INTEGRATION AND APPLICATION NETWORK

REPORT CARD 2023

An annual reflection on our work and impact.

ian

HIGHLIGHTS FROM 2023

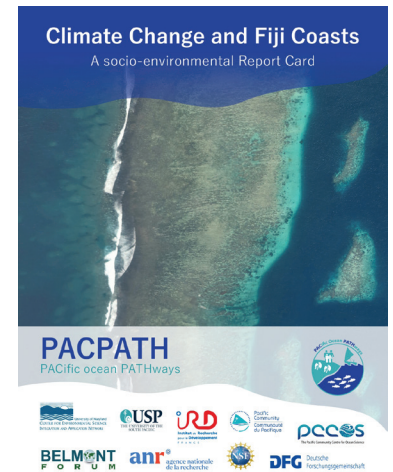## Partnership with the Chesapeake Monitoring Cooperative continues to support citizen science

The Chesapeake Monitoring Cooperative (CMC) works to support citizen water monitoring in the Chesapeake Bay watershed and makes the collected data available through the Chesapeake Data Explorer online tool. This data can then be incorporated in the Chesapeake Bay Program. UMCES produced report cards this year for Patapsco Heritage Greenway and Severn River Association, as well as case study documents highlighting the impact of local water quality monitoring. This coming year, IAN will continue to work on data interpretation and science communication products for citizen monitoring groups to increase their outreach and advocacy efforts, and support more groups to reach high-quality data collection. To learn more about the CMC project, please visit: https://ian.umces.edu/projects/chesapeake-monitoring-cooperative-integrating-citizen-based-and-other-nontraditional-monitoring/ and https://www.chesapeakemonitoringcoop.org/.

Citizens monitor hundreds of sites each year. Photo by Ann Foo.

IAN releases both Fiji and New Caledonia Report Cards

In February 2023, IAN staff traveled to Suva, Fiji to facilitate stakeholder workshops with local scientists, officials, and traditional leaders. Partners and stakeholders held discussions about the threats facing coastal communities in Fiji and throughout the South Pacific, with a focus on climate change impacts. Both the New Caledonia and Fiji report cards were released in 2023, providing qualitative assessments of both countries' coasts. New Caledonia received mixed scores for indicators such as biodiversity, food security, and indigenous knowledge. Fiji received an overall moderate score for a similar set of indicators as New Caledonia, including coastal fisheries, coastal development, and traditional governance. Both countries were divided into subregions for scoring, and qualitative scores were discussed and agreed upon by workshop attendees. To learn more about the PACPATH project, please visit: https://ian.umces.edu/projects/pacific-ocean-pathways-in-support-of-sustainable-development/ and https://pacpath.org/.

Cover of the first-ever Fiji Report Card.

Recent international travel demonstrates IAN's global efforts to promote science communication

The COAST Card project is a transdisciplinary international project that seeks to improve coastal sustainability through socio-economic report cards, stakeholder engagement, and systems dynamics modeling. This year, the COAST Card project made three of four international site visits to Manila Bay, Philippines; Tokyo Bay and Ishigaki Island, Japan; and Goa, India. Together, Japan, the Philippines, India, Norway, and the United States seek to use these diverse areas, experiencing both unique and similar threats to their coastal ecosystems, to learn from one another and apply conservation methods across the globe. To learn more about the COAST Card project, please visit: https://sites.google.com/umces.edu/coastcard/.

Meeting with international teams is part of the collaborative COAST Card process. Photo by Keita Furukawa.

The 2023 IAN Report Card has been modified from the previous year to better reflect IAN's mission and strategic goals, and to enable more precise comparisons from historical data. Adding to the growing list of indicator metrics, we now have the Socio-Environmental Impacts category with Core Categories, Socio-Environmental Products, Publications, and Project Impact indicators. Additionally, IAN now has the Diversity, Equity, Inclusion, and Justice category with DEIJ Indicators and Community Voices as indicators.

Diversity, Equity, Inclusion, & Justice

Measures IAN's inclusion of DEIJ in its products and services.

DEIJ Indicators measures if IAN socio-environmental report cards are including DEIJ-related indicators.

Community Voices measures IAN's effort to include socially diverse stakeholders in projects.

Education & Outreach

Measures the reach of virtual, traditional, and educational science communication efforts.

Total Reach measures blog views, IAN's media reach, and how IAN followers interact with our social media (Social Media Index) and our videos (Video Index).

Dissemination Effectiveness measures how IAN's tools and products are distributed from the IAN symbol and media library downloads and from printed products.

Teaching and Trainings measures the number of people involved with science communication courses and projects.

Partner Engagement

Measures how satisfied partners felt following the completion of a project.

Co-Produced Products measures how satisfied IAN partners were with their final product and the overall experience.

Collaborative Process measures how effective IAN partners felt the collaboration was and if they would recommend working with IAN.

Capacity Building measures if partners thought their project built capacity and encouraged teamwork in their organization.

Socio-Environmental Impacts

Measures collective impact in improving socio-environmental systems.

Core Categories measures if a report card contains indicators from five key categories (economics, water, environment & ecology, social & cultural, management & governance).

Socio-Environmental Products measures the number of socio-environmental assessments produced.

Publications measures the number of academic publications published by IAN authors.

Project Impact measures if IAN partners have seen improvements in ecological, social, or economic health.

2023 REPORT CARD RESULTS

The Integration and Application Network Report Card scored 71% (C-). For this version of the report card, substantial updates were made to the methodology and new metrics were added. Therefore, most scores from last year are not directly comparable to scores from this year.
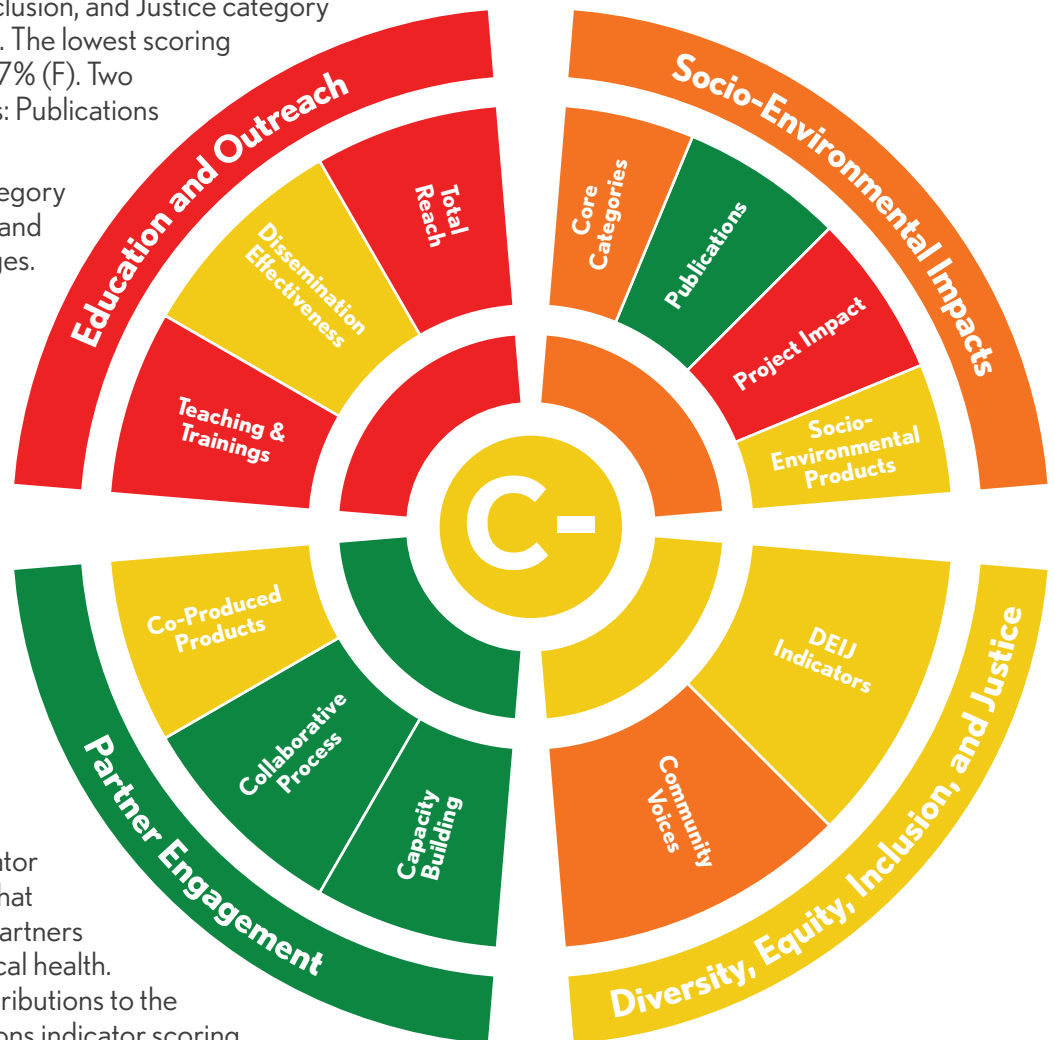
A new Socio-Environmental Impacts category scored 64% (D), a poor score. This category replaced Ecological Outcomes to be more inclusive of the holistic work IAN is prioritizing. Partnership Engagement scored 90% (A-), a very good score. Education and Outreach scored 57% (F), a very poor score. Finally, the Diversity, Equity, Inclusion, and Justice category scored a 71% (C-), a moderate score. The lowest scoring indicator was Project Impact, with a 17% (F). Two indicators had perfect (100%) scores: Publications and Capacity Building.

The **Education and Outreach** category has updated social media thresholds and metrics to better reflect recent changes. IAN is doing a good job of getting the word out about its work—IAN's media reach scored 100%. There is room to improve engagement across social media (41%), blogs (25%), and videos (55%). This lack of engagement led to a low score in Total Reach (55%). IAN is working to improve its Teaching and Trainings score (46%) by offering more opportunities for broader audiences.

The **Socio-Environmental Impacts** category has a new suite of indicators. The Core Categories indicator received 65% and the Socio-Environmental Products indicator scored 75%. These indicators show that IAN is making progress to help our partners assess social, economic, and ecological health. IAN continues to make valuable contributions to the scientific literature, with the Publications indicator scoring 100%. Low engagement from respondents makes it hard to draw conclusions about the failing Project Impact score (17%), but partners saw more improvement in ecological health than either social or economic conditions.

The **Partnership Engagement** category maintained an A grade, but slightly decreased from last year. Partners valued the Collaborative Process (96%) and felt that working with IAN improved their organization's capacity and teamwork (100%). While partners enjoyed working with IAN, their satisfaction with the final product was moderate (75%).

The **Diversity, Equity, Inclusion and Justice** category's DEIJ Indicators earned a C (75%), with all socio-environmental report cards including a DEIJ indicator. The Community Voices indicator scored 66% (D). IAN is improving how it engages with partners and stakeholders to ensure that all voices are represented and heard throughout the project process.

IAN scoring

A — Very good (90–100%)

B — Good (80–90%)

C — Moderate (70–80%)

D — Poor (60–70%)

F — Very poor (<60%)

Southeast Michigan, USA

Sekisei Lagoon, Japan

Tokyo Bay, Japan

Arkansas-Red River, USA

Manila Bay, Philippines

Chesapeake Bay & Watershed, USA

New Caledonia, South Pacific

Fiji, South Pacific

2023
BY THE NUMBERS

2 FULL-SEMESTER GRADUATE-LEVEL COURSES

36 IAN STAFF

44 PEOPLE TRAINED IN SCIENCE COMMUNICATION

352,000,000 PEOPLE REACHED BY THE CHESAPEAKE BAY & WATERSHED REPORT CARD & MEDIA

13 NEW SYMBOLS

79 PARTNER ORGANIZATIONS

1045 PROJECT PARTNERS

7,614,388 SYMBOL & IMAGE DOWNLOADS

18 PROJECTS

10 SOCIO-ENVIRONMENTAL HEALTH ASSESSMENTS

NEW AND CURRENT DIRECTIONS

IAN is incorporating resilience assessments into projects

IAN is working to improve the climate resilience of coastal communities and ecosystems across the globe by assessing how prepared they are for climate change. Following on from the first-ever Maryland Coastal Adaptation Report Card, IAN is working at county and local levels in Maryland to assess climate readiness in Charles County, the Eastport community of Annapolis, and the Pine Street community of Cambridge. IAN is also including resilience indicators in its work in Fiji, New Caledonia, Philippines, Norway, India, and Japan. These assessments will help identify the steps needed to create more sustainable and climate-resilient communities and ecosystems.

Understanding coastal erosion helps communities take climate resiliency action. Photo by Conor Keitzer.

New social media promotion campaign boosts IAN's online presence

Over the past year, IAN has improved its social media strategy to better highlight its work and partnerships. IAN now spotlights more projects and project partners, and continues to promote the IAN media library. IAN expanded content to include more short-form videos. Additionally, the quantity and frequency of posts have increased to at least one per week, which has been made possible through thoughtful planning and division of tasks. Many posts showcase collaboration with different organizations, and we have made strides to improve the connection among different IAN-affiliated accounts so that followers can keep up to date with specific projects. These efforts resulted in a greater amount of engagement from our audience and the public.

Travel photos, project events, and IAN media products are just a few of the types of content IAN is providing in social media posts. Images by UMCES-IAN.

We would love to work with you!

Since 2002, IAN has worked to improve science communication around the globe. Over the years, staff members have partnered with organizations to help scientists, managers, and non-profits on a variety of projects. Whether you're looking to train scientists to improve their science communication skills, complete a socio-environmental health report card, or improve the readability of your publications, IAN can help. If you're ready to create an impactful document, analyze your data in new ways, or have a greater influence on management decisions in your region, contact IAN to discuss how we can work together to accomplish your goals.

Contact us today to get started. Email ian@umces.edu or visit ian.umces.edu

University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE
INTEGRATION AND APPLICATION NETWORK

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