

**Opportunity Title:** Reducing human health risk and exposure to wastewater spills in coastal environments

**Opportunity Reference Code:** 0234-NPP-NOV23-JPL-EarthSci

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

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

**Description** The San Diego County Board of Supervisors recently declared that “pollution from the Tijuana River Valley [is] a public health crisis,” having led to 295 and 160 days of beach closures in Border Field State Park and Imperial Beach, CA, in 2020. In a 2017 case study, it was estimated that nearly 4% of 864,000 swimmers at San Diego beaches were sickened by a south-swell driven plume event containing massive amounts of untreated wastewater (Feddersen et al 2021). County of San Diego’s Health Department (DEHQ) works to protect beachgoers while preventing unnecessary closures that could negatively affect their beach tourism economy. This project will explore ways in which remote sensing can be used to improve understanding of Tijuana River plumes and enhance this decision process of DEHQ to protect public health.

**Location:**

Jet Propulsion Laboratory  
Pasadena, California

**Field of Science:**Earth Science

**Advisors:**

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**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/oiiir/export-control>.

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.



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