

**Opportunity Title:** Land use controls on inland and coastal aquatic habitat water quality and health in Belize

**Opportunity Reference Code:** 0248-NPP-NOV23-JPL-EarthSci

**Organization** National Aeronautics and Space Administration (NASA)

**Reference Code** 0248-NPP-NOV23-JPL-EarthSci

**How to Apply** All applications must be submitted in [Zintellect](#)

**Application Deadline** 11/1/2023 6:00:59 PM Eastern Time Zone

**Description Description:**

Belize's Barrier Reef System is a UNESCO World Heritage site, harboring high levels of biodiversity, is approximately 190 miles long and a part of the 625 mile long, extensive Mesoamerican Barrier Reef System (the largest barrier reef in the Western Hemisphere). BBRS is critical to the nation's economy through fisheries and tourism, contributing 15% GDP and supporting work for over 200,000 people (the nation's population is about 400k).

An agreement between the Government of Belize and The Nature Conservancy, Belize's Marine Spatial Planning process was launched in October 2022 to reduce public debt by 12% of GDP and accelerate marine conservation. This NPP opportunity seeks candidates who are interested in conducting research to support the Marine Spatial Planning (MSP) process in collaboration with colleagues in Belize.

The goals of this work include:

- \* Classification of water quality conditions in inland aquatic and marine environment using remote sensing and in situ method
- \* Further advance understanding of land cover/ land use controls on inland aquatic and marine environment conditions
- \* Constrain modeled outputs of water quality conditions in marine environments with in situ and remote sensing derived water quality
- \* Investigate connectivity of water quality events, such as sedimentation and algal blooms, in marine protected areas, and other regions of interest to MSP process
- \* Collaborate with colleagues in Belize to support integration of new datasets and analyses into Marine Spatial Planning

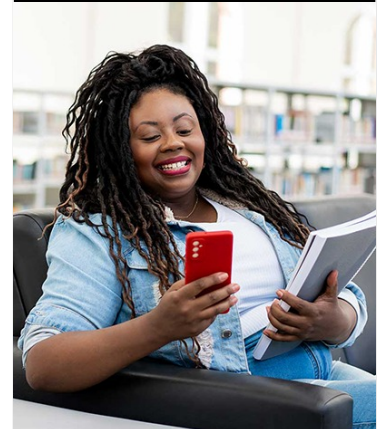
**Field of Science:** Earth Science

**Advisors:**

Christine Lee  
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(818) 354-3343

**Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States.** A complete list of Designated Countries can be found at:

<https://www.nasa.gov/oiir/export-control>.



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Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

**Eligibility  
Requirements**

- **Degree:** Doctoral Degree.