



**National Science Foundation
Where Discoveries Begin**

NSFs Commitment to IODP through 2024

Forthcoming NSF DCL Request for Information

Scientific Ocean Drilling Post-2024

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IODP Town Hall @ AGU 2020
Terry Quinn, Talking Points

Thank you for this opportunity to speak with the scientific ocean drilling community today.

I will focus on three topics in my presentation:

- 1) NSF's Commitment to IODP through 2024,
- 2) Forthcoming NSF DCL/Request for Information, and
- 3) Scientific Ocean Drilling Post-2024

Let's start with NSF's Commitment to IODP through 2024

Point #1: NSF remains committed to the current IODP and the JOIDES Resolution

The ongoing pandemic re-enforces the paramount importance of participant safety

NSF understands and accepts that deferred and/or modified operations (such as with a reduced science party) will need to occur for the near future

The pause in operations has allowed extensive improvement to the JR to occur, potentially lengthening its operational life

Point #2: NSF's support of JR operations and IODP is unchanged

Unspent funds in FY20 & FY21 due to reduced operations will be applied to future operations, thus increasing expedition number and/or complexity

FY24 expeditions will be supported under the option year as identified in JR Consortium Memorandums

JR Consortium members who contribute funds in FY20 thru FY23 will be accorded rights in FY24

JR operations in FY24 requires contributions from members in FY24

Now let me transition to the Forthcoming NSF DCL Request for Information

Point #1: NSF/OCE receives the 2050 Science Framework Exploring Earth by Scientific Ocean Drilling 2050

The framework document:

- a) Is impressive, well-written and illustrated
- b) Identifies science challenges that can be addressed by scientific ocean drilling in a comprehensive and logical manner
- c) Recognizes that facilities used for these challenges may have multi-decadal lifetimes, yet also calls for regular re-examination of priorities and efforts
- d) Reflects impressively broad input from numerous global community workshops
- e) represents a large, vibrant, enthusiastic international scientific user community

In summary, the Framework document provides a foundation for NSF to issue a Dear Colleague Letter.

Point #2: A Request for Information Regarding Potential Future Drilling Platform DCL is currently working its way through NSF clearance.

The RFI:

- a) seeks provision of a globally ranging, multi-decadal drilling platform to address a significant portion of the identified science challenges. Such a platform is not considered a replacement for the JR, while also allowing for new construction or existing hull-conversion models
- b) encourages innovative approaches and partnerships

- c) encourages scalable approaches for operational costs to accommodate potential funding variances
- d) will be posted on the Federal Register, FedBizOps, and community bulletin boards to encourages the broadest array of eligible entities to respond

Point #3: NSF/OCE will decide by June 2021, based on the responses to the DCL, whether funding for the new platform will be pursued.

Our decision will be informed by:

- National Science Board publication [Vision 2030](https://www.nsf.gov/nsb/publications/2020/nsb202015.pdf) (<https://www.nsf.gov/nsb/publications/2020/nsb202015.pdf>)
- *Jason Report* (https://www.nsf.gov/news/special_reports/jasonsecurity/JSR-19-FundamentalResearchSecurity_12062019FINAL.pdf)
- A realistic outlook for a sustainable business model for future scientific ocean drilling

Now let me transition to NSF's Perspective on Scientific Ocean Drilling Post-2024

Point #1: NSF/OCE cannot engage in substantive discussion with our partners regarding a post-2024 scientific ocean drilling program or programs until after the June 2021 decision whether funding for the new platform will be pursued.

NSF thinks it is premature to “pivot” from the current IODP proposal review to the new Framework

We support the recent JRFB decision not to accept new drilling proposals using the JR that do not bring in new resources

Point #2: The present Environmental Impact Statement allows for JR operation in FY25 through FY28, however funding for JR operation post FY24 is uncertain, and should not be assumed.

Point #3: The current business model for IODP is not financially sustainable, indeed the program is over-capitalized and under-funded.

For example, berths on the JR cost NSF \$1.2M each per year; whereas partner costs for berths currently are \leq \$0.4M each per year.

There is an enthusiasm gap between the science community, as demonstrated by the science opportunities in the Framework, and IODP funding agencies.

Point #4: Guiding Principles for Future NSF Partnership in Scientific Ocean Drilling

The recent JASON Report provides guidance to NSF regarding future partnerships that are based on transparency, reciprocity, and adherence to the norms of research integrity.

NSF needs to be confident that a post 2024 drilling program has a sustainable business model with partners who have the ability and demonstrated interest to provide substantial and equitable funding streams to a future program.

Point #5: NSF Acquisition of a new drilling platform is multi-year process with funding

- a) Authorized by the National Science Board,
- b) Requested in the President's budget, and
- c) Appropriated by the U.S. Congress

Let me close by saying that NSF encourages the science community to take new and innovative approaches to addressing the scientific questions posed in 2050 Framework

What are the new partnerships and approaches that could bring new resources to a future program and facilitate future discoveries?

Public – private?

Interagency, perhaps with our NASA friends?

Let me leave you with a quote from former US President John Kennedy

“History is a relentless master.
It has no present, only the past rushing into the future.
To try to hold fast is to be swept aside.”

So let’s embrace bold and innovative approaches for scientific ocean drilling post 2024.

Thank you for the opportunity to speak with you all.