

# SEACOOS R&D Linkage to Applications

## Summary

October, 2007

- LINKAGE was missing in SEACOOS because, although we made the stipulation to work on application science, it was mainly an R&D program.
- In some cases, SEACOOS tried to apply things in “operations mode” when still really in R&D mode.
- Maybe the RA needs to develop a well articulated process for the application of items such as inundation models or wave models. Establish some benchmarks. Act as a “test bed” for applying emerging technologies for the region. OSEs & OSSEs. What is really needed?
- Both data and models are estimations of the truth and need a process for evaluation, validation, verification. This process should be done by a third party.
- Perhaps the RA’s proposed forecast analysis centers can be the third party or ACT.

- Ensembles of models - no one official model.
- Need to articulate, as a role for the RA, being a bridge between R&D and operations. Need to factor in liability too.
- What is the piece the RCOOS has carved out that doesn't duplicate agencies, private industry, etc?
- Need “ocean forecasters” dedicated to looking at data-not worrying about if radars are working, data flowing, etc.

- If we have difficulty defining what our product is then, instead of trying to observe everything perfectly and ending up doing nothing, we should consider going to smaller areas, working out details from beginning to end, then transferring the technology to other parts of the region.
- Instead of trying to cultivate all backyards, we could use all our capacity to solve focused problems, then export the solution(s).

- There is such a wide range of users from highly technical to casual. One strategic position to consider for the RA is to be a filter for user needs in the region.
- Needs assessments - NOAA has done many and is creating an assessment of assessments so as not to go back and ask the same questions AGAIN.
- The RA needs to be a champion of user needs - applying all of the scientific resources in the region to address “priority” issues.
- Region is rich with problems to address and people who can address them. The RA can set priorities among fisheries, ecosystem based management, SAR, oil spills/hazards, etc. for how the collective will take a concept and move forward in an integrated, coordinated way to serve the regional interests.

- Once gaps are identified and the RA has a clearly articulated consensus of actions, how does an RA fund the whole spectrum from R&D to transition to operations?
- The unplanned loss of people/talent due to funding cuts can be addressed if the RA's budget plan factors-in flexibility in funds for personnel.
- When asking for money for R&D, need to ask for money for operations in order to transfer the products developed. Essential, but incredibly difficult.

- RA needs need to improve communications so that we work as a cohesive unit.
- Effective in-reach to better know what each other are doing improves ability to capitalize on opportunities, e.g., HF radars do more than surface currents-directional waves & ship tracking, application of SEACOOS activities to SAR, etc.
- Missed high profile fisheries events could have elevated need for technology development/future modeling, e.g., cold water upwelling event in SAB was a lost opportunity in which the entire SEACOOS group could have been involved in bringing info to bear on stock assessment impacts, etc. Had we responded cohesively & early on, might have gotten more support.

- Ideas for in-reach:
  - newsletter, reminder what's on the web page, featured science, featured scientist
  - blog
  - meetings at different institutions-learn about what each is doing
  - meetings focus on thematic areas or specific product lines

- SECOORA can be a mechanism to bring coordinated, diverse assets to bear on complex issues facing the region. Providing data & information, models, and science-based answers as well as estimates of uncertainty.
- Idea is to try to talk all things out and determine what makes sense for the collective.
- Need agility to take advantage of opportunities from responding to natural events to using laid-off fishermen to assist with servicing instruments at-sea.