Alaska OA Network Steering Committee  
Jan 22, 2018  Summary

Members: Dorothy Childers, Wiley Evans, Darcy Dugan, Davin Holen,  
Other participants (for all or part of the meeting): Jeff Hetrick, Natalie Monacci, Molly McCammon, Marilyn Sigman  
By Phone: Amanda Kelley (til 11am)  
Note: due to Government shutdown, committee members Jessica Cross, Bob Foy and Shallin Busch were not present

Working Group Updates
New working group chairs provided briefings. (For reference: working group webpage)

Outreach & Communication Group – Darcy Dugan

- The group met in March, June and October of 2017
- Members include Davin Holen (Sea Grant), Tina Buxbaum (ACCAP), Marilyn Sigman (Sea Grant), Jeff Dillon (ASLC), Maggie Mooney-Seuess (NOAA AFSC), and Shallin Busch (NOAA OAP). We need a new LCC member.
- Darcy has been the chair and is now passing the lead to Davin Holen and Tina Buxbaum
- Primary activities have involved developing ideas for producing and distributing information on OA, and identifying venues where researchers could present or engage.
- In October the group developed an Alaska OA Network outreach plan
- The working group is interested in having a presentation from a scientist at each meeting and then discussing how to communicate those findings to network.
- Examples of OA Network outreach from the past year:
  - Launched a Facebook page in October
  - Sent monthly e-News to the list serve which is now over 1,100 people
  - Circulated stakeholder survey about information needs (125 respondents)
  - Presentations at the Marine Technology Society conference, Petersburg Rainforest Festival, UAA Bookstore, Alaska Tribal Environmental Managers Conference, Local Environmental Observer Network, Southeast Subsistence Advisory Board, Southeast fish habitat partnerships, and others
  - Produced a 1 hour radio show in Cordova. There were also radio pieces about the ferry project and Kodiak crab research on APRN
  - Held community roundtables in Cordova and Kodiak
  - Had booth and panel at the Pacific Marine Expo in Seattle

Thoughts

- Website “What is OA” page is good but could add more Alaska-specific details about OA that provide more geographically specific information
- Think about creating visual ways to show saturation conditions (ferry data in SE; KBay analysis in spring; Arctic monitoring); circle back to creating actual maps later this year.

Tribal Research & Monitoring Group - Davin Holen

- The group formed in August and has had two meetings by phone
• Members include: Esther Kennedy, Chris Whitehead and Kari Lamphier (Sitka Tribe), Jeff Hetrick and Jacqueline Ramsay (Alutiiq Pride Shellfish Hatchery), Tom Lance (Sunaq Tribe), Jennifer Hanlon (Yakutat Tribe), Ian Johnson (Hoonah Indian Assoc.), Alex Whiting (Native Village of Kotzebue), and Gay Sheffield (AK Sea Grant in Nome).
• So far the Sitka Tribe and the Alutiiq Pride Shellfish Hatchery are collecting community samples. Bob Foy, through NOAA’s Kodiak Lab, will be working with six Kodiak villages to provide samples for analysis by their new Burke-o-Lator.
• There is a need to train other communities in proper methodology and QA/QC. A meeting and tour of the APSH facility will take place on Feb 16 during the Alaska Forum on the Environment week to discuss some of these protocols.
• In order for community IGAP representatives to be able to conduct OA sampling, it must be written into their village IGAP plans. Jeff Hetrick has been working on this. Once IGAP reps are allowed to sample, then we can work funding for sample analysis.

Thoughts:
• Overarching goal is to detail sites where communities are hotspots or refugia.
• If communities aren’t consistent about their sampling, they won’t provide meaningful data. Wiley can talk to new samplers, or call into the meeting at Alutiiq Pride on Feb 16.
• Yakutat is hotspot because of tidal glacier so should be priority village from scientific standpoint; also a good place for a future roundtable.

Fishing Community Engagement Group - Dorothy Childers
• The group has held three meetings by phone in the past year.
• Members include Dorothy Childers (Alaska Marine Conservation Council), Lindsey Bloom and Brett Verrhusen (United Fishermen of Alaska – Salmon Habitat Info Program), Bob Foy and Chris Long (NOAA AFSC Kodiak Lab), Theresa Peterson (North Pacific Fisheries Management Council), Melissa Good (Alaska Sea Grant – Unalaska), Chip Treinen (United Fishermen of Alaska), Darcy Dugan (Alaska Ocean Observing System), Clayton Hamilton (Juneau fisherman), Marc Carrell (Cordova fisherman).
• The group identified 60 key members of the fishing industry who should be informed about the network (processors, associations, members of UFA, etc.). Darcy contacted them with individual emails introducing the network and its resources, and a week later sent the stakeholder survey. Some asked to be listed as a collaborator on the network website.
• Worked with UFA to produce content they could send to permit holders.
• Produced postcard about OA geared for fishermen (reviewed by UFA).
• Had over 50 conversations at Pacific Marine Expo; filled up 5 pages of email addresses. Panel on OA and salmon well attended.
• Put up OA species impacts poster at Juneau harbors.
• Reached out to fishermen over Facebook (Clayton Hamilton).

Thoughts:
• The UFA collaboration is really helpful.
• Dorothy is working on content for a “For Fishermen” page on network website; still needs input from Bob & Jessica on a fishermen’s Q&A.
• We should focus on creating more content to share with UFA social media, as they requested
• There is one year remaining in the education tax credit program if we’d like to partner with industry to help fund OA monitoring or sample processing. A monitoring build-out plan would be helpful for approaching fishing organizations.

Policy Group - Molly McCammon
• The policy group met by phone in May.
• Members include Molly McCammon (AOOS), Dorothy Childers (formerly AMCC), Jeremy Mathis (NOAA), Beth Kerttula (formerly NOC, AK Legislature)

Thoughts
• How much can the network do with regard to advocacy? Should we form a separate group to handle advocacy or set up a subgroup of those who can do advocacy?
• Priorities for policy:
  o Funding for research and monitoring
  o Discussion about education (not specific advocacy) around carbon policy/cc mitigation with network member organizations. Can we help inform Alaskans on:
    ▪ Applied work on carbon emissions reduction
    ▪ “Climate intervention” (new name for geoengineering e.g. co2 removal; albedo modification). See new AGU statement
    ▪ Carbon pricing (e.g. fee and dividend; cap & trade)
  o Adaptation -- how should state policies (via Climate change leadership group) account for OA?
• Ideas for next steps:
  o Track Larry Hartig’s paper on mitigation for the state – to be released this month
  o Dorothy will draft a short description of webinar series or forums
  o Molly will talk to ACCAP about hosting the webinars
  o Molly will also track conversations in the Governor’s new climate leaderships team where she serves

K-12 Education - Marilyn Sigman
• The education group met by phone in May to hear from educators on how they were currently teaching OA and what their biggest needs were in the classroom. We learned that teachers are strapped for time and often use Google to find information/curriculum
• Marilyn and Darcy are working on a “For Educators” page for the network website
  o Identifying a short list of Alaska-relevant curriculum and low tech equipment
  o Will then produce a loanable kit for more sophisticated lab lessons
  o Considering video production for AK-specific lessons on chemistry lesson/AK drivers
  o It would be good to get scientists together to create teaching tools for concepts (carbon cycling, etc.) i.e. PPT, video, diagram.
  o We need to include educators in the development of products (COSEE model).
  o IARPC theme was carbon cycle – Molly will find out who did that and who we could work with; NPRB Arctic program might be a partner to fulfill outreach objectives.
Amanda will help Marilyn to set up educator/scientist collaboration on products.

**Special focus on the Research & Monitoring Group**
Discussion question: What would we like to accomplish through this group? The current OA researcher list is helpful to keep each other abreast of what’s going on but we need to identify specific projects to work on.

**Recommendations:**
1. **Split into smaller groups with specific focus/tasks:** potentially an observing group and species research group, but potentially other groups.
   **Approach:** We did not identify a specific approach for this, other than Bob and Amanda (neither who were present) would need to develop objectives for the species group. Many of the tasks below will produce project-focused subgroups.

2. **Develop a straw dog monitoring buildout plan.** Molly advocated highly for this, as AOOS and other potential funding entities can do more when they can refer to demonstrated needs. The buildout plan would identify priority areas for monitoring but would not produce an ordered list.
   **Approach:** Wiley Evans, Jessica Cross, and Sam Siedlecki would create a draft to run by a larger group.

3. **Develop a data catalogue.** Right now some data has a home and other data do not. The catalog would be a page that lists the monitoring projects across Alaska and points to the specific locations where you can find their data, if it is ready for public consumption. Data without a home but ready for public consumption can be housed in the AOOS data portal.
   **Approach:** Darcy will start a draft page providing direct links to available data and run it by researchers to make sure it’s accurate.

4. **Develop an assessment of where/when corrosivity is happening in Alaska waters.** This would involve reviewing the existing studies and identifying OA hot spots around the state that we’re aware of. The assessment could be developed into an academic paper and shared with the outreach group to help with public education/awareness.
   **Approach:** the committee identified the team of Wiley Evans (Gulf), Jessica Cross (Arctic), and Sam Siedlecki and Darren Pilcher (modeling). These individuals will all be in Portland for Ocean Sciences and could begin discussions there.

5. **Develop a synthesis of research literature about OA in Alaska for the level of an educator.** The stakeholder survey showed that Alaskans have a lot of questions beyond the basics of OA – many whose answers are buried in the literature and not accessible to an interested member of the public. This would involve interpreting Alaska-specific phenomenon with regard to OA, such as the influence of glacial melt, the Alaska coastal current, Arctic carbonate chemistry, etc.
   **Approach:** Natalie is going to ask SNAP/ACCAP if there are contacts that might be able to help; Shallin may have ideas for materials to build off.
6. **Restructure the academic articles on the publication page.** Right now there is a huge and un-updated list that’s broken down into Alaska and non-Alaska articles. Most of them don’t have links and many are not publicly accessible without a subscription.  
   **Approach:** Darcy is looking for someone to work with her to come up with a strategy.

7. **Begin a “Question of the month”.** This would involve a recorded conversation with a researcher delving into some element of ocean acidification, or a written answer that would be circulated in the OA eNews, to UFA, and other communication channels. We have a big list of relevant and interesting questions that stakeholders asked that researchers can answer!  
   **Approach:** Darcy will make a schedule of monthly questions and researchers who can answer them. Dorothy will look into setting up a public radio BSA based on the question of the month idea.