



Oregon Nearshore Research Task Force Scientific Review Committee

Scientific Review and Synthesis of the National Academies

Advisors to the Nation on Science,
Engineering, and Medicine

National Academies

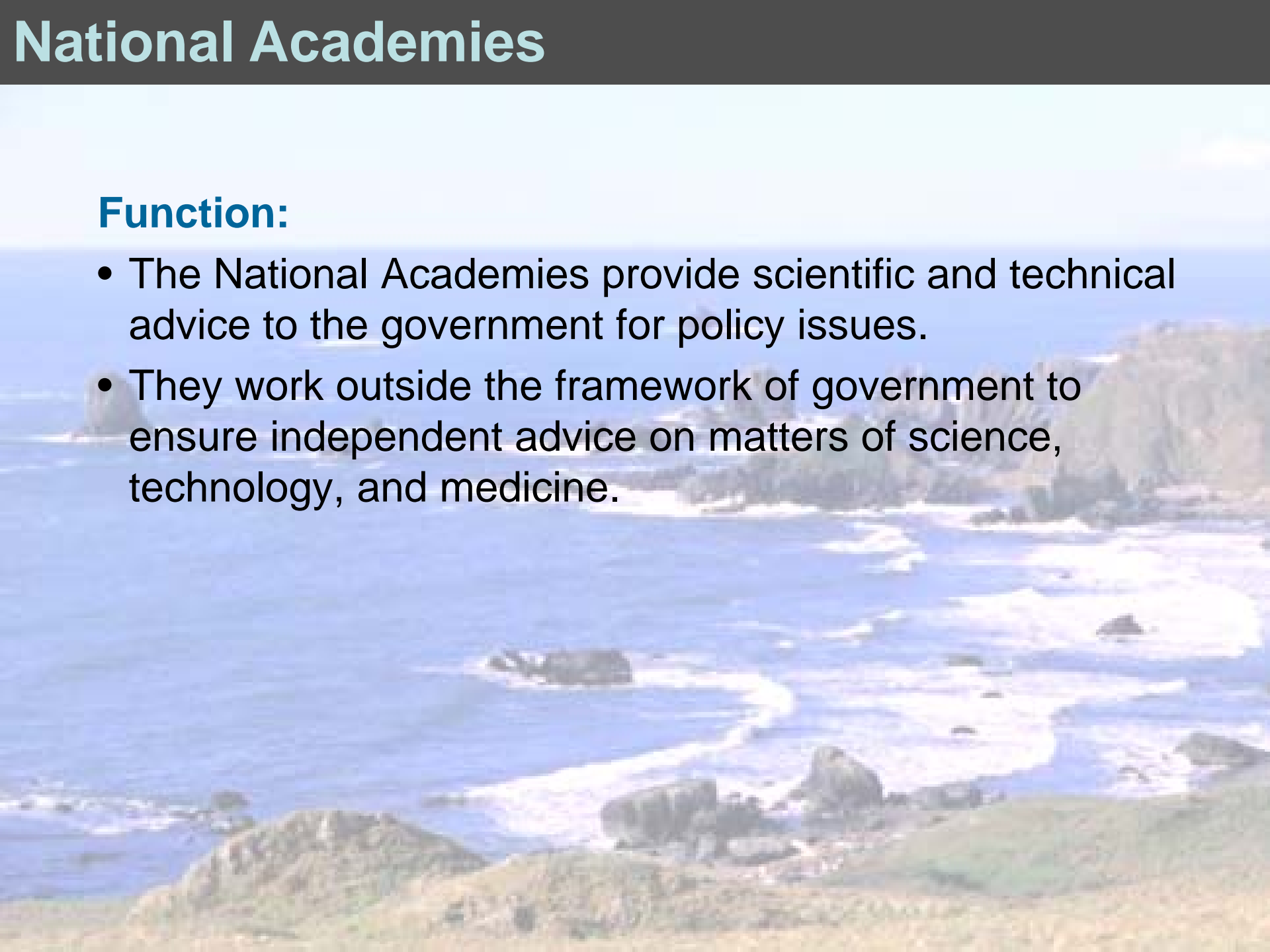
Background:

- National Academy of Sciences (NAS) was established by President Lincoln in 1863.
- NAS serves to *investigate, examine, experiment, and report upon any subject of science or art* whenever called upon by any department of the government.
- The institution eventually expanded to include the:
 - National Research Council (NRC; 1916)
 - National Academy of Engineering (1964)
 - Institute of Medicine (1970)

National Academies

Function:

- The National Academies provide scientific and technical advice to the government for policy issues.
- They work outside the framework of government to ensure independent advice on matters of science, technology, and medicine.



National Academies

Structure:

- The Academies are private, non governmental, organizations.
- They enlist committees of the nation's top scientists, engineers, and other experts, all of whom volunteer their time to study specific concerns.
- The majority of studies they carry out are at the request of government agencies.

National Academies

Congressional Liaison - The Office of Congressional and Government Affairs (OCGA)

OCGA activities include:

- Negotiating legislative requests to the National Academies;
- Monitoring current legislation and relevant congressional activities;
- Coordinating briefings to Congress for the National Academies;
- Responding to inquiries from congressional offices;
- Reviewing and advising on the congressional testimony of representatives of the National Academies;
- Distributing National Research Council reports to interested members of Congress and federal officials;
- Preparing an annual Report to Congress in conjunction with the Office of News and Public Information.

National Academies

Funding:

- Academies do not receive direct federal appropriations for their work.
- Studies are usually funded out of appropriations made available to federal agencies.
- They have endowment funds for self-initiated studies and for expenses (costs directly pertinent to membership affairs that are not recoverable as indirect costs).
- They can seek additional endowments to conduct studies not requested by federal agencies or other sectors, but deemed critical by the leadership of the Academies and the Institute.

National Academies

Membership:

- Elections of new members take place annually, and new members are nominated and voted on by existing members.
 - The number of new members elected is established either by the bylaws or the council of each organization.
 - There are no provisions in the governing documents of the Academies for the removal of members who are elected for life.
- Although no formal duties are involved, members are invited to participate in the governance and advisory activities of the Academies and the NRC.

National Academies - NAS

NAS Structure:

- Membership
 - 2,100 members
 - 380 foreign associates (~ 200 have won Nobel Prizes)
- Member and foreign associates of the Academy are elected in recognition of their distinguished and continuing achievements in original research.
- The NAS is governed by a Council consisting of twelve members (councilors) and five officers, elected from among the Academy membership.
 - Current NAS President: Dr. Ralph J. Cicerone
- They hold an annual meeting in D.C., which includes sessions devoted to business and to scientific and technical issues.

National Academies - NAS

NAS Roles:

- Publishes the journal, *Proceedings of the National Academy of Sciences*
- Organizes symposia and convenes meetings on issues of national importance and urgency.

The Academy operates very few committees directly; most of its science policy and technical work is undertaken by the NRC (the operating arm).

National Academies - NRC

NRC Summary

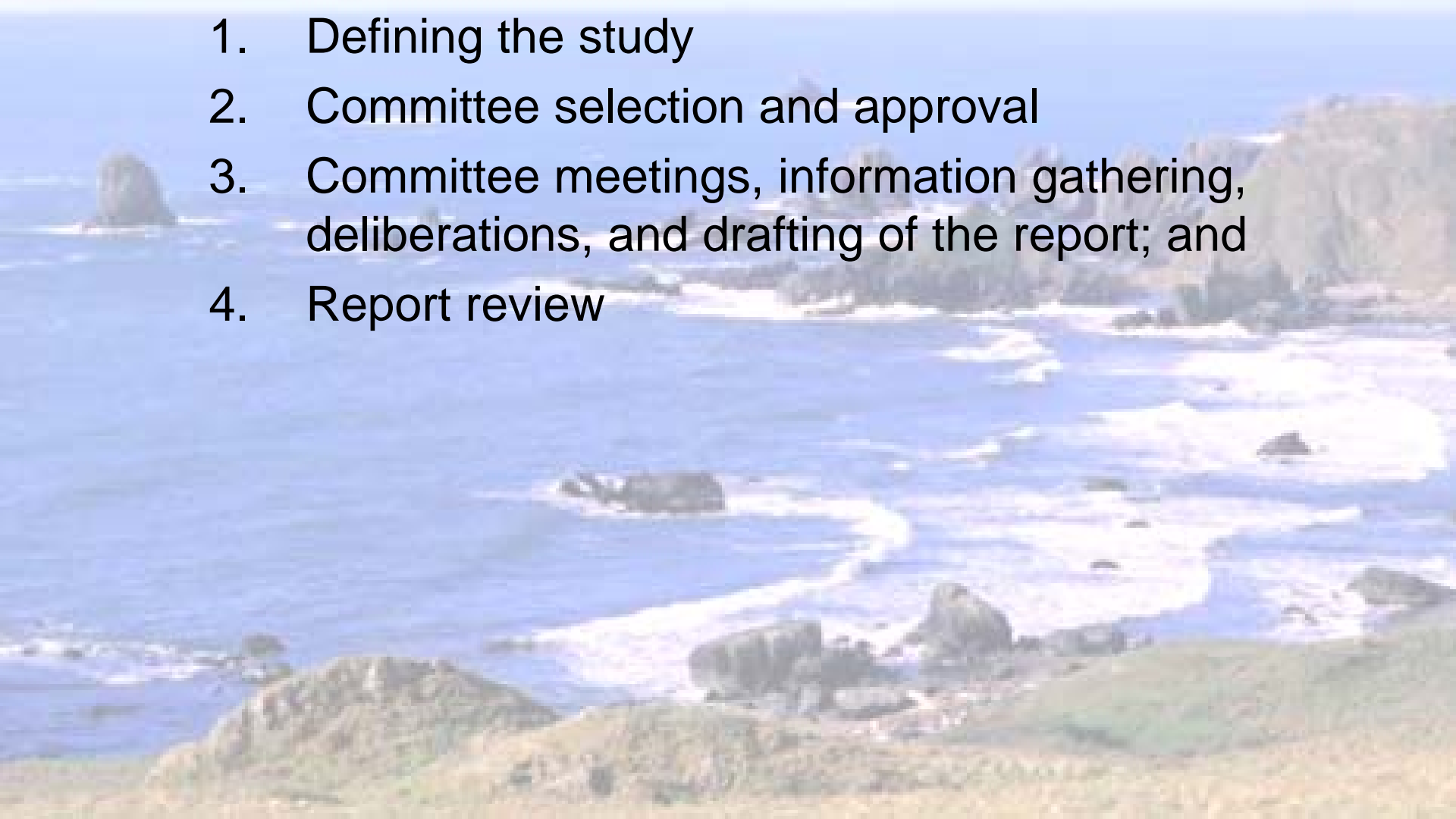
- 6,000 of the world's top scientists and other professionals volunteer their time to serve on NRC committees.
- The NRC is administered jointly by the Academies through the NRC Governing Board.
- The core services involve collecting, analyzing, and sharing information and knowledge.

Relevant NRC Activities

- *Consensus Studies*: Comprehensive reports that focus on major policy issues and provide recommendations for solving complex problems.
- *Expert Meetings and Workshops*: Convene symposia, workshops, meetings, and roundtables to connect with professionals and the interested public.

Four Stages of the Study Process

1. Defining the study
2. Committee selection and approval
3. Committee meetings, information gathering, deliberations, and drafting of the report; and
4. Report review



Study Process

Stage 1. Defining the Study

- *Identify Questions and Cost* - NAS staff and members work with sponsors to determine questions to be addressed by the study in a formal “statement of task,” as well as the duration and cost of the study.
- *Determine Study Scope and Committee Needs* - The statement of task defines and bounds the scope of the study, and serves as the basis for determining the expertise and the balance of perspectives needed on the committee.
- *NRC Approval* - The statement of task, work plan, and budget must be approved by the Executive Committee of the NRC Governing Board.

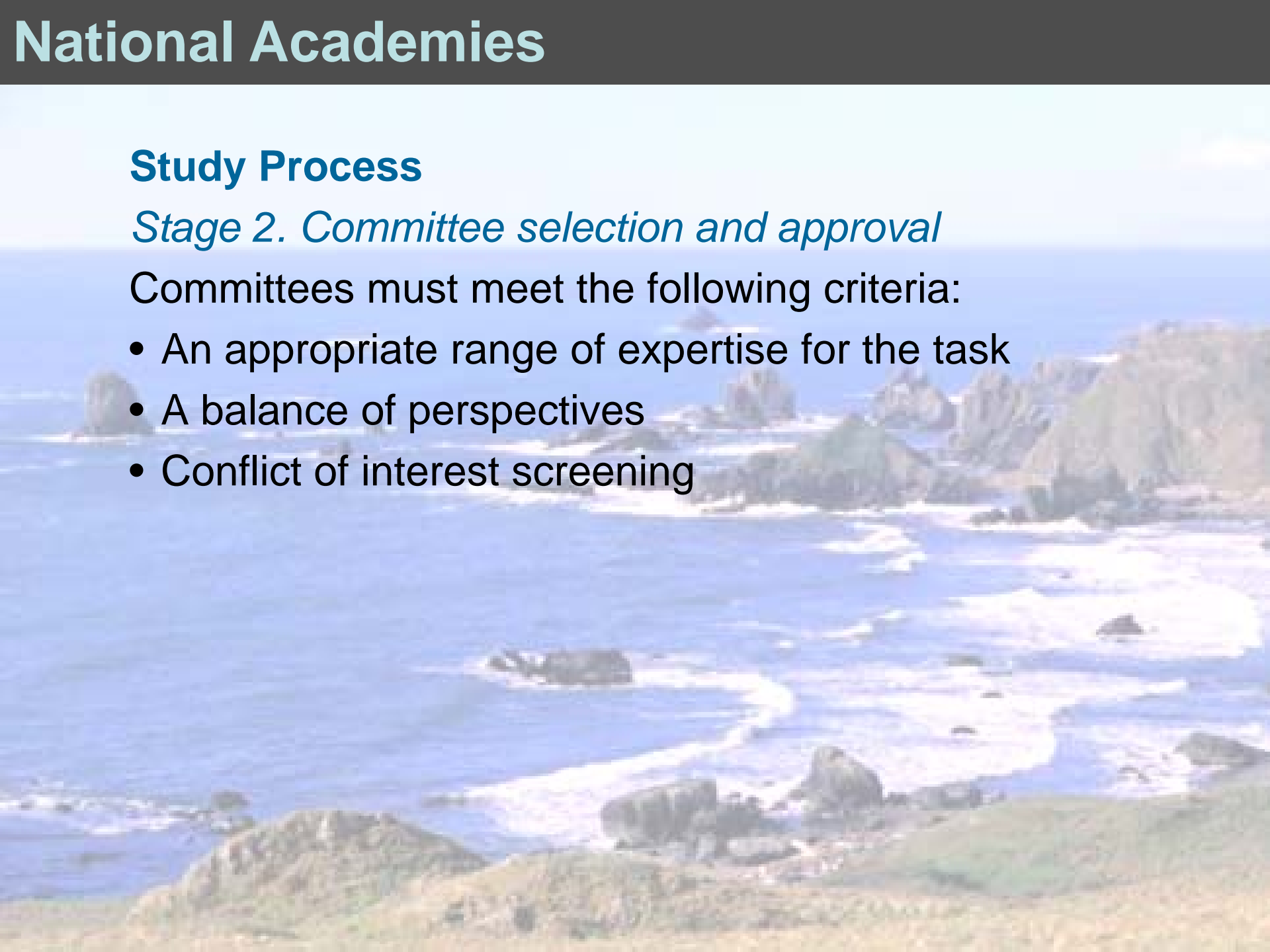
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Study Process

Stage 2. Committee selection and approval

Committees must meet the following criteria:

- An appropriate range of expertise for the task
- A balance of perspectives
- Conflict of interest screening



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Study Process

Stage 3. Committee Meetings, Information Gathering, Deliberations, and Drafting the Report

Study committees typically gather information through:

1. Meetings that are open to the public and that are announced in advance through the National Academies Web site
2. The submission of information by outside parties
3. Reviews of the scientific literature
4. Investigations of the committee members and staff

In all cases, input is solicited from individuals who have been directly involved in, or who have special knowledge of, the question being considered.

Study Process

Stage 4. Report Review

- The NAS recruits independent experts with a range of views and perspectives to review and comment on the draft report prepared by the committee.
- The review process is structured to ensure that each report:
 - addresses its approved study charge and does not go beyond it
 - has findings that are supported by scientific evidence
 - has effective organization
 - is impartial and objective

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Study Process

Stage 4. Report Review

- Each committee provides a detailed response to reviewer comments that are examined by independent report review “monitors”.
- After all committee members and appropriate National Academies officials have signed off on the final report, it is transmitted to the sponsor of the study and is released to the public.
- Sponsors are not given an opportunity to suggest changes in reports.
- The names and affiliations of the report reviewers are made public when the report is released.

National Academies

