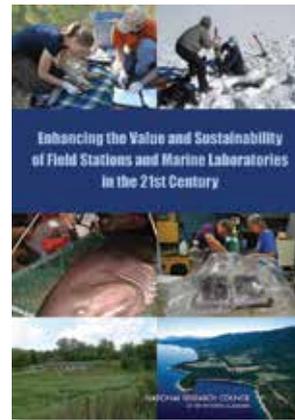


# seeking solutions

At a time when humans are confronted with making difficult decisions, the need for objective field research and public engagement has never been more urgent. Embedded in natural environments that range from remote to densely populated urban locations, field stations are observing and tracking environmental change over time and moving towards solutions by creating broader, more engaged partnerships through which to effect needed change.



To build on the important role that field stations\* play in research, education, and stewardship, the 2014 National Academy of Science (NAS) report, *Enhancing the Value and Sustainability of Field Stations and Marine Laboratories in the 21st Century*, provides a blueprint for their future. This brochure is a brief overview of those NAS recommendations.



\* For the sake of brevity, this brochure refers to field stations, marine laboratories, and nature reserves all as "field stations."

**THE PLACE-BASED KNOWLEDGE THAT FIELD STATIONS PROVIDE MAKES BETTER INFORMED RESOURCE MANAGERS, DECISION-MAKERS, AND CITIZENS**

# future strategies

The 2014 NAS report suggests the following strategies to meet the future research, education, outreach, infrastructure, funding, and logistical needs of field stations.

- Increase the value, relevance, and sustainability of field stations.
- Seek opportunities to support these strategies through networking.
- Focus on the challenges and opportunities to build and maintain infrastructure.
- Seek visionary leadership and financially sustainable business models.
- Address the need to develop and document the impact of field stations and marine labs.

**"EXPANDING SUPPORT FOR FIELD STATIONS IS KEY TO CREATING SOLUTIONS TO REAL WORLD ISSUES"**

**- National Academy of Sciences**

The Organization of Biological Field Stations (OBFS) and the National Association of Marine Laboratories (NAML) are committed to work together to achieve the NAS goals by expanding their collaborative and inclusive approach to effective problem-solving and communication.



Print and electronic copies of *Enhancing the Value and Sustainability of Field Stations and Marine Laboratories in the 21st Century*, 2014 The National Academies Press, can be obtained at <http://j.mp/NAS-FSMLRpt>.

#### For more information

Organization of Biological Field Stations  
[www.obfs.org](http://www.obfs.org)



National Association of Marine Laboratories  
[www.naml.org](http://www.naml.org)



#### Photo credits

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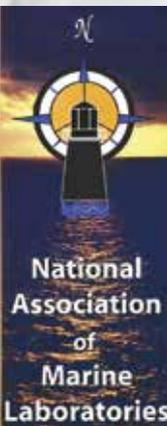


#### Reference

Billick, I., I. Babb, B. Kloeppe, J.C. Leong, J. Hodder, J. Sanders, and H. Swain. 2013. *Field Stations and Marine Laboratories of the Future: A Strategic Vision*. National Association of Marine Laboratories and Organization of Biological Field Stations. Available at [www.obfs.org/fsml-future](http://www.obfs.org/fsml-future).

# from Science to Solutions

**ADVANCING THE ROLE OF FIELD STATIONS**



In 2014, the National Academy of Sciences released a report acknowledging the current value of field stations to science and society, and made the following recommendations to guide their future sustainability.

# 1. enhance science, education, & public engagement

**Develop their unique assets and qualities, prepare the next generation of scientists, and empower the public by**

- encouraging multidisciplinary, “convergent” studies,
- expanding opportunities for active learning activities and independent, collaborative research,
- exploring a wide range of approaches to engage the public,
- guiding the development of activities that effectively promote public understanding of science, and,
- engaging with citizen science programs to improve scientific understanding.

# 2. network for discovery & innovation

**Continue to build and further establish networks and partnerships by**

- expanding opportunities for networking, and,
- looking to universities, National Science Foundation, and other funding agencies for networking incentives.



# 3. build & maintain a modern infrastructure

**Create modern infrastructures in a networked world by**

- evaluating its own infrastructure needs,
- including internet connectivity and cyberinfrastructure in all infrastructure management plans, and,
- converting long-term data sets into digitally accessible formats.

# 4. strategize for financial sustainability

**Seek financial security for a modern infrastructure by**

- developing business plans that describe their unique value,
- creating mechanisms to establish reliable base funding,
- diversifying approaches to obtain supplemental funding,
- recruiting station leaders with management and entrepreneurial skills, and,
- asking host institutions to mentor station leaders in management, business planning, and fundraising.

# 5. develop metrics for demonstrating impact

**Measure performance and impact by**

- working together to develop common performance and impact metrics,
- encouraging universities, host institutions, and funding organizations to use innovative ways to collect, aggregate, and synthesize performance information to document stations’ contributions, and,
- developing new mechanisms and funding to collect performance data and translating them into metrics and information.

