

## **Talking Points for FAC Discussion on NCCWSC Science Priorities**

The overarching tactic we have used to generate NCCWSC science priorities has been to respond to the needs of our clients.

The NCCWSC national science agenda was developed via the review of each CSC regional agenda and subsequently establishing general themes (grouped as capacity and research) that meaningfully encompassed most CSC research.

Specific lines of work have been identified by directly or indirectly responding to client requests.

NCCWSC initiated the *National Synthesis of Climate Impacts to Biodiversity, Ecosystems, and Ecosystem Services* in response to a request from the US GCRP. This was an appropriate request given the NCCWSC mission.

The proposed *National Synthesis of the Ecological Consequences of Drought* began with several different considerations.

- a research need articulated by the University PIs
- Redmond's "Ecological Drought", Overpeck's "Megadrought"
- vetting through other CSCs (Jackson's "Transformational Drought")
- vetting through other USGS research programs (Betancort, Reed, et al.)
- leveraging pilot projects (Cain, Kauffman, and Brown)
- alignment with other Agency initiatives ("ecological flows", US NPN)
- support from legislators (new budget initiatives)

Work to synthesize *Climate Impacts to Migratory Birds, Marine Birds, and Waterfowl* stems from a review of NCCWSC and CSC sponsored research. It is an attempt to summarize currently funded work on similar taxa among all CSCs.

Guidance on the *Use of Downscaled Climate Information by Natural Resource Managers* has been initiated at the request of multiple other agencies (via Land Managers Working Group), in response to CSC stakeholders seeking guidance, and in recognition of the need to balance investments among other areas of research.

The NCWSC process for conducting *National Synthesis Assessments* takes roughly 5 years

1. Scoping, identify and validate priorities, inventory current investments
2. Initiate pilot work (directed) to frame and refine the assessment, recruit a project manager (postdoc)
3. Expand on pilot work using additional resources (RFP or directed), convene sponsored researchers (ad hoc)
4. Conduct work, compile findings, define new lines of needed research
5. Complete synthesis and assessment, sponsor additional targeted research as appropriate (local, regional)