Hands on the Land

Interagency Strategy
2013 – 2015
Produced by:
Partners in Resource Education,
an alliance of five federal agencies
and a nonprofit foundation,
including the Bureau of Land Management,
U.S. Fish and Wildlife Service,
National Park Service,
U.S. Forest Service,
National Oceanic and Atmospheric Administration,
and National Environmental Education Foundation.

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Background

America’s national forests, parks, wildlife refuges, and other public lands and waterways offer unique teaching and learning opportunities. Hands on the Land (HOL) is a national network of field classrooms that connects students, teachers, families, and volunteers to these lands and waterways all across America, making HOL “America’s largest classroom.”

HOL was formed in 1999 by Partners in Resource Education, an alliance of five federal agencies that manage public lands and waterways with initial funding from the Environmental Protection Agency. The agencies include the Bureau of Land Management, U.S. Fish and Wildlife Service, National Park Service, U.S. Forest Service, and National Oceanic and Atmospheric Administration. Collectively, these agencies are responsible for the stewardship of federally owned public lands and waterways—lands that comprise approximately one-third of the acreage of the United States. The National Environmental Education Foundation, a nonprofit organization chartered by Congress in 1990, provides the coordination of the agency alliance, with the Environmental Protection Agency continuing to provide technical assistance and advice.

In addition to HOL, Partners in Resource Education supports a variety of educational programs and initiatives related to high-priority resource issues, such as climate, fire management, weed suppression, and endangered species management. These programs and initiatives include those from the Environmental Protection Agency, U.S. Department of Education, and state partners.
Introduction

Building Partnerships that Support Student Learning and Environmental Literacy

HOL sites offer field-based teaching and hands-on learning experiences using local, natural, historical, and archaeological settings to bring classroom learning to life. HOL exposes participants to issues confronting 21st century land and waterways managers, provides an introduction to natural resources careers, and supports opportunities to foster a life-long commitment towards environmental stewardship. In addition, HOL programs promote awareness of the health benefits of learning from and being in the great outdoors.

Educational programming at HOL sites supports environmental literacy needs through a partnership created between the HOL public lands or waterways site, local schools, universities, or other community organizations such as environmental education centers. Field-based and hands-on learning experiences at HOL member sites are designed to support the teaching of required curriculum and to meet applicable state or national content standards, such as the Common Core Standards or the Next Generation Science Standards. Twenty-first century educational initiatives, such as STEM (science, technology, engineering, and mathematics), are, as much as possible, integrated into HOL activities and programs. Programs may include environmental monitoring activities that use 21st century data collection tools or technology. Some HOL programs use citizen science initiatives or provide student service-learning opportunities. In general, HOL programs are place-based and intended to expand a student’s understanding of environmental processes and to enhance their critical thinking and problem-solving skills through field-based investigations and experiences.

Establishing a Community of Practice through a Shared Website

A user-friendly website—www.handsontheland.org—supports the collaborative networks and partnerships between the federal agencies, teachers, and HOL and its sites, resources, and members. The website provides the platform through which HOL programs, projects, best practices, and resources are accessed, shared, and exchanged. HOL sites are mapped nationally and given a profile page that includes a description of their educational program(s). Educational resources can be posted by HOL members and linked to site profiles. Resources related to pressing environmental issues, or “hot topics,” are also accessible to teachers and students. Professional development information and links to other agency initiatives are available, and HOL members can post blog articles or events of interest. In addition, the HOL website hosts unique environmental monitoring databases and data collection programs. These collaborative efforts help the HOL community stretch their limited resources, enhance the quality of the educational experiences they offer, and unify the resource education efforts of public lands and waterways agencies.
Looking to the Future: Expanding Program Scope and Excellence

HOL, which began as a pilot project in 1999, now supports more than 120 sites. Expanded partnerships and marketing, such as with the U.S. Department of Education’s Green Ribbon Schools program, and aligning with the goals of the America’s Great Outdoors Initiative will enable the program to grow even further, putting HOL at the fingertips of every child and teacher.

Within the timeframe of this strategy (2013-2015), the Partners in Resource Education seeks to reach the following goals:

- Expand opportunities for diverse audiences to participate in the HOL network, with an increase in the number of participating HOL member sites (120 current).
- Establish HOL sites as centers of educational excellence across the network.
- Promote interactions among sites through an expanded and enhanced HOL website and other avenues.
- Develop partner and agency support at both local and national levels.
- Establish the network as a widely recognized resource for educators as well as a resource for federal agency leaders to support conservation education priorities.
- Provide continuous program improvement through effective administration and evaluation.

The Partners in Resource Education hopes to meet these goals by implementing nine descriptive objectives and their associated strategies, which follow. The Appendix includes the logic model that was used by the Partners in Resource Education to develop this strategy.
Vision

As America’s largest classroom, Hands on the Land will promote educational excellence by providing students across America with hands-on learning in natural and cultural settings.

Goals

- Enhance curriculum-based student learning in natural, historical, and archaeological settings.
- Expand student understanding of basic environmental processes, and help students develop skills for investigating, evaluating, and making decisions about the environment.
- Expand collaborative efforts among public lands and waterways agencies, schools, and communities to make the best use of staff, funding, and expertise supporting conservation education.

Anticipated Outcomes

- Schools, students, and families have beneficial place-based and learning experiences when they visit public lands and waterways.
- Public lands and waterways are seen as living laboratories.
- HOL is viewed by the federal agency sponsors as a model for engaging their local communities in environmental education and stewardship.
- Communities understand and embrace the significance and meaning of resource stewardship.
- Public land agencies, schools, and community organizations leverage each other’s resources.
- Twenty-first century educational initiatives, such as the integration of STEM skills, are modeled contextually within resource stewardship activities.
- Students and families have beneficial health-based experiences when they visit or participate in activities at outdoor public lands and waterways sites.

Anticipated Impacts

- Public lands and waterways are viewed as being vital, relevant, and valuable to student learning and to local communities and are used to increase environmental literacy.
- Collaboration across agency/jurisdictional boundaries results in effective communication of place-based interagency educational programs.
- The community has an increased interest in a broad range of career opportunities on public lands.
- Natural, cultural, and historical resources on public lands and waterways are sustained/enhanced/improved through increased opportunities for civic engagement by schools and other members of the community.
Objective 1

Program Framework and Administration

Support program growth through a strong framework and national coordination.

All field classrooms participating in the HOL network should be sustainable programs supported by partnerships with local schools and communities. Programs should enhance kindergarten through high school learning by using America’s public lands and waterways as laboratories of learning. In order to ensure standards of excellence are met and to promote program growth, a framework for the program and clear administrative direction must be provided.

Associated Strategies:

1. Continue to support a national coordinator for HOL.

2. On an annual basis, develop a work plan for the national coordinator.

3. Ensure new sites meet the HOL participation criteria and complete the online application process.

4. Develop a procedure for sites that do not meet HOL participation criteria to help them reach compliance.

5. Identify minimum HOL site reporting requirements, and develop data collection procedures.
Objective 2

Program Tools

Make a broad range of program tools available to HOL program providers to support field classroom programs.

Many outstanding programs and materials have already been developed by federal agencies in partnership with local schools. Sharing these resources and the expertise involved in developing them will reduce redundant efforts, encourage best practices, and ensure that all participants have the tools they need to do an effective job.

Associated Strategies:

1. Provide guidelines and training to HOL sites in the development of teaching materials that adhere to excellence guidelines and are correlated to state or national standards (e.g., Common Core Standards or Next Generation Science Standards).

2. Encourage and provide incentives for HOL sites to post teaching materials on the HOL website in order to make them available to the widest possible audience.

3. Provide guidance and recommendations to HOL sites on how to develop service-learning opportunities that support agency resource conservation goals.

4. Develop specific programs to engage HOL sites in an interactive way with a focus on national education initiatives.

5. Recognize and promote best practices, such as delivering teacher workshops and conducting environmental monitoring, and provide forums for sites to be inspired by those ideas, concepts, and activities.
Objective 3

Communication

*Improve information sharing internally and externally, as well as horizontally and vertically, within the network.*

Communication is a key component of any network, and with HOL, communication is essential at both local and national levels. At the local level, HOL sites must promote effective communication among public lands and waterways staff, schools, families, volunteers, and community partners. HOL sites must also communicate effectively across the network to enhance educational programs and to make the most of limited resources. Effective communication among the participating agencies and partners is essential at the national level to build an awareness of the program; to develop community, sponsor, and agency support; to showcase student learning; and to recruit new HOL sites.

**Associated Strategies:**

1. Develop a forum for routine internal and external communication within each Partners in Resource Education agency.

2. Develop a two-fold marketing strategy: (1) provide incentives/benefits/policy drivers to agency site personnel (e.g., extend their reach as agencies); (2) provide incentives/benefits to classrooms and participants (e.g., engage in “real-life” field investigations).

3. Develop new public information materials to market the program at the national level.

4. Create a program awareness plan for internal use within each agency to recruit and increase HOL sites and for external use with potential members, partners, or sponsors.

5. Develop an annual HOL report.
Objective 4

Professional Development

Assess staff and volunteer training needs, identify training options, and establish mechanisms to facilitate training.

Plan and provide the highest quality instruction and continued professional development opportunities for HOL program providers.

Associated Strategies:

1. On an annual basis, conduct a needs assessment to identify staff, docent, and volunteer training needs, as well as other tools and resources needed for program support.

2. On an annual basis, research and provide a report to HOL sites on tools and training options to address identified needs.

3. Identify HOL program providers who have expertise in developing and delivering training; establish mechanisms for these individuals to share their expertise with the HOL network.

4. Develop and distribute a “how-to” manual for newly participating program providers.
Objective 5

Website Development and Maintenance

*Develop a high-quality, innovative website for the HOL network.*

The HOL program website is an essential tool for promoting interactivity among students, teachers, and public lands and waterways staff across the network. Through the website, students compare project results, teachers structure exchange programs with other schools and share teaching materials, and program providers offer expertise with staff throughout the country. Continuous updating is needed to ensure that the website can accommodate program growth, supports field-based learning, has credibility with educators, meets legal requirements, and remains an effective communication tool for all users.

**Associated Strategies:**

1. Operate the HOL website from an updated server with the capacity to support the needs of the HOL network.

2. Research options and usability recommendations for the long-term development and maintenance of the HOL website.

3. Establish an annual work plan to address website user needs, development, and maintenance.
Objective 6

Resource Management Linkages

Develop HOL programs and materials that support agency resource management objectives.

Responsible conservation of our natural, historical, and archaeological resources depends on an informed and educated public. Public lands and waterways resource management agencies have an obligation to provide current and accurate information about resources and management options to enable the public to participate in land management decisions. The HOL program provides an avenue for public lands and waterways agencies to engage youth in learning about complex land management challenges and to encourage attitudes of respect toward the environment.

Associated Strategies:

1. Post links to agency conservation education materials on the HOL website that support agency resource objectives.
2. Promote exchanges among HOL sites and such agency units as National Park Service resource conservation centers, U.S. Fish and Wildlife Service Nature of Learning sites, and U.S. Forest Service research units.
3. Promote the involvement of HOL sites in volunteer stewardship events, such as National Public Lands Day events.
4. Promote HOL site participation in distance-learning programs and web seminars.
5. Promote service-learning opportunities at HOL sites that support public lands and waterways agency management objectives.
6. Expand and update the “hot topics” section on the HOL website in order to enhance student learning about priority resource conservation topics.
7. Identify resources, partners, and best practices that expand field-based opportunities using the integration of STEM skills and promotion of STEM-related or resource career pathways.
Objective 7

Funding Development

Provide sustained funding for HOL to ensure program growth and continuous improvement.

Educational programs are long-term endeavors that require time to develop and refine. Without sustained funding, quality educational programs will not evolve. Schools, volunteers, and other community partners will be reluctant to commit time and resources to HOL programs if they are ad hoc, intermittent efforts. Securing funding and partnership support from both the public and private sectors is essential to the long-term success of HOL.

Associated Strategies:

1. Develop a business plan that identifies public and private sources of funding or in-kind contributions that new and existing sites can use for program enhancements, such as transportation, training, equipment and supplies, contractor/hosted worker/volunteer positions, and travel.

2. Coordinate HOL budget planning at the Department level to ensure sustained HOL agency funding.
Objective 8

Program Evaluation

Identify proven assessment tools for evaluating the effectiveness of HOL programs. Establish minimum program evaluation requirements for HOL sites.

Educational institutions are under increased scrutiny to demonstrate that students and teachers are meeting established standards. Evaluation of HOL programs is essential to establish their effectiveness in helping schools meet these standards. Evaluation is also essential to demonstrate to public lands and waterways managers that HOL programs support priority resource management objectives. Finally, evaluation results are critical to building confidence in the program on the part of funders and community partners.

Associated Strategies:

1. Research program evaluation strategies, provide recommendations to HOL sites on credible models, and establish minimum requirements for HOL site self-assessments.

2. Facilitate mentoring relationships and provide other assistance that will enable sites to remedy program deficiencies identified through program evaluations.

3. Conduct a national program evaluation by end of year 2015.
Objective 9

Recognition and Awards

Establish mechanisms to reward and recognize excellence among program providers, schools, students, and supporters at both national and local levels.

By recognizing individuals who excel in developing programs and other components of the HOL network and by acknowledging the support of partners, sponsors, managers, and volunteers, enthusiasm for the program is sustained, and models of excellence are provided for others.

Associated Strategy:

1. Establish a mechanism or mechanisms to provide recognition, both locally and nationally, of outstanding programs, materials, staff, managers, volunteers, partners, and sponsors.
## Appendix: Hands on the Land Logic Model

<table>
<thead>
<tr>
<th>Resources/Input</th>
<th>Activities</th>
<th>Outputs (#’s)</th>
<th>Outcomes</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models for teachers to use in workshops.</td>
<td>Environmental monitoring work at HOL sites.</td>
<td>HOL sites identify ways to engage teachers in innovative stewardship learning activities.</td>
<td>Schools, students, and families have beneficial place-based and learning experience when they visit public lands.</td>
<td>Public lands/waterways are viewed as being vital, relevant, and valuable to student learning, and local communities are used to increase environmental literacy.</td>
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<tr>
<td>Facilitation models that encourage relevancy to youth audience.</td>
<td>Peer-to-peer mentoring.</td>
<td>Students participate in service learning activities.</td>
<td>Greater community sees federal government/public as a vital community service.</td>
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<tr>
<td>Agency Education Specialists.</td>
<td>Teacher workshops.</td>
<td>Teachers develop lesson plans/projects that use HOL and agency resources to help students meet educational standards.</td>
<td>Students have multiple interactions.</td>
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<tr>
<td>Partners in Resource Education members: BLM USFWS USFS NPS NOAA EPA ED NEEF</td>
<td>Place-based learning and stewardship activities are correlated to state environmental literacy standards.</td>
<td>Students learn about their environment and their place in it.</td>
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<tr>
<td></td>
<td>Service learning projects.</td>
<td></td>
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<tr>
<td>Good communication with community members.</td>
<td>Interagency partners build an understanding of community needs.</td>
<td>Consistent promotional materials that “brand” HOL.</td>
<td>Evolving partnerships that are relevant to impacts from climate change.</td>
<td>Collaboration across agency/jurisdictional boundaries results in effective communication of place-based interagency stories and networking.</td>
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<td>Meaningful partnerships that facilitate stewardship-based outcomes.</td>
<td>Hosting internet databases for student-oriented citizen science projects.</td>
<td>HOL website.</td>
<td>Public lands and waterways are seen as living laboratories.</td>
<td>Promotes interest in a broad range of career opportunities.</td>
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<tr>
<td>Facilitation models that encourage relevancy to youth audiences.</td>
<td>Students have a place-based experience, collect real world data, and then go back to their school to ask questions on that data— inquiry learning.</td>
<td>Inspired teachers and partners who make good use of public domain information and resources.</td>
<td>HOL is viewed by federal agency sponsors as a model for engaging with their local communities in environmental education and stewardship.</td>
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<td>Subject matter experts provide content expertise and technical assistance within the interagency community.</td>
<td>Collaborative projects between interagency federal group and nontraditional partners.</td>
<td>Interagency group and partners work to develop, maintain, and enhance sustainable partnerships, such as with the Department of Education and the Green Ribbon Schools initiative.</td>
<td>The significance and meaning of resource stewardship and stewardship activities is understood and embraced by communities.</td>
<td>Natural, cultural, and historical resources on public lands and waterways are sustained/enhanced/improved through increased opportunities for civic engagement by schools and other members of the community.</td>
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<tr>
<td>Provide teachers with tools and methods for developing service-learning projects used by education specialists on public lands and waterways.</td>
<td>Citizen science activities, such as snow pack monitoring and ozone biomonitoring.</td>
<td>Student community-based projects/service-learning connected to HOL experience.</td>
<td>Environmental monitoring and understanding the results of the monitoring is increased and enhanced. Interagency groups, schools, and partners leverage each other’s resources.</td>
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<td></td>
<td>Student community-based projects/service-learning connected to HOL experience.</td>
<td>Develop partnerships with organizations that promote outdoor activity to improve children’s health.</td>
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<tr>
<td></td>
<td>Green Strides webinar(s).</td>
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<tr>
<td></td>
<td>Share “best practices” through HOL website, webinars, and other training.</td>
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