

Charter

SCIENCE LEADERSHIP GROUP for the NORTHAMERICAN CARBON PROGRAM (NACP)

Approved by the NACP Science Leadership Group May 2021

Introduction

The North American Carbon Program (NACP) is a community of researchers working to understand the dynamics and drivers of the coupled carbon-climate system, including interactions with the health and sustainability of ecosystems, natural resources, and the provision of goods and services. With a focus on sources and sinks of carbon for North America and its coastal waters, the Program emphasizes diagnosis of the contemporary carbon cycle, scientific understanding of how it responds to natural and human-caused factors and reliable predictions of its likely future dynamics. The Program provides scientific assessments of a range of policy and management options for climate change mitigation and prevention of ocean acidification. As such, the NACP plays a vital role in global carbon cycle research and its applications in service to society.

Role of the NACP Science Leadership Group

Overall Responsibilities and Interfaces. The NACP Science Leadership Group (SLG) provides scientific leadership for the NACP. The NACP SLG interacts and collaborates with the NACP Office and the U.S. Carbon Cycle Science Program Office. The SLG assists the NACP Office in implementing the NACP Science Plan and Implementation Plan, following the Science Implementation Strategy as adopted in 2005 and as reflected in pertinent updates. The original objective and implementation strategy for NACP are presented in the [Science Plan \(2002\)](#) and [Implementation Plan \(2005\)](#), respectively.

Specific Scientific Responsibilities. The NACP SLG is responsible for the scientific direction and strategies of the NACP and works with the NACP Office to coordinate the scientific activities of NACP's components. The NACP SLG addresses scientific research priorities, implementation priorities, and overall integration of the NACP efforts. The NACP SLG develops technical information for detailed science planning and program evolution and guides the implementation and integration of scientific research. The NACP SLG identifies critical research gaps and program balance issues that require attention.

Specific Implementation Responsibilities. The NACP SLG works with the NACP Office to outline coordination strategies for optimizing scientific synergy among NACP investigations and participating programs, projects, and networks. The NACP SLG addresses 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, 7) coordination and collaboration on modeling and data-model integration activities and 8) optimization of existing infrastructure and networks for NACP.

Interactions. The NACP SLG is expected to interact frequently with the NACP Office in order to facilitate coordination and integration of NACP scientific implementation. Members of the SLG, in coordination and communication with the NACP Office, and the U.S. Carbon Cycle Science Program Office, also liaise with key national and international groups, including (but not limited to) the Carbon Cycle Interagency Working Group, the U.S. Ocean Carbon and Biogeochemistry (OCB) Program, the Interagency Working Group on Ocean Acidification (IWG-OA), the Global Research Projects of Future Earth (e.g., the Global Carbon Project (GCP), the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the World Climate Research Program (WCRP), the Integrated Carbon Observing System (ICOS), the Integrated Global Greenhouse Gas Information System (IG3IS), SILVACARBON and FLUXNET/AmeriFlux/MexFlux. To encourage interactions, the SLG may also invite representatives from these groups and others such as the Carbon Cycle Interagency Working Group (CCIWG) and pertinent federal and non-federal institutions and stakeholder groups, as appropriate, to present at SLG meetings and explore/forge/sustain productive collaborations in fulfilment of the NACP mission. All interested scientists and partners are welcome to attend NACP SLG meetings.

NACP SLG Membership

Members. The NACP SLG consists of approximately 15 – 25 scientific experts from diverse institutions, including minority-serving institutions (MSIs), non-profit organizations and private sector and, as appropriate, representatives of major federal agency programs, projects, and networks¹. Members are selected on the basis of their scientific expertise, leadership qualities, and ability to represent the interests of NACP science investigators and/or major federal programs, projects, or networks that participate in NACP. Additionally, the Director of the U.S. Carbon Cycle Science Program and the NACP Coordinator serve as *ex officio* members of the SLG.

Appointment and Terms for Members. SLG members are appointed by the NACP Office. New members may be recommended by the current SLG members based on review of nominations publicly solicited via the NACP website and via stakeholder and partners, such as the Carbon Cycle Interagency Working Group. The NACP SLG and the NACP Office will mutually agree to the selection of new members based on selection criteria that meet the NACP science goals, SLG membership qualifications and the NACP diversity, equity, and inclusion objectives. In adherence with the [NACP Statement on Racism and Injustice](#), nominations will also be received via the NACP website and newsletter and actively sought from minority serving institutions (MSIs) and/or populations that have historically been under-represented in the NACP SLG and/or any carbon/climate leadership groups. Appointees to the NACP SLG will serve terms of three years, with the possible extension once for an additional term of three years. Additional

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

term extensions, especially where such extension is necessary to ensure that a major program, project, or network remains represented on the NACP SLG, may be considered on a case-by-case basis.

Qualifications of NACP SLG Members. Because of the unprecedented challenges anticipated in synthesis and integration of NACP science, it is crucial that the NACP SLG membership represent a broad and balanced range of diverse expertise that encompasses many of the areas covered by the program. Specifically, the combined membership of the NACP SLG 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*), experimental studies, and integration; 3) include an appropriate balance between scientists supported through intramural and extramural funding mechanisms; 4) be drawn from all types of participating institutions (e.g., governmental, academic, private-sector institutions); and 5) be diverse across career stage, institution type, geographic location, gender, race and ethnicity.

Chair of NACP SLG

The NACP SLG may be chaired by a single Chair or the duties may be split between two Co-Chairs. The Chair/Co-Chairs of the NACP SLG will be appointed by the SLG 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 SLG 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. If a new Chair/Co-Chair is needed, nominations will be sought from the members of the NACP SLG. All NACP participants, including current NACP SLG members, will be eligible to serve as Chair/Co-Chair. Depending on the option pursued, the SLG will either re-appoint the current NACP SLG Chair/Co-Chair or appoint a new NACP SLG Chair/Co-Chair after consulting with the retiring Chair/Co-Chair of the NACP SLG.

NACP SLG Meetings

Frequent meetings (quarterly, monthly, or as needed) of the NACP SLG are expected. To increase participation and reduce carbon emissions, the NACP SLG will conduct most of its meetings virtually but will hold at least one in-person meeting each year, except during extraordinary events (such as during the COVID-19 pandemic) or pending availability of meeting funding support. Allowable travel and meeting expenses of the NACP SLG may be covered by the federal agencies, the U.S. Carbon Cycle Science Program Office and/or CCIWG member agencies. The in-person meetings will also have a virtual option to maximize accessibility. All meetings will be advertised by the NACP Office and will be open to the public.

Process for Amending this Charter

Amendments to this charter may be proposed by the NACP SLG and will be implemented once the NACP SLG and NACP Office come to a mutual agreement on the changes.