

The U.S. National Committee for the Decade of Ocean Science for Sustainable Development

*UN Decade of Ocean Science for Sustainable Development is:
**Transformative ocean science solutions for sustainable development, connecting
people and our ocean.***

Larry Mayer

University of New Hampshire

Chair, Ocean Studies Board and U.S. National Committee



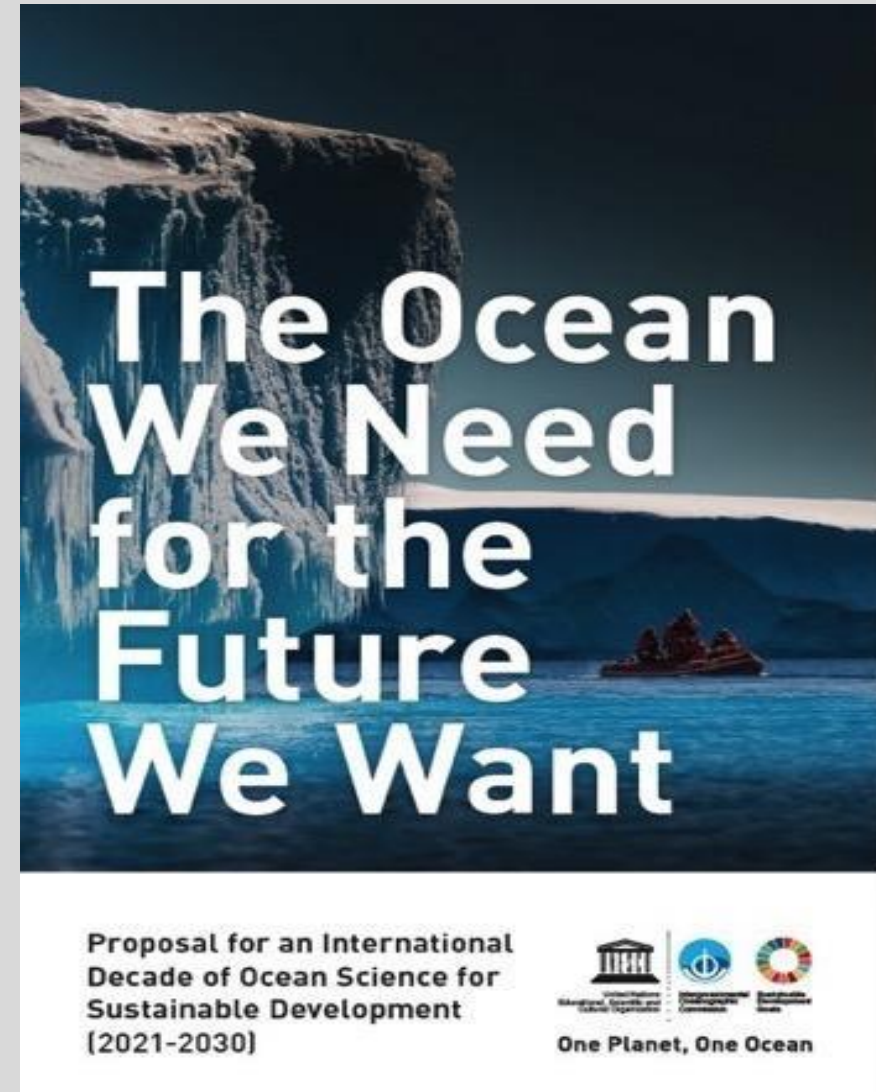
United Nations

UN GENERAL ASSEMBLY PROCLAMATION

Dec. 6, 2017

Omnibus Resolution for Oceans and the Law of the Sea (A/RES/72/73)

- Proclaimed the **UN Decade of Ocean Science for Sustainable Development 2021-2030**
- Called upon the IOC to prepare an **implementation plan** for the Decade



UN DECADAL GOALS



U.S. DECADAL PRIORITIES



Transparent Ocean

Data sharing & application products, services, policy



Productive Ocean

Sustainable BE, safe thresholds for econ growth, mitigate impacts of envir. change



Safe Ocean

Disaster risk reduction



Healthy/Resilient Ocean

Ecosystems mapped & protected, impacts mapped, measured & reduced



Clean Ocean

Pollution identified, quantified, reduced & removed



Predicted Ocean

All ocean basins observed and mapped; obs. for mgmt. & BE; innovate tech



Inspiring & Engaging Ocean

Focus on ocean literacy to establish broad understanding of role/importance of ocean



Modernize R&D infrastructure

Big data, models, R2O



Promote Economic Prosperity

Seafood competitiveness, energy, minerals, econ/eco balance, workforce



Resilient Coastal Communities

Disaster risk reduction



Safeguard Human Health

Plastics contaminants & pathogens, HAB, Natural Products



Ensure Maritime Security

Arctic transport, situational awareness, national security relies on *strong science literacy* in our communities

Ocean Decade Challenges

Knowledge and Solutions

- 1) Pollutants and Contaminants
- 2) Ecosystem protection
- 3) Food sustainability
- 4) Sustainable economic development
- 5) Ocean-climate nexus

Essential Infrastructure

- 6) Hazard warnings
- 7) Ocean observations
- 8) Equitable access to data and tech

Foundational

- 9) Capacity development
- 10) Social & behavioral barriers



U.N. Decade Challenges:

- Essential Infrastructure Challenges
- Challenge 6: Enhance multi-hazard early warning services for all geophysical, ecological, biological, weather, climate and anthropogenic related ocean and coastal hazards, and mainstream community preparedness and resilience.
- Challenge 7: Ensure a sustainable ocean observing system across all ocean basins that delivers accessible, timely, and actionable data and information to all users.
- Challenge 8: Through multi-stakeholder collaboration, develop a comprehensive digital representation of the ocean, including a dynamic ocean map, which provides free and open access for exploring, discovering, and visualizing past, current, and future ocean conditions in a manner relevant to diverse stakeholders.



U.N. Decade Challenges:

Knowledge and Solutions Challenges

Challenge 1: Understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems, and develop solutions to remove or mitigate them.

Challenge 2: Understand the effects of multiple stressors on ocean ecosystems, and develop solutions to monitor, protect, manage and restore ecosystems and their biodiversity under changing environmental, social and climate conditions.

Challenge 3: Generate knowledge, support innovation, and develop solutions to optimise the role of the ocean in sustainably feeding the world's population under changing environmental, social and climate conditions.

Challenge 4: Generate knowledge, support innovation, and develop solutions for equitable and sustainable development of the ocean economy under changing environmental, social and climate conditions.

Challenge 5: Enhance understanding of the ocean-climate nexus and generate knowledge and solutions to mitigate, adapt and build resilience to the effects of climate change across all geographies and at all scales, and to improve services including predictions for the ocean, climate and weather.

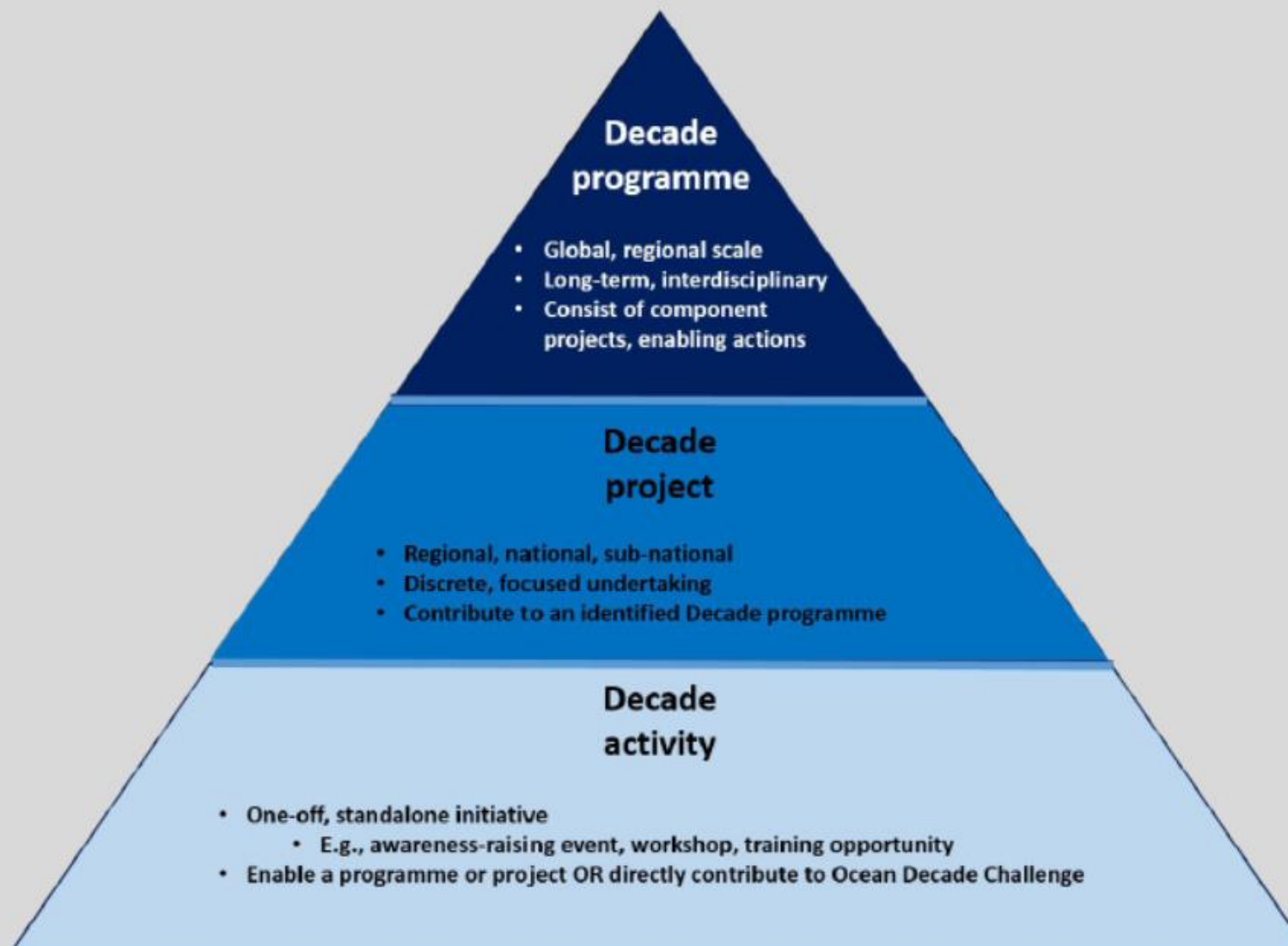


U.N. Decade Challenges:

- Foundational Challenges
- Challenge 9: Ensure comprehensive capacity development and equitable access to data, information, knowledge and technology across all aspects of ocean science and for all stakeholders.
- Challenge 10: Ensure that the multiple values and services of the ocean for human wellbeing, culture, and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.



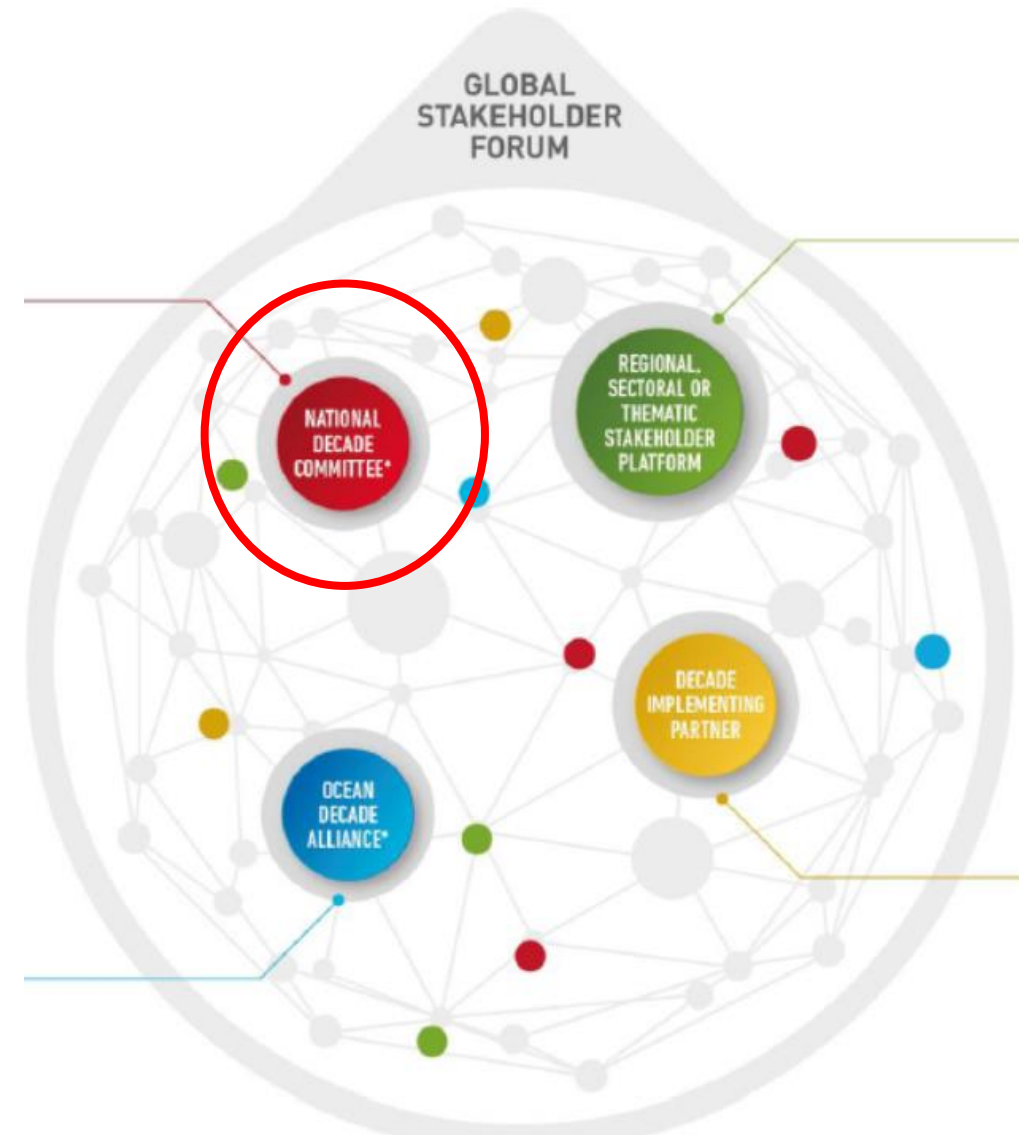
DECADE ACTION FRAMEWORK



From U.N. Decade Implementation Plan:

- ***National Decade Committees***

105. Given the scope and breadth of the Decade, national coordination of Decade activities will in many cases be essential. The creation of National Decade Committees will be encouraged to facilitate national contributions to the Decade, engage national stakeholders, and enhance their access to Decade benefits such as data, forecasts, science-based decision support tools, or capacity development opportunities. The Decade Coordination Unit will use the Global Stakeholder Forum to promote exchange and cooperation between National Decade Committees. Ideally, these National Decade Committees should be multi-agency and multi-stakeholder platforms, involving the political and scientific institutions and actors concerned by the ocean and its management. Existing national coordinating mechanisms may provide the basis for performing such functions. The mandate and role of National Decade Committees will be tailored to the local context



Committee

Ocean Studies Board Plus



See all bios



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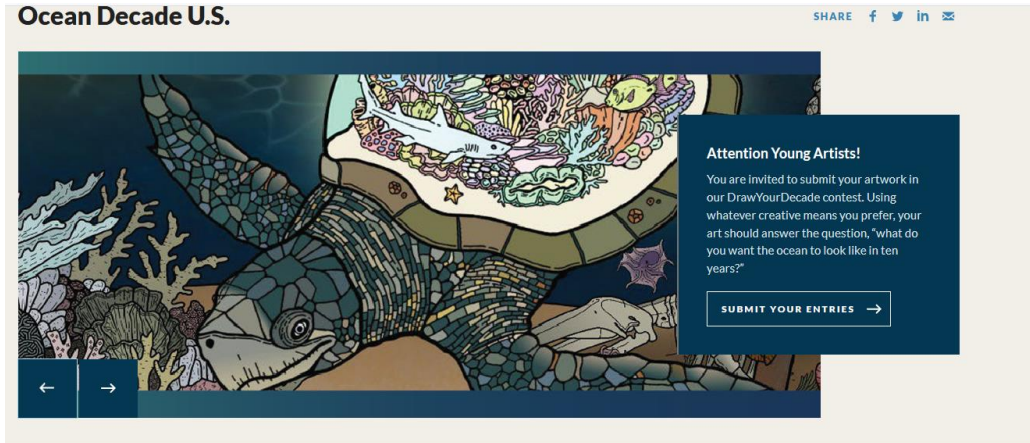
MEMBER

Robert S. Winokur

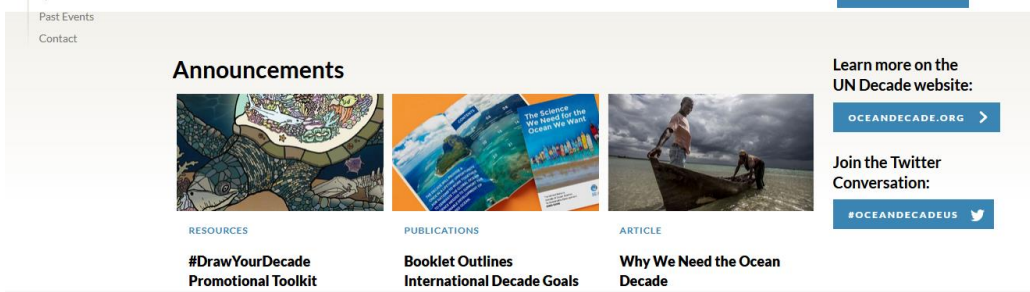
Plus four early career liaisons
– call for nominations coming
out soon – check on website

[www.nationalacademies.org/
oceandecadeus](http://www.nationalacademies.org/oceandecadeus)

ROLE OF U.S. COMMITTEE: 1- COMMUNICATIONS AND LIAISON FOCAL POINT



www.nationalacademies.org/oceandecadeus



The WEBSITE –

- General dissemination and updates on U.S. and international Decade activities
- Hub for Ocean Decade U.S. Nexus - Organizations that will contribute to and help disseminate news about U.S. efforts during the Decade.
- Identify available Decade resources (documents, plans, calls for actions, etc.) – youth engagement (Draw Your Decade)
- an online platform for sharing “Ocean Shot” concepts across a broadly defined ocean community – nationally and internationally

OCEAN SHOTS – BOLD, TRANSFORMATIVE IDEAS

CRITERIA for submission

- **RELEVANT**: Topic represents a key area of potential scientific advancement related to the ten Ocean Decade Challenges
- **VISIONARY/INSPIRATIONAL**: potential for disruptive or transformational impact
- **REALIZABLE**: connections to existing strengths
- **ENGAGING**: Trans-, inter- and multi-disciplinary ... sectors outside of traditional ocean sciences.
- **LEVERAGING**: international participation and collaboration.
- **CAPACITY BUILDING/STRENGTHENING**: developing world, next generation
- **JUST/DIVERSE/EQUITABLE/INCLUSIVE**: build community ...involves local or indigenous experts and knowledge.

ROLE OF U.S. COMMITTEE: 2- MOTIVATE and CATALYZE RESEARCH THAT HAS POTENTIAL TO ACCELERATE GOALS OF THE DECADE: BOLD, TRANSFORMATIVE IDEAS

OCEAN-SHOTS ---

- Identify relevant NASEM entities (and others) as well as external communities who may broaden and bring expertise to research areas
- Promote these research ideas and collaborations through website, webinars, annual meetings and NASEM infrastructure
- Liaise with U.N. Decade Structure
- Liaise with U.S. Federal agencies, NGOs, industry and others.



Realistic goals are useful but a moon-shot is transformative.

<https://leadershipfreak.blog/2018/10/17/moon-shot-goals/>

This call for ‘Ocean-Shots’

Is ...

- Open invitation
 - All participants, all sectors, all disciplines
- A start
 - IOC kickoff, and US kickoff in 2021
- Unconstrained
 - “...not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills...” JFK, 9/12/62

Is not ...

- Federal Funding Opportunity
- Exclusive
 - Other calls from IOC
- Preordained/prejudged
 - Known unknowns
 - “...there are also unknown unknowns—the ones we don't know we don't know...” D. Rumsfeld, 2/12/02

Why participate?

From template ...

As an author of a selected entry, you will have the opportunity to present your concept in either a Committee-hosted webinar or as a participant in the Committee's annual symposium for Ocean Decade US. The webinars and symposia will be high profile events that provide a platform for sharing your innovative research ideas with influential sectors of the ocean science community. In addition, entries that meet the Ocean-Shot criteria (see below) will be featured on the Ocean Decade US web site to provide a forum for further development of concepts, facilitate networking with potential collaborators, and promote matchmaking with potential funders. Selection of a concept as an Ocean-Shot is not associated with funding. However, the US National Committee will highlight the Ocean-Shots in discussions with potential sponsors to help generate interest in supporting such projects as contributions to the UN Decade of Ocean Science for Sustainable Development.

Opportunity to present
at annual symposium
or in webinar

Featured on Ocean
Decade US Website

Highlighted in Committee
discussions with
potential sponsors



THE PROCESS:

- The OCEAN SHOT template will be available on the US Decade website
- www.nationalacademies.org/oceandecadeus
- Committee will evaluate against criteria
- Those that meet criteria – will be featured on website and presented at U.S. Decade Kick-off meeting in January
- Work with proponents to expand expertise base, collaborations, etc.
- Work with UN Decade to promote
- Work with potential sponsors to promote
- Will repeat and review each year.

TEMPLATE (1-2 page document)

Title:

Relevant Ocean Decade Challenge(s):

Vision and potential transformative impact (200 word limit):

Realizable, with connections to existing U.S. scientific infrastructure, technology development, and public-private partnerships (150 word limit):

Scientific/technological sectors engaged outside of traditional ocean sciences (100 word limit):

Opportunities for international participation and collaboration (100 word limit):

Builds global capacity and encourages the development of the next generation of ocean scientists (100 word limit):



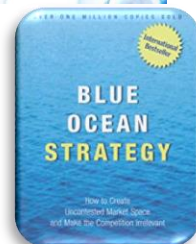
ROLE OF U.S. COMMITTEE:

US COMMUNITY

**U.S. National
Committee for the
Decade**



Federal Agencies



WEBINAR FRIDAY 16

October

2PM-4PM EST

[www.nationalacademies.org/
oceandecadeus](http://www.nationalacademies.org/oceandecadeus)



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



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US NATIONAL COMMITTEE FOR THE DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT