report.
  - Does STAC endorse the report?
  - Could STAC review the report and advise? Point out strengths and weaknesses? Write a cover letter?
  - We're only going to get 4 more years of data, at most, for the evaluation. The university team's report would need to be to STAC by about Aug 1, 2022.

## Follow-ups and Future

- ODFW use Google Drive folder as a living repository. Continue to add documents and materials over time. ODFW send an email to STAC members when new items have been posted.
- ODFW post copies of today's presentations to Google Drive.
- ODFW provide a more descriptive timeline up to 2023.
- More frequent interactions between STAC and ODFW.
  - Yearly?
  - More frequent, shorter meetings?
  - Topic specific?

**Adjourned:** 4:05pm