social impacts

ecological outcomes

partner engagement

Integration & Application Network

2016

Report Card

IAN's 2nd annual reflection on social impacts, ecological outcomes, and partner engagement

from the beginning

The Integration & Application Network (IAN) is a collection of scientists committed to accomplishing positive environmental change through scientific synthesis, engagement, and communication. IAN is a component of the University of Maryland Center for Environmental Science (UMCES), an institution formed in 1925. UMCES has redefined scholarship in terms of discovery, integration, application, and teaching. IAN was launched in 2002 as an integral part of UMCES to specifically address the scholarship of integration and application. Since then, IAN has evolved into a regional, national, and global leader in using science for better environmental decision-making.

tracking our progress

IAN staff regularly work with a broad range of partners and stakeholders to produce report cards and assessments for regions around the world. IAN scientists have developed a rigorous process for assessment which they have turned inward to assess IAN's status; thus, this IAN report card. Indicators and thresholds were established for three broad categories that represent IAN's external goals: social impacts, ecological outcomes, and partner engagement.

In addition, IAN assessed internal goals: financial viability, career development and training, roles and responsibilities, and flexibility in the workplace. The 2015 and 2016 IAN Report Cards represent the initial effort, but future iterations will continue to develop and evolve the indicators and scores so that IAN can better track progress toward achieving its vision— creating a world where science is used to make smart environmental choices.

the future of IAN

This effort to track progress in a transparent manner has helped IAN develop a more strategic approach to activities. This annual IAN report card will help to prioritize activities and to keep IAN focused on its vision throughout the course of its work. There are plans to modify the indicators and measures used in future versions of the IAN report card, but this 2016 report card uses the same indicators and measures as the inaugural 2015 IAN report card.

IAN staff and John Sturtevant during a professional development workshop in Annapolis, MD.

IAN– making **science** accessible around the world

Indian River Lagoon USA

Upper Potomac River USA

Chesapeake Bay USA

Long Island Sound USA

Mekong River Cambodia

Yucatan State Coast Mexico

Orinoco River Colombia

Guanabara Bay Brazil

Laguna de Bay Philippines

Kakadu Floodplains Australia

2016

IAN by the numbers

10 out of **11** partners reported being very satisfied or satisfied with their IAN partnership

11 ecosystem health assessments completed

114 people trained in science communication

91 Blogs

20 IAN staff

5,406,474 symbols & images downloaded from IAN's free libraries

1263 project partners

204 partner organizations

30 projects

503,067 unique page views

IAN report card results

Overall, the IAN report card for 2016 was an A- (90%). This is up from a B+ (88%) in the 2015 inaugural report card. The Ecological Outcomes did not change from the 2015 report card, but there were measureable improvements in both Social Impacts and Partner Engagement.

Social Impacts improved largely through the teaching & trainings indicator, due to a larger commitment to teaching by IAN staff. In Partner Engagement, the partner surveys revealed a much higher sense of satisfaction by IAN partners, resulting in a jump in grade from 89% to 96%, with improvements across all indicators (co-produced products, collaborative process, and capacity building). The improvement is encouraging, since IAN devoted more energy to engaging with their partners in projects and collaborations.

The Chesapeake and Maryland Coastal Bays are both still not in desired conditions, but there is currently a positive trajectory in the Chesapeake Bay and the scores are expected to improve in the future.
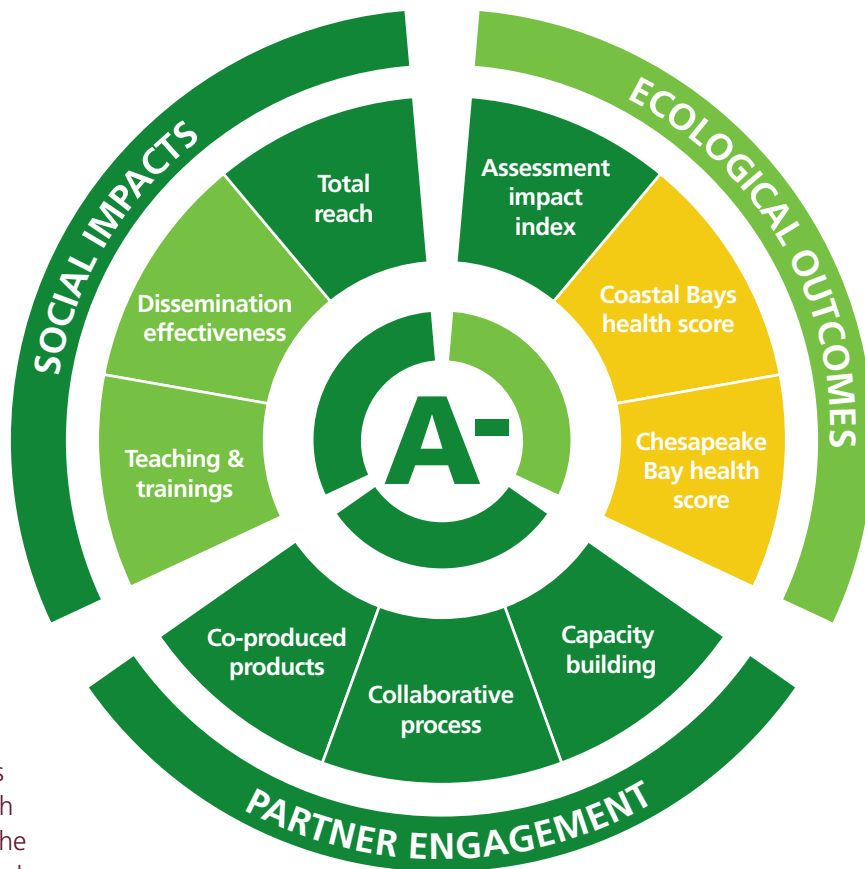
social impacts

The impact of IAN's tools, trainings, and materials on science communication globally

partner engagement

The survey results of IAN's partners in terms of their satisfaction with co-produced products, the collaborative process, and capacity building

ecological outcomes

The outcomes of IAN's ecological status assessments globally and two regions where IAN has had longstanding involvement and impact

Report card diagram

A-

SOCIAL IMPACTS
- Total reach
- Dissemination effectiveness
- Teaching & trainings

ECOLOGICAL OUTCOMES
- Assessment impact index
- Coastal Bays health score
- Chesapeake Bay health score

PARTNER ENGAGEMENT
- Co-produced products
- Collaborative process
- Capacity building

IAN scoring

A	very good (90-100%)
B	good (80-90%)
C	moderate (70-80%)
D	poor (60-70%)
F	very poor (<60%)

IAN staff on-site with partners at the Orinoco River in Colombia, Indian River Lagoon in Florida, Laguna de Bay in the Philippines, and WWF in Maryland.

nine indicators were evaluated

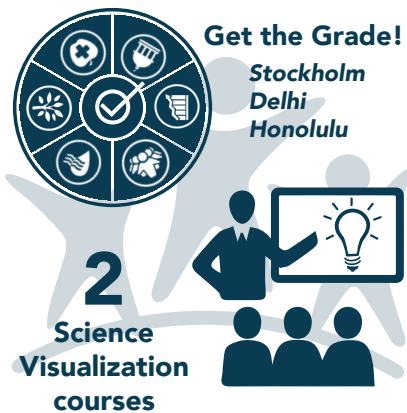| CATEGORY	INDICATOR	MEASURE	SCORE
SOCIAL IMPACTS **90%**	**Total reach** The number of Facebook posts, blogs, and media articles about IAN or IAN products.	Facebook posts (not including automatic postings) with the goal of one per day, or 365: 457/365 = 100% Blogs posted with the goal of two per week, or 104: 91/104 = 88% Media articles with the goal of one per week, or 52: 80/52 = 100%	96%
	Dissemination effectiveness The number of IAN symbol and image library downloads, and the distribution of IAN products such as report cards and newsletters.	IAN symbol and image library downloads with the goal of 45,000 per year (2012-2014 average): 30,531/45,000 = 68% IAN symbol and image library registered users with the goal of 8,000 new users per year: 10,166/8,000 = 100% Printed copies of IAN Press products with the goal of 10,000 per year: 20,000+/10,000 = 100%	89%
	Teachings and trainings The number of people directly interacting with IAN through courses, workshops, and partnerships.	Students in semester-long courses with the goal of 12 students in each course, 2 courses per year: 14/24 = 58% Students in short courses with the goal of 100 per year: 100/100 = 100% Project partners with the goal of 1,000 per year: 1,263/1,000 = 100%	86%
ECOLOGICAL OUTCOMES **85%**	**Assessment impact index** A rating based on the population, area, and iconic status of the regions where IAN assessments and report cards have been conducted.	Total population of assessment areas: 252,573,923 Total area of assessments: 6,189,591 km^2 Iconic region with the goal of one new iconic region per year: Orinoco River Basin = 100%	100%
	Coastal Bays health score The annual ecohealth score of the Maryland Coastal Bays.	The 2016 grade from the Maryland Coastal Bays Report Card converted from 20-point scale to 10-point scale for grades: 79%	79%
	Chesapeake Bay health score The annual ecohealth score of the Chesapeake Bay.	The 2016 grade from Chesapeake Bay Report Card converted from 20-point scale to 10-point scale for grades: 77%	77%
PARTNER ENGAGEMENT **96%**	**Co-produced products** A measure of how satisfied IAN partners were with their final product and their overall experience in co-producing the product.	Partner survey results = 10/11 satisfied with product; 11/11 satisfied with co-production	96%
	Collaborative process A measure of how effective IAN partners felt the collaboration was, and if they were likely to make a referral for working with IAN.	Partner survey results = 11/11 clear short-term goals; 11/11 clear long-term goals; 10/11 likelihood of referral	97%
	Capacity building A measure of how comfortable IAN partners were with asking questions, and if partners thought the project built capacity and encouraged teamwork in their organization.	Partner survey results = 10/11 comfort asking questions; 10/11 capacity building; 11/11 teamwork enhanced	94%

Overall IAN score

An average of the scores for three categories: social impacts, ecological outcomes, and partner engagement.
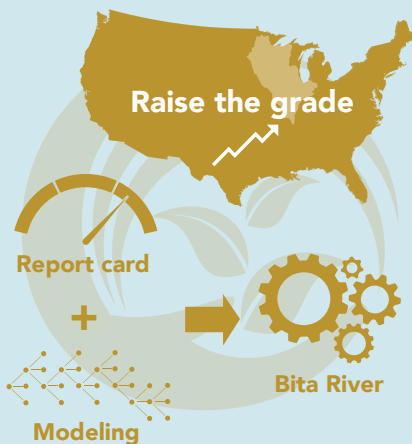
90%

highlights of 2016

social impacts

Get the Grade!
Stockholm
Delhi
Honolulu

2
Science Visualization courses

WWF, Emerson College, and IAN created an interactive game called "Get the Grade!" The game launched in Sweden at the World Water Week, in India at the International Riversymposium, and in Hawaii at the IUCN International Conservation Congress. Participants gathered to role play, negotiate, and form partnerships in order to raise their report card grade. Due to the outpouring of positive feedback, WWF is now mass producing the game for dissemination.

IAN staff taught Science Visualization courses twice in 2016. Once for graduate students in the Marine, Environmental & Estuarine Sciences program through the University System of Maryland, and once for non-governmental organizations. IAN created a website using the lectures, blogs, and student projects: sciencevisualizationclass.wordpress.com.

ecological outcomes

Raise the grade

Report card
+
Modeling

Bita River

IAN and America's Watershed Initiative created the Mississippi River Report card in 2015. A follow-up conference in 2016 for the Upper Mississippi River focused on "Raising the Grade." During this conference IAN created an Action Agenda which addressed ecosystem resilience, nutrient reduction, monitoring and assessment, watershed planning and management, transportation infrastructure, recreation opportunities, and hydropower.

IAN and WWF co-hosted a workshop to explore the linkages and potential benefits of combining river basin health report cards and system dynamics modeling. Participants from Europe, Colombia, Cambodia, and the U.S. produced a workshop synthesis newsletter. This workshop stimulated a proof-of-concept study in the Bita River, one of the tributaries of the Orinoco River in Colombia. There these systems models will be used to identify actions that will have positive environmental, social, and economic outcomes.

partner engagement

10 **sub-basin report cards**

1st

Orinoco River report card, South America

Belmont Forum Synthesis Workshop

IAN and Future Earth Coasts facilitated the inaugural Belmont Forum Synthesis Workshop in San Francisco, CA. This workshop gathered researchers from transdisciplinary and transnational projects in both coastal sustainability and freshwater security. We are currently working closely with Belmont Forum staff to produce science communication products and help facilitate workshops.

The IAN-WWF partnership, Healthy Rivers for All, released the Orinoco River Basin report card in Bogotá, Colombia– the first report card IAN has released in South America. The Orinoco River Basin report card included ten sub-basin report cards. The report cards were produced in Spanish and English, and were accompanied by a supporting website (ecoreportcard.org/report-cards/orinoco-river/). IAN is following up the report card with a system dynamics modeling exercise for improving the Orinoco River Basin grade of B-.

we would love to work with you!

We love new challenges, and we will work with you locally or internationally. Contact us today to get started: ian@umces.edu.

ian.umces.edu