

Title: Synthesis and Assessment Product 4.2: Thresholds of Climate Change on Ecosystems

Subject and Purpose: The U.S. Climate Change Science Program (CCSP), a consortium of Federal agencies performing climate science, has established a program for the creation of 21 Synthesis and Assessment Products (SAPs) as a part of its Strategic Plan. These SAPs are to be administered by 13 Federal agencies over a 5-year period. The U.S. Geological Survey (USGS), a participant in the CCSP, is responsible for 3 of the 21 SAPs. SAP 4.2: Thresholds of Climate Change on Ecosystems is the subject of this USGS peer review plan.

An author team of experts in the field of climate science and thresholds was established to address and synthesize the present state of scientific understanding regarding potential abrupt state changes or regime shifts in ecosystems in response to climate change in the development of SAP 4.2: Thresholds of Climate Change on Ecosystems. A Federal Advisory Committee (FAC) has been established by USGS to review the draft product and to provide advice and recommendations regarding the development of SAP 4.2. The primary function of the committee is to review and provide comments on the draft SAP 4.2 ensuring the completeness of the SAP to serve as the CCSP definitive document on current knowledge pertaining to the topic of abrupt state changes or regime shifts in ecosystems in response to climate change. Committee membership consists of Federal and non-Federal scientists, educators, and other experts who are engaged in the study of climate change issues. SAP 4.2: Thresholds of Climate Change on Ecosystems will be prepared by the USGS under the auspices of the CCSP. The published product will be released as a CCSP publication. However, USGS also has responsibility for developing and implementing a rollout strategy to publicize the document's release.

Impact of Dissemination: This product is considered to be a "Highly Influential Scientific Assessment".

Timing of Review (Including Deferrals): January 2008. Deferrals are not anticipated at this time.

Manner of Review, Selection of Reviewers, and Nomination Process: This peer review plan was prepared in accordance with USGS/DOI interpretation of OMB guidelines for peer review. Detailed information regarding the USGS IQA compliance process is available at http://www.usgs.gov/peer_review/.

Reviewers will have access to the draft document on a USGS pass-word protected Web site. Reviewer's comments will be forwarded to the author team for its response.

Request for nominations will be solicited during the public comment period of the Prospectus published for SAP 4.2, by lead authors, and by supporting Federal agencies.

Nominations will be evaluated on their technical and professional background. The nominations will also be reviewed during the formation of the FAC by the Administration. Final selection of peer reviewers will be made by the Secretary of the Interior as appointees to the FAC.

USGS will provide the reviewers with a charge statement that offers guidance, establishes the due date, and lists questions to consider during review.

Expected Number of Reviewers: Anticipates 4-10 reviewers.

Requisite Expertise: Paleoclimatology, landscape ecology, oceanography, climate modeling, terrestrial ecology, aquatic ecology, biology, limnology, dendrochronology, hydrology, glaciology, fire science.

Opportunity for Public Comment: Yes.

A 45 day public comment period after peer review has been completed will be managed through the CCSP website. The public comment period will be coordinated by CCSP and authors will be required to respond to all public comments.

Date Plan Submitted: September 25, 2008.

Agency Contact: peer_review_agenda@usgs.gov.