Charter

SCIENCE STEERING GROUP FOR NORTH AMERICAN CARBON PROGRAM CCIWG Approved on 15 February 2008

Introduction

The North American Carbon Program (NACP) is a multidisciplinary research program to obtain scientific understanding of North America's carbon sources and sinks and of changes in carbon stocks needed to meet societal concerns and to provide tools for decision makers. Successful execution of the NACP will require an unprecedented level of coordination among observational, experimental, and modeling efforts regarding terrestrial, oceanic, atmospheric, and human components. The NACP is supported by a number of different federal agencies through a variety of intramural and extramural funding mechanisms and award instruments. NACP will rely upon a rich and diverse array of existing observational networks, monitoring sites, and experimental field studies in North America and its adjacent oceans. Integrating these different program activities and maximizing synergy amongst them, will require expert guidance beyond the norm for large field programs in Earth system science and global climate change.

Role of NACP SSG

<u>Overall Responsibilities and Interfaces</u>. The NACP Science Steering Group (SSG) will provide scientific leadership for the NACP. The NACP SSG will interact closely with the Carbon Cycle Interagency Working Group (CCIWG) and the NACP Office. It will also interact with the Carbon Cycle Science Steering Group (CCSSG) and the Ocean Carbon and Climate Change Science Steering Group (OCCC SSG), as needed. The NACP SSG will assist the CCIWG and NACP Office in implementing the NACP Science Plan, following the Science Implementation Strategy adopted in 2004 and working to assure that scientific returns are maximized.

<u>Specific Scientific Responsibilities</u>. The NACP SSG will be responsible for the scientific direction and strategies of the NACP and will work with the NACP Office to coordinate the scientific activities of NACP's components. The NACP SSG will address scientific research priorities, implementation priorities, and overall integration of the NACP. The NACP SSG will develop technical information for detailed science planning and program evolution and will guide the implementation and integration of scientific research. The NACP SSG will identify critical research gaps and program balance issues that require attention.

<u>Specific Implementation Responsibilities</u>. The NACP SSG will work with the NACP Office to outline coordination strategies for optimizing scientific synergy among NACP investigations and participating programs, projects, and networks. The NACP SSG will address high-level issues concerning logistics, coordination of infrastructure, and data management from the perspective of maximizing scientific returns. Such issues may include: 1) coordination of measurements and activities within intensive field studies and

experiments, 2) geographic distribution of research infrastructure, 3) timing and scheduling of activities, 4) compatibility of data sets and reporting formats, 5) measurement protocols and standards, 6) data sharing and archival of data and data products, and 7) optimization of existing infrastructure and networks for NACP.

<u>Reporting</u>. The NACP SSG will report formally to the CCIWG. Reports will be delivered to the CCIWG at least twice per year and more often, if needed. The NACP SSG is expected to interact frequently with the NACP Office in order to facilitate coordination and integration of NACP scientific implementation. Periodic briefings to the CCSSG and interactions with the OCCC SSG, with regard to research in the oceans adjacent to North America, also are expected.

NACP SSG Membership

<u>Members.</u> The NACP SSG will consist of approximately 12-20 scientific leaders representing approved NACP science investigators¹ and, as appropriate, representatives of major federal agency programs, projects, and networks². Members will be appointed by the CCIWG and will be selected on the basis of their scientific expertise, leadership qualities, and ability to represent the interests of approved NACP science investigators and/or major federal programs, projects, or networks that participate in NACP.

<u>Appointment and Terms for Members</u>. Nominations for NACP SSG members will be sought from the CCSSG, current NACP SSG members, and the CCIWG. The NACP SSG Chair and the CCIWG will mutually agree to the selection of new members. Appointees to the NACP SSG will serve terms of three years, and may be extended once for an additional term of three years. Additional term extensions, especially where such extension is necessary to ensure that a major program, project, or network remains represented on the NACP SSG, may be considered on a case-by-case basis.

<u>Qualifications of NACP SSG Members</u>. Because of the unprecedented challenges anticipated in synthesis and integration of NACP science, it is crucial that the NACP SSG membership represent a broad and balanced range of expertise that encompasses many of the areas covered by the program. Specifically, the combined membership of the NACP SSG must: 1) have expertise in carbon cycle science in terrestrial, oceanic, atmospheric, and human systems; 2) reflect a balance among researchers specializing in modeling, observation (both remote sensing and *in-situ*), and experimental studies; 3) include an appropriate balance between scientists supported through intramural and extramural funding mechanisms; and 4) be drawn from all types of participating institutions (e.g., governmental, academic, private-sector institutions). Some overlap in membership between the CCSSG, OCCC SSG, and the NACP SSG will be acceptable.

¹ A researcher becomes an "approved NACP science investigator" when the federal agency funding/sponsoring his/her research designates his/her investigation as an NACP investigation.

 $^{^{2}}$ A "major program, project, or network" is defined as a coordinated effort involving <u>many</u> individual investigations or activities or one that involves <u>large</u> investments of resources to maintain and operate (while there is no hard financial threshold, generally, this would be in excess of \$1M/yr)

Chair of NACP SSG

The NACP SSG may be chaired by a single Chair or the duties may be split between two Co-Chairs. The Chair/Co-Chairs of the NACP SSG will be appointed by the CCIWG for a two-year term. The term of the Chair/Co-Chair may be extended one time for an additional two-year term. One year prior to the expiration of the NACP SSG Chair's/Co-Chair's term, a decision will be made to either extend the term of a first-term Chair/Co-Chair or to identify a Chair-designee to succeed him/her. At that time, the NACP SSG will make a recommendation to the CCIWG as to which option should be pursued. If a new Chair/Co-Chair is recommended, nominations will be sought from the members of the NACP SSG, the CCIWG, and the CCSSG. All approved NACP science investigators, including current NACP SSG members, will be eligible to serve as Chair/Co-Chair. Depending on the option pursued, the CCIWG will either re-appoint the current NACP SSG Chair/Co-Chair or appoint a new NACP SSG Chair/Co-Chair after consulting with the Chair of the CCSSG and, if applicable, the retiring Chair/Co-Chair of the NACP SSG. The Chair/Co-Chairs of the NACP SSG will serve as *ex officio* members of the CCSSG.

NACP SSG Meetings

Frequent meetings (quarterly, monthly, or as needed) of the NACP SSG are expected. The NACP SSG will conduct most of its meetings as teleconferences and, nominally, will have two in-person meetings per year. One of these meetings may be planned in conjunction with a meeting of the CCSSG. Allowable travel and meeting expenses of the NACP SSG will be covered by the CCIWG and/or its member agencies.

Process for Amending this Charter

Amendments to this charter may be proposed by either the NACP SSG or the CCIWG and will be implemented once the CCIWG and NACP SSG come to a mutual agreement on the changes.