



UNIVERSITY OF WASHINGTON

SCHOOL OF MARINE AFFAIRS

November 24, 2009

Dr. Jane Lubchenco
National Oceanic and Atmospheric Administration
Room 6811
14th Street & Constitution Avenue, NW
Washington, DC 20230

Dear Dr. Lubchenco:

At its November 2009 Science Advisory Board (SAB) meeting, the SAB was briefed on the review by the SAB Climate Working Group (CWG) of the NOAA Climate Information Products and Applications program (CIPA).

As you are aware, the landscape for climate information products and applications is undergoing rapid change as the Nation recognizes the importance of climate services in addressing the issues of climate adaptation and mitigation. It is expected that these societal needs will lead to the establishment of a National Climate Service. Within this emerging context, the team believes a new course should be charted for CIPA.

Overall, the CWG found that both the *level* and the *nature* of the existing NOAA effort fall far short of the national need for climate services.

Resources for the CIPA in aggregate amount to no more than \$40M a year, only some 1% of NOAA's annual budget; these funds are distributed over dozens of small, disaggregated projects. While the vast majority of these individual projects are of high quality, in sum they do not constitute a national program of climate services. Additional resources for CIPA are necessary but not sufficient to create a program that will scale up to the national need. Instead, a new approach and strategy is required.

Local, state, tribal, and federal requirements for climate information products and applications are rapidly expanding and evolving as they grow. Decisions and actions totaling trillions of dollars will be made in future years based on anticipated short-term, regional-scale climate variability and longer-term global trends. If NOAA wishes to serve national needs in climate science and services during this period, it must (re)design itself in a short period of *months* (not *years*) to serve a much broader set of customers for more ambitious and extensive climate services that will be considered necessary domestically and internationally.

The team therefore recommends that NOAA:

- **Develop a strategic plan and framework for its climate information products, applications, and related services.**

The CIPA Program is less of a ‘program’ and more of an assemblage of individual climate-relevant elements, many of which developed independently over time in a somewhat ‘organic’ fashion. As such, this review did not assess a programmatic track record but rather reviewed the adequacy of the ‘pieces’ that could be drawn into a coherent program for the purpose of serving future climate information and services over the next 15 years. In general, NOAA appears to have many of the critical pieces assembled but lacks an integrated strategic framework to guide program development and decision-making, evaluate program effectiveness, and to identify appropriate performance metrics upon which to evaluate climate service.

- **Give highest agency priority to scaling up the level of its effort devoted to climate information products, applications, and services to match the growing scope and accelerating pace of societal needs.**

The NOAA panel maintains that it is as much about building external capacity as about building its own internal capacity. The CWD did not find the discussion compelling. The NOAA panel provided few specific examples of what is done to build the capacity of the communities of people who might be users of the kind of information that they are able to contribute. There is not any indication of serious collaboration with other agencies and institutions involved in similar programs and efforts.

- **Become far less insular, more outward-looking, and do far more to partner and collaborate.**

Collaboration is critical and must become a NOAA core competency if the agency is to be successful in leading a National Climate Service. Collaboration must occur on many different levels and among many disparate entities. If NOAA is serious about success in this initiative, it might even consider establishing an Office of Climate Collaboration. Strong leaders with a successful track record in building win/win partnerships will be every bit as important as physical science acumen in getting a National Climate Service off the ground and making it a success.”

In addition, the CIPA review team notes that it was reviewing a moving target – to comment on meritorious but small and fragmented projects and programs at precisely the moment NOAA was undergoing a transition in administration and wrestling with how to develop a suite of true climate services. The CWG sees considerable opportunity (and corresponding urgency) here. For example, at the World Climate Conference-3, participants agreed that what is missing internationally is a vital climate-science-service-user-interaction mechanism. The CIPA elements contain the seeds of such a mechanism within NOAA. Accordingly, the team recommends that NOAA: **report back promptly to the SAB on its intentions (within 1-2 months) and its progress (within one year) on these recommendations.**

The NOAA SAB approved the report and asked me to transmit it to you for your further consideration. [Please find report attached to this letter].

We look forward to providing NOAA with further advice to assist in NOAA's leadership in providing the science needed to inform policy development.

Respectfully,

A handwritten signature in black ink that reads "David Fluharty". The signature is written in a cursive style with a large, stylized 'D' and 'F'.

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