

# »» NEWSLETTER ««

NASA Equity & Environmental Justice

# EEJ NEWS

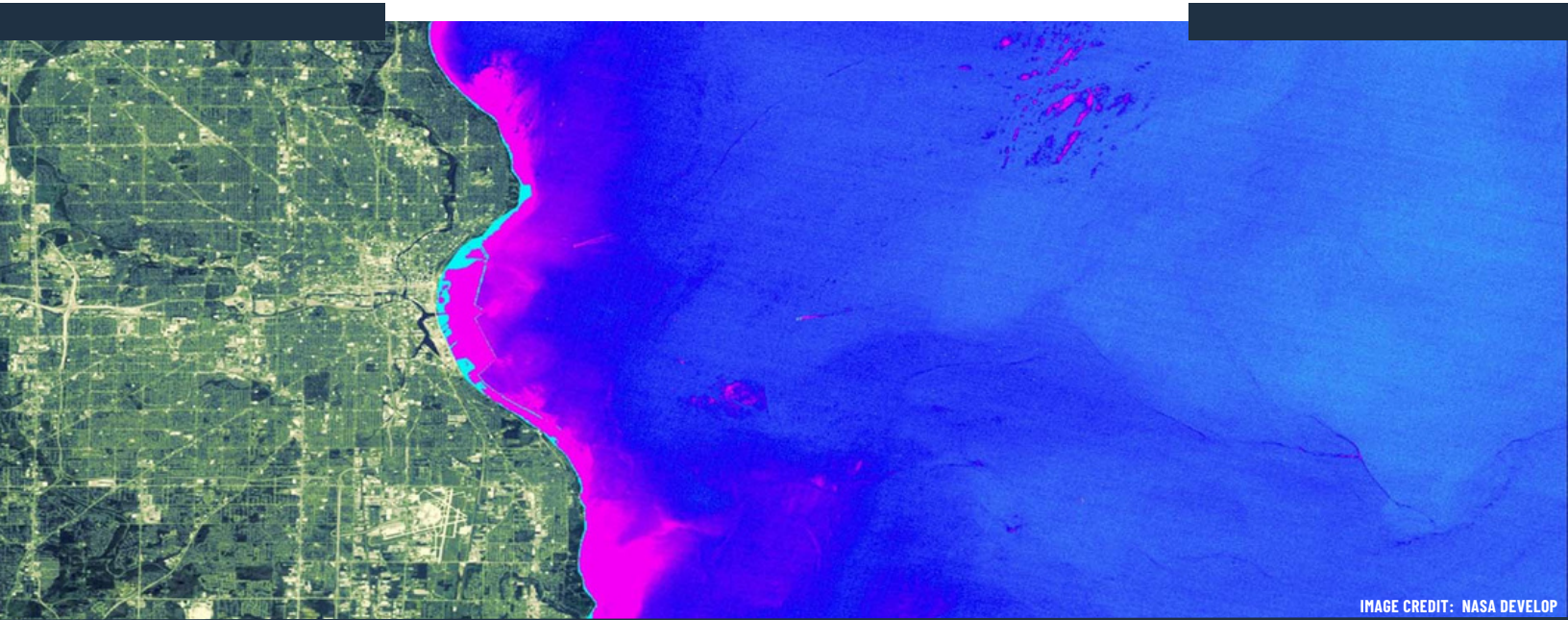


IMAGE CREDIT: NASA DEVELOP

## »» ANNOUNCEMENTS ««

### EEJ APPLICATIONS OF PACE



IMAGE CREDIT: NASA

NASA's Plankton, Aerosol, Cloud, ocean Ecosystem ([PACE](#)) Earth-observing satellite mission launched February 8, 2024, a monumental step in understanding our ocean and atmosphere. The satellite is [hyperspectral](#), meaning it will capture finer differences across the electromagnetic spectrum than earlier multi-spectral sensors, allowing NASA to differentiate phytoplankton species, sediments, and dissolved matter in the coastal regions as well as different aerosols in our atmosphere. The [data](#) produced will be used to monitor air quality, track ocean health, and understand carbon exchange within the ocean. The launch is timely, after the Biden-Harris Administration's release of the first ever [U.S. Ocean Justice Strategy](#) at COP28 in December. The report outlines an effort to ensure all communities have equitable access to the benefits of the ocean and Great Lakes and are appropriately engaged in ocean decision-making, activities, and research.



IMAGE CREDIT: NASA SVS

PACE data presents exciting possibilities for this ocean justice work. Already, participants in the Early Adopter program have identified opportunities for PACE to inform coastal resilience plans. [NASA-GISS Modeling and Climate Impacts groups](#) aim to use the data to provide coastal risk information, identify threats to global food systems, and contribute to actionable strategies for climate change adaptation. Beyond the ocean, [Marcela Loría-Salazar](#), assistant professor and aerosol researcher, plans to assess how the data can be used to improve air quality forecasts, specifically in underrepresented communities that often lack air monitoring stations.

"Air quality forecasts directly affect people's lives. Unlike well-forecasted dramatic events such as tornados and hurricanes, poor air quality can result in slow and silent death. Worse yet, underrepresented communities often live where not only the air quality is bad, there is a lack of ground monitoring stations. By working with PACE data, we are offering a pathway to air quality justice." – Marcela Loría-Salazar

Learn more about other Early Adopters plans for the data [HERE](#).

# NASA FUNDING OPPORTUNITIES

On December 14, Earth Action, part of NASA's Earth Science Division, announced two new funding opportunities as a part of Research Opportunities in Space and Earth Science (ROSES-23).

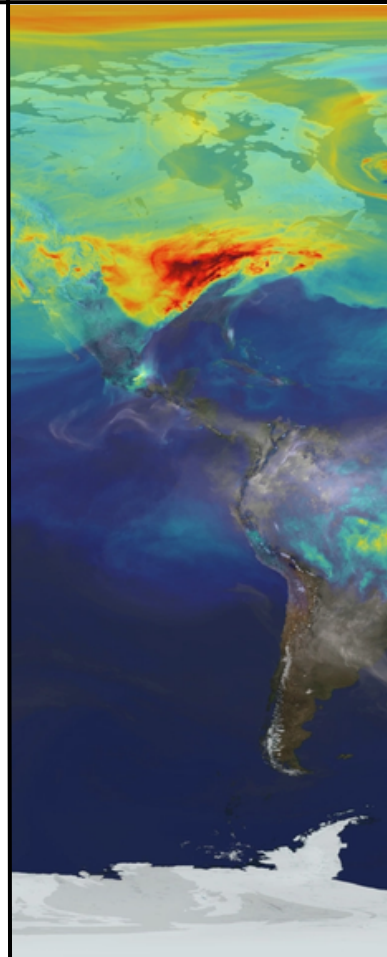
## A.47: Community Action for Equity and Environmental Justice

NASA seeks to advance EEJ through the creation of geospatial tools that integrate Earth science and socio-economic information, expand the communities of practice that use Earth observations to address environmental justice issues, and inform action. NASA is especially interested in proposals from or partnered with domestic non-Federal organizations from community-based non-profit institutions, Tribal governments and academic institutions, Indigenous-supporting organizations, local governments, and academic institutions active in addressing EEJ issues. NASA requests proposals developed in collaboration with underserved and overburdened communities, that involve a co-design process to address community interests to use Earth science information in decisions, actions, and policies. Each proposal should address three components: 1) Assessment and Consultation, 2) Tool Design, Test, and Implementation, and 3) Evaluation and Capacity Building.

**Proposals are due by March 14, 2024. Learn more [here](#).**



Check out the recording of the pre-proposal telecon [HERE](#).



## A.67: Supporting Climate Resilient Communities

This call for proposals aims to increase the use of NASA Earth observations to support community resilience, expand the communities of practice who use NASA Earth observations to develop climate-informed community resilience decisions, demonstrate the value of using NASA Earth observations to prepare for and respond to climate change, and inform NASA's future strategic engagement and activities on climate resilience. Proposals must engage communities in advancing climate-informed decisions that enhance their resilience to the impacts of climate change and involve organizations that assist in knowledge sharing between scientists and decision makers.

**NOIs are requested by February 23, 2024 and proposals are due by May 3, 2024. Learn more [here](#).**



## SPRING INTERN SPOTLIGHT: KENDALL WILSON

Meet Kendall Wilson, a returning EEJ Intern originally from the city of Philadelphia, PA. Kendall is a graduating senior Chemistry major, Biology minor at Howard University. During her time at Howard, she has had many experiences that grew her love for science and the environment. She attended events, performed research, and even planned and hosted her own events with the HU Student Chapter of the American Chemical Society. Her passions led her to NASA, where she has been working as an EEJ Intern since August of 2023. Kendall has worked on a number of impactful projects, such as content preparation for the HBCU Climate Change Conference and Justice40 research. Kendall's favorite part of being an intern has been learning about the ways the environment affects different communities, and meeting new people within the administration. In the future, she intends to continue to perform research that will prosper change in underrepresented communities. Connect with Kendall [HERE](#).



## UPCOMING EVENTS



## ARSET WATER QUALITY TRAINING

February 13, 2024 10am-12:15pm EST and 2:00pm-4:15pm EST

This two-hour training will provide an overview and demonstration of the latest version of SeaDAS 8.4.1, which is useful for remote sensing of water quality monitoring. This training will also serve as a prerequisite for future ARSET training on remote sensing of water quality.

Who is the training for? Local, state, and federal water quality managers, fisheries advisors, aquaculture managers, freshwater and coastal ecosystems managers, and academic researchers working on remote sensing of water quality. Learn more [HERE](#).



## 2024 ASTROPHOTO CHALLENGE

December 18 - February 29

The 2024 Winter Astrophoto Challenge is an amazing opportunity for participants to use real astronomical data and tools to create their own images of the Crab Nebula. Learners of all familiarity levels are welcome to experience using real data, including those from NASA space-based missions. This challenge includes instructions on how to turn this data into real images that can be used to explore how this star behaves across different types of light and how it has changed over time. Images can be captured using the Microobservatory robotic telescope network or with a set of data files taken with multi-wavelength NASA, European Space Agency, and Canadian Space Agency. Learn more [HERE](#).



# UPCOMING CONFERENCES



## THE AMERICAN WATER RESOURCES ASSOCIATION SPRING CONFERENCE

Dates: April 8-10 2024. Tuscaloosa, AL

The conference seeks to bring together a diverse multi-disciplinary group of water professionals - to disseminate, share, and learn about research-based cutting-edge solutions to evaluate and address future water risks and improve how society can adapt to these risks. Technical session topics will include actionable science, evaluation, and planning methods, design and implementation of specific infrastructure projects, and design and implementation of programs and policies. Learn more [HERE](#).



### AMERICAN WATER RESOURCES ASSOCIATION

### SAVE THE DATE

### 2024 National Environmental Justice Conference and Training Program

Walter E. Washington Convention Center  
801 Mount Vernon Place, N.W., Room 146A-B  
Washington, DC 20001

To volunteer or for sponsorship opportunities and additional information, contact  
Lloyd Moore, Conference Coordinator, at [email@thenejc.org](mailto:email@thenejc.org) or 202.827.2224

[www.thenejc.org](http://www.thenejc.org)



APRIL 16-18, 2024

## NATIONAL ENVIRONMENTAL JUSTICE CONFERENCE AND TRAINING PROGRAM

Dates: April 16-18, 2024. Washington, DC

Participants will engage in 3 days of free exchange of ideas and approaches to achieving environmental justice. The interactive training sessions will feature voices of experience, research, discussions, and thought-provoking dialogue. The program format will feature the needs and challenges of communities, governments, municipalities, tribes, faith-based organizations, and others with an interest in environmental justice. Speakers will represent Federal and state agencies, local governments, tribes, community groups, business and industry, public interest groups, academia, and other entities. This forum will give participants the opportunity to network with a variety of interests from diverse quarters. Registration closes February 21, 2024. Learn more [HERE](#).

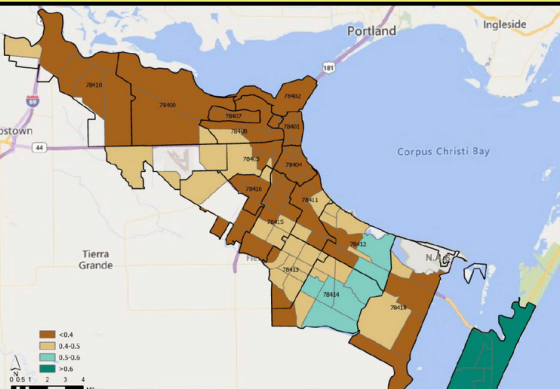
## NATIONAL ADAPTATION FORUM

Dates: May 14-16 2024. St. Paul, MN.

The NAF allows adaptation professional to innovate, network, and focus on established and emerging climate adaptation issues of the day. The Forum provides opportunities for professional development through training sessions, facilitated presentations and panels, and formal and informal networking sessions. The Forum is cross-disciplinary, bringing together practitioners from a variety of sectors, spanning natural, built, and social systems. The program covers over 25 adaptation-related topics and 12 geographic regions across the U.S. and beyond. The overall goal of the National Adaptation Forum is to move beyond adaptation awareness into adaptation action by highlighting the breadth of adaptation activities occurring in the United States around the world. Learn more [HERE](#).



## PROJECT HIGHLIGHTS



### Toward Environmentally and Socially Equitable Stormwater Management Fees: The Case of Corpus Christi in Texas

Team: Dr. Hua Zhang, Dr. Jim Lee, Yuxia Huang, Lapone Techapinyawat, Wen Zhong, Ziba Abbasian, Hannah Garcia (Texas A&M University - Corpus Christi)

Increasingly more communities in the United States have begun levying a separate utility fee to support local stormwater management services in the face of flooding woes under climate change. Most local stormwater fee programs rely on the determination of impervious area that causes the most surface runoff in urban areas. Instead of measuring impervious surfaces, the most popular method for residential properties is the application of a fixed runoff factor. Using Corpus Christi in Texas as the study area, this project aims to i) evaluate how well the official runoff factor represents the impervious area of individual land parcels and ii) explore the spatial patterns of the deviation of the runoff factor from the official benchmark across neighborhoods in the context of social equity. Read more [HERE](#).

### Understanding Contaminant Risk Through Stories of 'Aina in Ke Awa Lau O Pu'uloa

Team: Dr. Eileen Nalley Sandy Ward, Donn Viviani, Mia Comeros-Raynal, Dingyi Liu, Austin Allen, Lucie Schragger, Brandon dela Cruz

In order to support healthy coastal ecosystems, it is imperative to understand how pollutants move through ecosystems and accumulate. Pu'uloa (Pearl Harbor) in Hawai'i used to be known for its numerous fishponds, abundant streams, and calm waters. However, the land use in this area has shifted and caused changes to the landscape and the health of surrounding ecosystems and communities. Intensive agriculture, industrial development, and dense urbanization have all altered the environment. This study aims to understand how different types of land use have polluted the ecosystem over time, and whether these contaminants are disproportionately affecting vulnerable communities. This work is being done by aggregating historic maps to analyze changes in land use over time. Researchers are also working with non-profit organizations in the community to get feedback on the maps and incorporate local knowledge into the assessment. Read more [HERE](#).



## **EJ WATER RESEARCH TOOLS**

### Water Quality Data Pathfinder

Produced by National Aeronautics and Space Administration

### NOAA: EJ Tools and Resources

Provided by National Oceanic and Atmospheric Administration

### InVEST Software Models (Coastal Vulnerability, Urban Flood Risk Mitigation, etc.)

Produced by Stanford University's Natural Capital Project

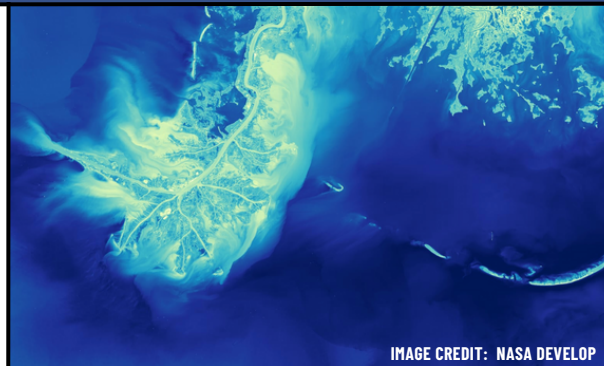


IMAGE CREDIT: NASA DEVELOP

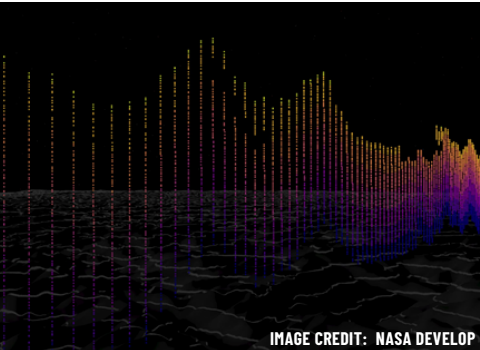


IMAGE CREDIT: NASA DEVELOP

## **EPA GRANT OPPORTUNITIES**

### Coastal Ecosystem Climate Resilience

Opening for Notice of Interest (NOI) soon

### Climate Pollution Reduction Grants

General competition deadline: April 1, 2024, Tribes and Territories Competition deadline: April 1, 2024

### EJ Thriving Communities Grantmakers Subgrants

Grantmakers are expected to begin opening competitions and awarding subgrants by Summer 2024

## **HYR-SENSE TRAINING**

Dates: June 10-13, 2024 University of Colorado, Boulder

Thermal Remote Sensing for Environmental Justice for students, faculty, and early-career scientists from tribal communities. Join NASA Surface Biology and Geology and ESIL in Boulder, Colorado from June 10-13, 2024. Participants will gain hands-on experience with hyperspectral and thermal imaging remote sensing technology and its applications for environmental justice issues. Accepted participants' travel costs, lodging, and meals will be fully covered.

Applications are now open, and can be found here: [HERE](#). Apply by March 24, 2024.



## ➤➤➤ **INTRODUCTION TO EEJ** <<<<

# The Equity and Environmental Justice Program (EEJ)

The EEJ program aims to advance progress on equity and environmental justice. One part of this effort is to help build the community of practice around the application of Earth science information to inform action in EJ communities by monitoring and measuring environmental factors. This newsletter is one of the program's strategic communication efforts for engaging those working in the space. It will continue to evolve, so please share your thoughts for what information is useful to you!

Learn more about the EEJ Program and access our previous newsletters by visiting our website [HERE](#).

## **CONTACT US:**

Contact us with "EEJ newsletter" in the subject line with any comments, questions, or feedback!

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