

**CAOS Data Management and Communications Steering Committee
First Meeting: April 22, 2003; Anchorage, Alaska**

Attendees

- Dale Kiefer (kiefer@usc.edu) – USC, biological background, EASy, CoML, international coastal management)
- Rachel Potter (rpotter@ims.uaf.edu) – UAF (representing Sharpton and George: GI, data base of remote sensing - GINA, web interface)
- Rob Bochenek (rob_bochenek@oilspill.state.ak.us) – EVOSTC data manager, strong data management
- Joe Banta (banta@anch.pwsrca.org) – PWS RCAC, project manager, represents communities of EVOS impact area
- Bern Megrey (bern.megrey@noaa.gov) – NOAA/AFSC fisheries biology oceanographer, self-taught data manager and web programmer, North Pacific Ecosystem Metadatabase
- Steve Hankin (steven.c.hankin@noaa.gov) – NOAA/PMEL, IOOS DMAC Steering Committee Chair, FERRET, Live Access Server (LAS)
- Allen Macklin (allen.Macklin@noaa.gov) – NOAA/PMEL, meteorologist, FOCI Coordinator, Director – North Pacific Ocean Theme Page, Co-director North Pacific Ecosystem Metadatabase

IOOS DMAC (Steve Hankin) –

IOOS DMAC are integrators, distributors, archivists of information after it is delivered from observing platforms, models, etc.

Develop and deliver standards and protocols for integration.

National level does not do data management. DMA C provides integrating framework for data managers (NPRB, GEM, NOAA, etc.) who produce or are

- Data assembly and QC
- Modeling centers
- Archive centers

Users must be the driving and evaluating force.

DMAC is a framework for interoperability among independent observing systems, large and small.

DMAC needn't interfere with pre-established information delivery systems. DMAC can allow a data supplier to reach a broader audience.

DMAC includes Expert Teams (data transport, data discovery/metadata, applications, data archival) and Outreach Teams (data facilities management, products and services).

The greatest challenges are not technological but rooted in the area of community outreach and organizational behavior.

Funds available in FY 2006.

Technical components:

- Data discovery – build on partnerships, many metadata repositories exist; FGSC standard; web portal and search capability; seamless segue to data transport
- Data transport – XML; OPeNDAP, GIS interoperability; “web services” and gateway to standardization; supply data to broad range of clients
- Data archival – build upon existing partnerships; utilize DMAC metadata and transport standards
- Applications
 1. Data products – (things a computer can see) state estimation forecasts
 2. Information products – (things a person can see) generated by users, e.g. UAF.

Suggested concrete actions for CAOS

1. Data discovery – produce FGDC metadata; submit to national search sites (GCMD – Global Change Mastery Directory, Coastal Services Center); create home page and search portal
2. Interoperable (binary) data access – install OPeNDAP servers for sharing gridded data sets; for *in situ* data, use interrelational data bases, work with IOOS to identify missing components
3. On-line browse – install on-line browse solutions that utilize interoperability mechanisms exploiting OPeNDAP (GIS, LAS)

Purpose and objectives of CAOS DMAC and its steering committee

The purpose of DMAC is to facilitate the integration and communication of the disparate data and information produced by CAOS.

Objectives are

1. Solicit information from data providers and end users from which to develop a conceptual design for data management and communication.
2. Define goals in terms of functionalities DMAC will provide to data providers, end users, and product developers.
3. Define the formal requirements for the DMAC infrastructure for CAOS.

4. Provide a set of standards and protocols that will enable data providers and end users to be part of and benefit from CAOS.
5. Integrate seamlessly with IOOS.

DMAC membership

Bern Megrey (NOAA/AFSC)
 Allen Macklin (NOAA/PMEL)
 Rob Bochenek (EVOSTC)
 Buck Sharpton (UAF)
 Shari George (UAF)

Need to add members to better represent user groups and disciplines.

ADF&G (Bob Walker, Brian Lieb)
 US DOI (FWS – Jay Johnson, USGS - Mark Shasby)
 AK DNR (Sean Weems)
 AK DEC (Carol Fries, Russell Kunibe)
 OSRI (Oil Spill Recovery Institute)- Shari Vaughn

Infrastructure

Proposal

- 1) engage stakeholders to develop collaborative partnerships among data collectors, data managers, and users of data and information.
 - a) Articulate an approach to identify stakeholders and educate them on benefits of CAOS – CAOS workshop for data providers and information users.
 - i) Stakeholders to be identified by User Outreach Committee
 - ii) Web-oriented questionnaire to identify stakeholders’ requirements
 - iii) Two-day meeting for stakeholders with an additional day for DMAC and User Outreach. Attendees designated by User Outreach Committee \$50K
 - iv) Format of meeting or road show developed in response to questionnaire responses
 - b) Develop concepts and partnerships from results of meeting
 - i) Road show or web site that travels to stakeholders offering CAOS solutions \$15K

2) Pilot Project

a) User identification and coordination – see above on minor scale

b) Data integration and management

- i) Furnish 6-10 data providers with software and expertise to serve information through OPeNDAP protocol \$25K
- ii) Acquire a PC server and install EASy \$5K
- iii) Provide data to analysts for product development \$?K
- iv) Serve and archive data and products (labor) \$20K
- v) Travel \$10K
- vi) System administrator \$80K