

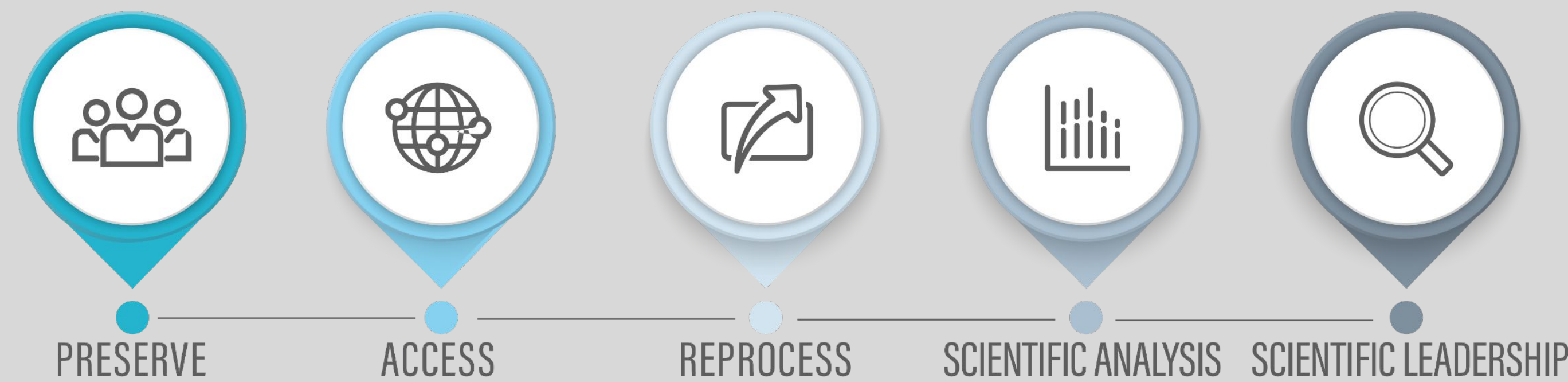
Effectively Communicating Ocean Data

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NOAA National Centers for Environmental Information

NOAA National Centers for Environmental Information (NCEI) hosts and provides access to one of the most significant archives on Earth, with comprehensive oceanic, atmospheric, and geophysical data. From the depths of the ocean to the surface of the sun and from million-year-old ice core records to near-real-time satellite images, NCEI is the Nation's leading authority for environmental information.

NCEI demonstrates how it has used no-cost social media, web stories, and story maps featuring ocean and coastal observations from bathymetry, video databases, and expeditions by NOAA Ship *Okeanos Explorer* to build an audience for its scientific data.



Social Media

- **Social media is an icebreaker.** Tweets, Instagram, and Facebook posts should entice followers to plunge into your web content.
- **Create curiosity.** Show Images that make the viewer ask: "What's that?"
- **Be helpful.** Explain how your information has value.
- **Know news.** Tie your knowledge to current events.
- **Show action.** Your followers love seeing scientists in action, so show them off!
- **Use video.** Whenever possible, use movement in media to capture your audience's attention.

Web Stories

- **Web content is your anchor.** Create engaging, thorough web stories that inform and drive the reader to explore your other content.
- **Use clear language.** Always use plain language.
- **Provide clarifying content.** Links to additional resources, graphs, and explanatory visuals will help the reader understand complex topics.
- **Show relationships.** Show related links to help readers connect with a specific topic through your resources.

A New Age in Ocean Observing

Uncrewed Marine Systems bring opportunities for data synthesis



The age of Uncrewed Maritime Systems (UMS) is here. NOAA's current use of UMS is improving performance in lifesaving and economically impactful missions and is setting the course to strengthen environmental science and technology leadership for the coming decades. With the increase in uncrewed ocean observing capabilities, NCEI has received an associated increase in the amount of data collected by UMS. NCEI is working to effectively steward UMS data including integrating the data into publicly available, synthesized products.

Emerging technologies

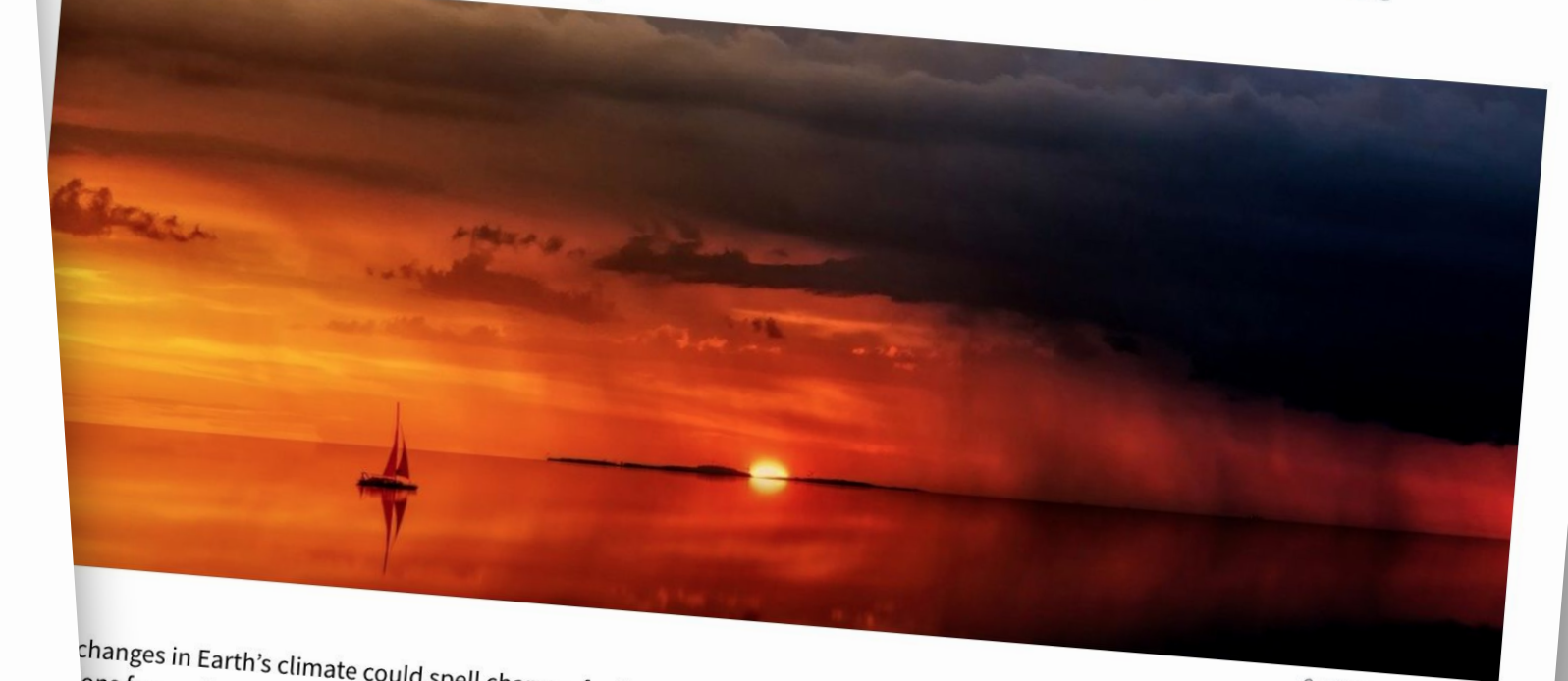
Uncrewed Maritime Systems are defined as waterborne systems (vehicles, sensors, communications software) that can perform an ocean observing mission without human input. UMS include Uncrewed Underwater Vehicles (UUVs) - untethered systems capable of

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Related Links
[Day in, Day Out: NCEI Takes Data Seriously](#)
[World Ocean Database Profiles the Ocean](#)
[NCEI Improves Analysis of Sea Surface Temperatures](#)
[Planet Postcard: A Bucket Full of Data](#)
[Surveillance Ocean Exploration and Data Collection](#)

Rapid Sea Surface Changes Pose Risks

Researchers find new ocean conditions may emerge as others disappear, challenging species



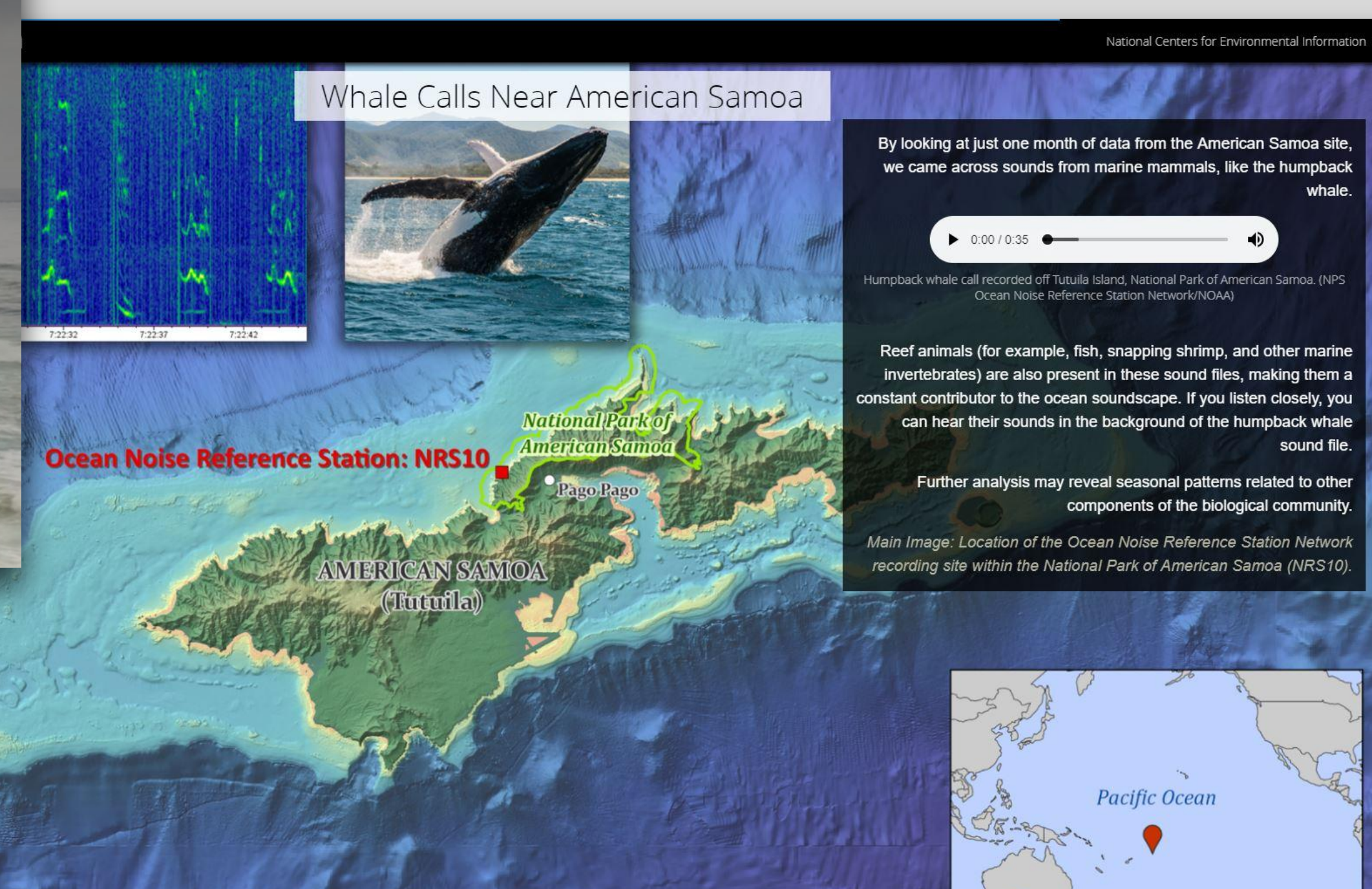
Changes in Earth's climate could spell changes for the ocean and set up dire conditions for marine species, according to research by NOAA and partners. Depending on the conditions could pose challenges that may be without precedent for species.

stated rise in global temperature of 1°C to 3°C (1.8°F to 5.4°F) and increases in acidification over the remainder of the 21st century underlie this unprecedented stress, according to the authors of the paper "Novel and disappearing climates in the future ocean," published in [Nature Scientific Reports](#).

Related Links
[Regional Ocean Climate Outlook](#)
[Regional Data Explorer: Global Insights](#)
[Global Ocean Assessment: More Carbon](#)
[The Future of Ocean Acidification](#)
[How Warmer Ocean Temperatures Affect Marine Life](#)
[World Ocean Database](#)
[World Ocean Atlas](#)

In Hot Water: Ocean Heat and Our Warming World

NOAA National Centers for Environmental Information
September 27, 2021



Story Maps

Story maps are an interactive visual and written experience for your audience. Story Maps let you combine authoritative maps with narrative text, images, and multimedia content. They make it easy to harness the power of maps and geography to tell your story.

Within NOAA and NCEI, story maps have proven to be an effective communication method to present often-complex scientific information or public safety information to the public in simple, easy to understand terms, and to show why they matter.

