



# Distributed Biological Observatory:

## The US Interagency Arctic Research Policy Committee (IARPC) Implementation Team

Sue E. Moore, NOAA/NMFS/Office of Science & Technology, Seattle, WA; Jacqueline Grebmeier, University of Maryland Center for Environmental Studies; Robert Pickart, Woods Hole Oceanographic Institution; Molly McCammon, Alaska Ocean Observing System; IT members



### Summary

In response to dramatic seasonal sea ice loss, the Distributed Biological Observatory (DBO) was envisioned in 2009 as a change detection array to measure *biological response* to physical variability along a latitudinal gradient extending from the Northern Bering Sea to the Beaufort Sea. By design, DBO sampling is focused on five regions of high productivity, biodiversity and rates of biological change.

In 2012, the US interagency Arctic Research Policy Committee (IARPC), comprised of representatives from 14 federal agencies, developed a five year plan (2013-2017) focused on seven research themes. A DBO implementation Team (IT) was formed under the first theme "Sea Ice and Marine Ecosystems" and consists of 37 participants, 25 from seven federal agencies and 12 non-federal partners. Since 2013, the DBO IT has met via monthly teleconference with the overarching goal of routine sampling in all five DBO regions by US and international partners by 2015.

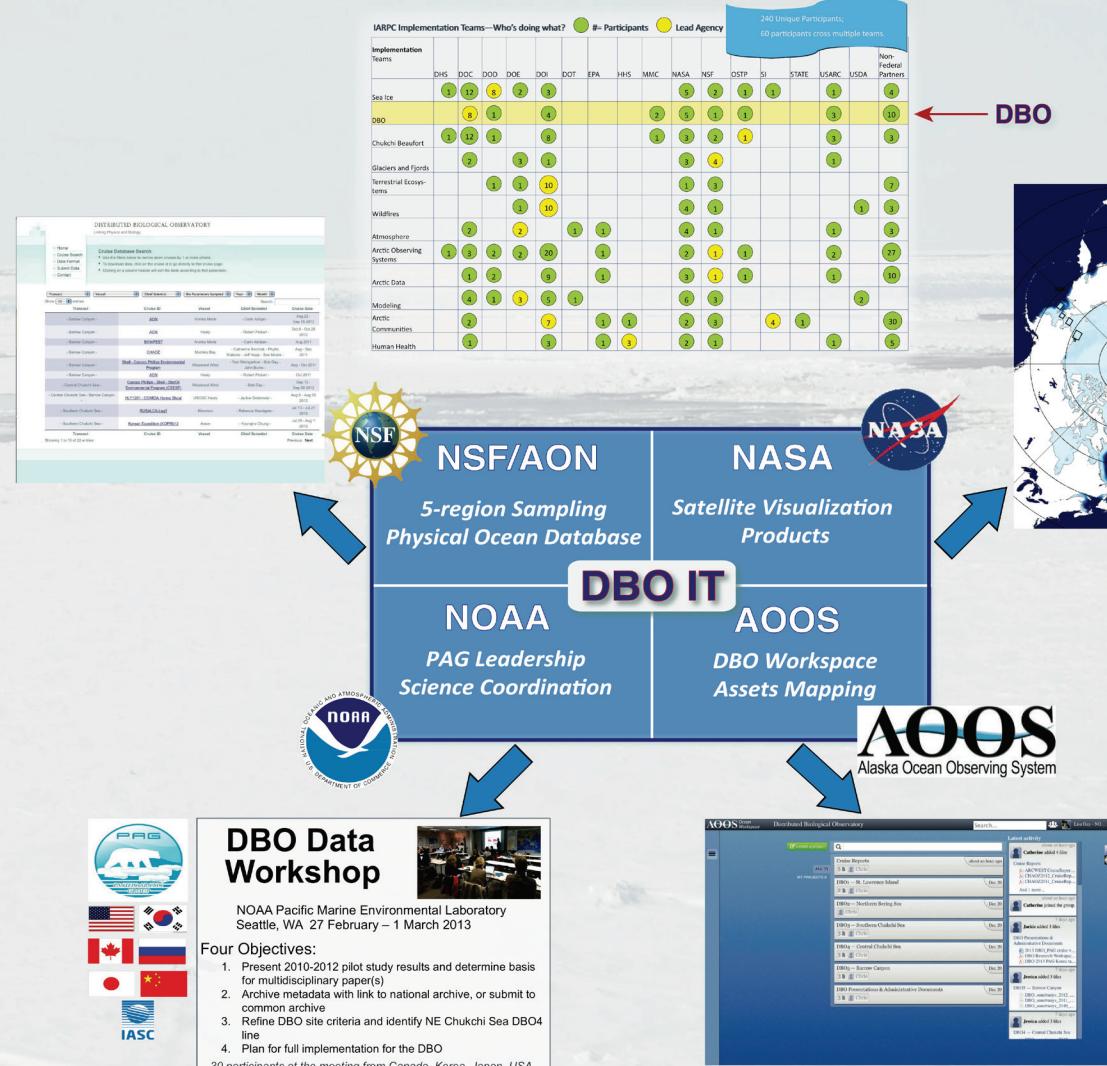
Activities and products developed via collaborations facilitated by the DBO IT include: (i) annual DBO sampling from various national and international platforms (NSF/JMCS); (ii) a portal for physical oceanographic data (NSF/WHOI); (iii) development of satellite visualization products (NASA); (iv) a DBO Data Workspace (AOOS); and (v), coordination of national and international contributions to the DBO, via the Pacific Arctic Group (NOAA).

### DBO IT



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

<http://www.arctic.noaa.gov/dbo>



### Next Steps

The DBO is now focused on integrating data from 2010-2013 sampling, to demonstrate the value added by this multiple sampling shared-data approach to investigation of biological response to a rapidly changing Arctic marine ecosystem. Expanding from the Pacific Arctic sector, the DBO will also serve as a framework for international research coordination via the Arctic Council Circumpolar Biodiversity Monitoring Program (CBMP), and is a recognized task of the pan-Arctic Sustaining Arctic Observing Network (SAON).