

### The Eye on Alaska's Coast's and Oceans

## **Data Management**

WHAT TO DO ABOUT THE DATA MANAGEMENT ADVISORY COMMITTEE AND THE DATA MANAGEMENT CONTRACT

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AOOS Board Meeting 16 December 2019





## The AOOS Data Management Advisory Committee

### **Purpose:**

- Advises Executive Director and
- Reports annually to Board on status of AOOS DM services and workplan
- Meets twice a year (2013-2017)

Focused on Data Management System technical attributes as it was being developed with Axiom:

- Interoperability
- Open access/discovery
- Sustained efficient operations
- Effective user feedback
- Open design and standards
- Preservation of data and products

November 2017:

AOOS Data Management System Review (DMR)

The AOOS DMAC helped identify:

- Who should make up review board
- Topics for the review board
- Appropriate user survey questionnaire for AOOS to administer prior to the review.

December 17, 2017: Last official AOOS DMAC meeting, that reviewed recommendations from DMR

- Question on future of AOOS DMAC
- 2 members of DMAC retired, 1 left the state, and 1 we continue to work closely with as a PI and a data management customer.

## Data Management System Review Committee November 2017

#### **Committee Chair:**

Peter Pulsifer, NSIDC, IASC-SAON Arctic Data

Committee

### **Members:**

Sky Bristol, USGS

Jim Potemra, PaclOOS, Univ. of Hawaii

Derrick Snowden, IOOS Program Office

Dayne Broderson, UAF-GINA

Reyna Jenkyns, Ocean Networks Canada

Observer: Jennifer Dorton: SECOORA Observing System & Data Manager

### **DMR Recommendations:**

### Those related to the AOOS Data Management Advisory Committee

- 1. Currently, DM decisions are based on local & expert knowledge of AOOS & Axiom staff, DMAC & few partners:
- DMR recommends exploring different methods for priority setting

### Example:

- "product committee" or a "product executive"
- use rubric to evaluate priority, relevance, value to science, urgency etc.
- balance w/resource availability
- screen new opportunities w/lean cost/benefit analysis;
- provide ready-made usage examples (data views)
- develop a formal User Needs Analysis

- 2. Perform a User Needs Analysis:
- This would link to
   AOOS strategic plan &
   priorities, as well as
   consider various
   national priority plans
   - and cross-walking to
   those plans.
- The method should be applied regularly. (every two years?)



## **Summary**

- The Data Management Review recommendations were heavy on process improvements (i.e., providing user support tools for data portal; improve product release process in operations model).
- light on technology changes as Axiom provides a state of the art technology foundation, which were the key attributes the DMAC advised on originally
- AOOS should focus efforts now on data priorities, portal interface, data products and discovery improvements.
- AOOS has a Data Management Policies and Procedures now in place
- AOOS is currently redesigning website and data portal interface
- Axiom has been developing data tools to support easy access data views
- AOOS is developing project pages that better explain observational projects and links to their data
- AOOS staff are developing more data portal products for externally funded projects

# Final Recommendation: AOOS Dissolves DM Advisory Committee as it currently stands

AOOS DMAC was set up to advise largely on technology aspects of the AOOS Data System and data ingestion priorities, and less so on data portal process improvements and product development

## AOOS recommends making a change to data management advisory approach:

- Dissolve the current DMAC (which is practically dissolved already, due to departures)
- Develop an operations model for software and product project management
- Design a clear process for product development that allows for open innovation and rapid development
- Consider a new staff person who would act as a data services and products coordinator/project manager to liaison for these efforts

## **Future of Data Management Contract**

- Has been with Axiom Data Science since 2010.
- 5 yr contract extended for 3 years to 2018, then for another 3 years 2018-2020.
- Contract expires Aug 30, 2020.
- Question: do we go out to competitive bid for contract?
- Pros and cons discussion

## WHAT DO OTHER REGIONS DO?

### **PACIOOS: No DM Advisory Comm**

- DM driven by IOOS requirements
- Products driven by Gov. Council,
   Exec. Committee and stakeholders

### **CENCOOS: YES DM Advisory Comm**

- Staff Product Developer- works with Axiom developing/transitioning derived products and advanced visualizations, focused on ocean products targeted to specific stakeholder needs
- Staff Data and Information Manager
   point of contact for the Axiom

### **SECOORA: No DM Advisory Comm**

### **GLOS: No DM Advisory Comm**

GLOS has adopted a data services operational model

They have staff perform DMAC activities:

- Chief Info Officer: leads planning and execution of DM and communications infrastructure, software development
- Data Coordinator: Coordinates with data providers
- Data Services Manager: Manages
   GLOS DM services and activities (i.e.
   Product development)

NANOOS: YES DM Advisory Comm

DMAC and User Products (UPC) Comms

## WHAT DO OTHER REGIONS DO?

### **NERACOOS: NO DM Advisory Comm**

- Has its DM run thru the Gulf of Maine Research Inst.
- Outreach& Comms Staffer oversees DM activities

### **MARICOOS: NO DM Advisory Comm**

- DM lead is within Rutgers and also private Contractor
- Innovation Council runs theme-specific working groups to implement strategies for high priority stakeholder defined projects
- Product user experience (ux) design to moderate focus group feedback
- Tests or desgins one product/year

#### **SCOOS: NO DM Advisory Comm**

Joint Strategic Advisory Comm JSAC

- JSAC connects Ocean Observing to stakeholders within the region.
- SCOOS staff, JSAC committee members formulate suggestions for the development of decisionmaking tools and products efforts.