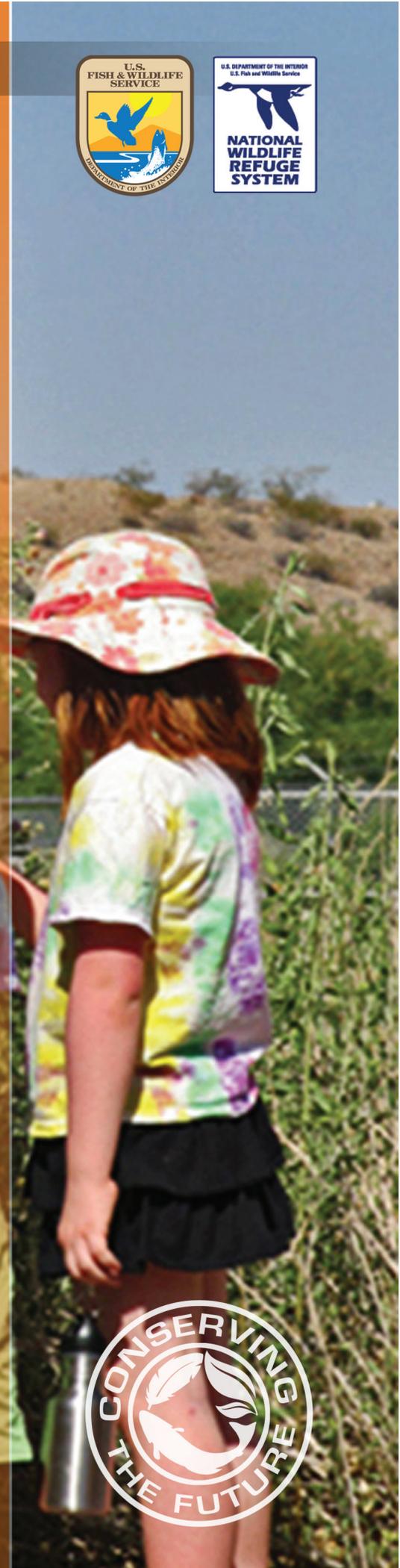


Touching Hearts And Minds

*A Strategic Plan for
Improving Interpretation for the
National Wildlife Refuge System*



COVER PHOTO: Moapa Valley National Wildlife Refuge (Photo: USFWS)

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“This strategic plan establishes five national interpretation program priorities. It contains one overarching goal, five measurable objectives, and a number of strategies and actions that will guide our interpretation program in the next 10 years.”

I. Executive Summary

One of the goals of the 2011 vision document *Conserving the Future: Wildlife Refuges and the Next Generation* (*Conserving the Future*) is to make wildlife conservation more relevant to the public and foster their engagement in, and support of, the National Wildlife Refuge System (Refuge System).^{*} And one of the most effective ways to accomplish this is through the process of interpretation.

This strategic plan addresses this major goal and fulfills *Conserving the Future's* Recommendation 19 on interpretation. It contains recommendations for employees, volunteers and partners to enhance interpretation planning, delivery, and evaluation at national wildlife refuges, wetland management districts, and other divisions of the U.S. Fish and Wildlife Service (Service).

Interpretation is a communication process that forges emotional and intellectual connections between the audience and the resource. Interpretive programs in the Refuge System must convey thematic messages through personal and non-personal (i.e.,

publications, new media, social media, signs, and exhibits) elements. This strategy directs Service employees to engage with a diverse and changing America, communicating to constituents about the conservation of natural and cultural resources in relevant ways.

Quality interpretation means following the principles of the profession and using proven, established tools to develop our interpretive products. Effective interpretive products require skillful planning and thoughtful delivery. There are several models that ensure quality interpretation, and the Service uses the *Interpretive Process Model* and the *Interpretive Analysis Model*. These models outline the most critical elements of an interpretive product or service, including a theme statement and cohesively developed ideas. Interpretive themes link our tangible resources to intangible meanings, and allow opportunities for visitors to form intellectual and emotional connections to the resources the Service manages.

^{*} In this document, the terms refuge, National Wildlife Refuge System, and Refuge System generally refer to either an individual unit or all of the more than 560 refuges, 38 wetland management districts and other protected areas encompassing 150 million acres of land and water administered by the U.S. Fish and Wildlife Service.



Pea Island NWR interns leading an interpretive program (Photo: Mike Carlo/USFWS)

This strategic plan establishes five national interpretation program priorities. It contains one overarching goal, five measurable objectives, and a number of strategies and actions that will guide our interpretation program in the next 10 years. This approach will help us design programs for our employees, volunteers, and partners to help strengthen the Refuge System's overall interpretive program.

The plan includes the following goal and objectives:

Goal: *Strengthen interpretation within the Refuge System to create a connected conservation constituency.*

Objective 1. *Increase the capacity, recognition, and visibility of interpretation so that visitor services staff at field stations can provide effective interpretation programs.*

Objective 2. *Create and strengthen partnerships in order to maintain, improve, and expand quality interpretation.*

Objective 3. *Invest in training to empower employees, volunteers, and partners to create and implement interpretive programs and products to meet our Refuge System needs.*

Objective 4. *Assess and develop effective interpretation delivery modes to reach diverse audiences.*

Objective 5. *Monitor interpretive program planning, content, and outcomes to evaluate effectiveness and guide future priorities.*

“The goal, objectives, and strategies in the plan will help define and provide direction for Refuge System interpretation programs over the next 10 years.”

II. Purpose of this Document

The goal, objectives, and strategies in the plan will help define and provide direction for Refuge System interpretation programs over the next 10 years. Interpretation supports Recommendation 19 in the Refuge System’s Conserving the Future vision document, which directs the development of “... an interpretation strategy that builds upon

current Service standards and guidelines, takes advantage of multiple modes of delivering messages, reaches diverse audiences, and measures the effectiveness of our programs in partnership with key government agencies, the National Association for Interpretation (NAI), and other professional organizations.”



Oregon Islands National Wildlife Refuge Complex volunteer interpreter
(Photo: USFWS)

III. Introduction and Vision

Introduction

Volumes of stories are found throughout our national network of lands and waters dedicated to the conservation of wildlife, fish, and their habitat. Fish and Wildlife Service icons such as biologist and author Rachel Carson and editorial cartoonist “Ding” Darling used their pens to share some of these compelling stories with the public. The National Wildlife Refuge System Improvement Act of 1997 recognized the importance of public communication and engagement, embracing the art and science of interpretation as one of six priority public uses of the Refuge System. Interpretation helps us tell the stories that can connect our natural and cultural resources with the interests and values of the American public.

We trace the history of the interpretation profession back to the late 1800s, when naturalist and author John Muir first used the word “interpret” in reference to natural history. “I’ll interpret the rocks, learn the language of the flood, storm, and the avalanche. I’ll acquaint myself

with the glaciers and wild gardens, and get as near the heart of the world as I can.” In 1920, a young protégé of Muir named Enos Mills wrote “The aim is to illuminate and reveal the alluring world outdoors by introducing determining influences and respondent tendencies. A nature guide is an interpreter of geology, botany, zoology, and natural history.” (*Adventures of a Nature Guide*). Freeman Tilden built upon Mill’s idea of revelation and incorporated it into his six principles of interpretation, saying “Information, as such, is not interpretation. Interpretation is revelation based upon information.” (*Interpreting Our Heritage, 1957*).

If we consider Muir, Mills, and Tilden to be the fathers of interpretation, Rachel Carson could be considered the mother. Carson had a fifteen-year career with the U.S. Bureau of Fisheries (now the U.S. Fish and Wildlife Service), where she wrote radio spots and numerous pamphlets and bulletins on conservation. She used her unique communication ability to present complex science ideas in clear, poetic language that captivated readers and

“The care of rivers is not a question of rivers, but of the human heart.”

- Tanaka Shozo



Hobe Sound National Wildlife Refuge (Photo: USFWS)

sparked their interest in the natural world. One of her most well-known works was the series *Conservation in Action*, devoted to exploring wildlife and ecology on national wildlife refuges. After leaving government service, Carson authored inspiring books, such as *Under the Sea-Wind*, *The Sea Around Us*, *The Edge of the Sea*, and the posthumously published *Sense of Wonder*. But it was her final book, *Silent Spring*, published in 1962, that awakened society to our responsibilities of being good stewards of all forms of life.

Aldo Leopold, another prominent figure in our conservation history, wrote *A Sand County Almanac* (1949) using interpretive writing techniques to convey complex biological interrelationships, and introduced the concept of a land ethic. In the 'Prairie Birthday' section of the Almanac, Leopold wrote about a remnant prairie plant "...Silphium, spangled with saucer-sized yellow blooms resembling sunflowers... What a thousand acres of Silphiums looked like when they tickled the bellies of buffalo is a question never again to be answered, and perhaps not even asked".

Building upon this legacy, many universities

and colleges across the United States offer courses and degrees in interpretation. Additionally, the Service partnered with the National Park Service to provide *Interpretive Process Model* training based on Tilden's principles and David Larsen's *Meaningful Interpretation: How to Connect Hearts and Minds to Places, Objects and Other Resources*. Professional support is offered by the National Association for Interpretation (NAI). The NAI has become an international professional organization, hosting regional, national, and international training courses and conferences. It also provides an interpreter certification program and a variety of publications. Many Service employees have used the resources of NAI to improve interpretive product design and delivery.

Vision

Our vision for interpretation in the Refuge System is to connect visitors and the American public to natural and cultural resources and foster appreciation and understanding of, and a sense of wonder for, our nation's wildlife, plant, and habitat resources.

IV. Challenges and Opportunities

Our most significant challenge is to adapt our interpretive programs to the continually changing face of America. This can only be accomplished by offering experiences that are relevant to diverse audiences with varied values, beliefs, and attitudes about fish and wildlife conservation.

Using the best available research on interpretation and understanding how conservation and the Refuge System are valuable to our constituents, we can create interpretive programs that speak to the interests and experience of diverse audiences. Whether individuals and groups appreciate and support the Refuge System for wildlife conservation, clean air and water, recreation, economic benefits, family interaction, solitude, relaxation, or rejuvenation, we can help them make personal and lasting connections with our agency, nature, and conservation.

Interpretation serves as the bridge between our agency and the public, providing opportunities for people to make their own associations between the natural and

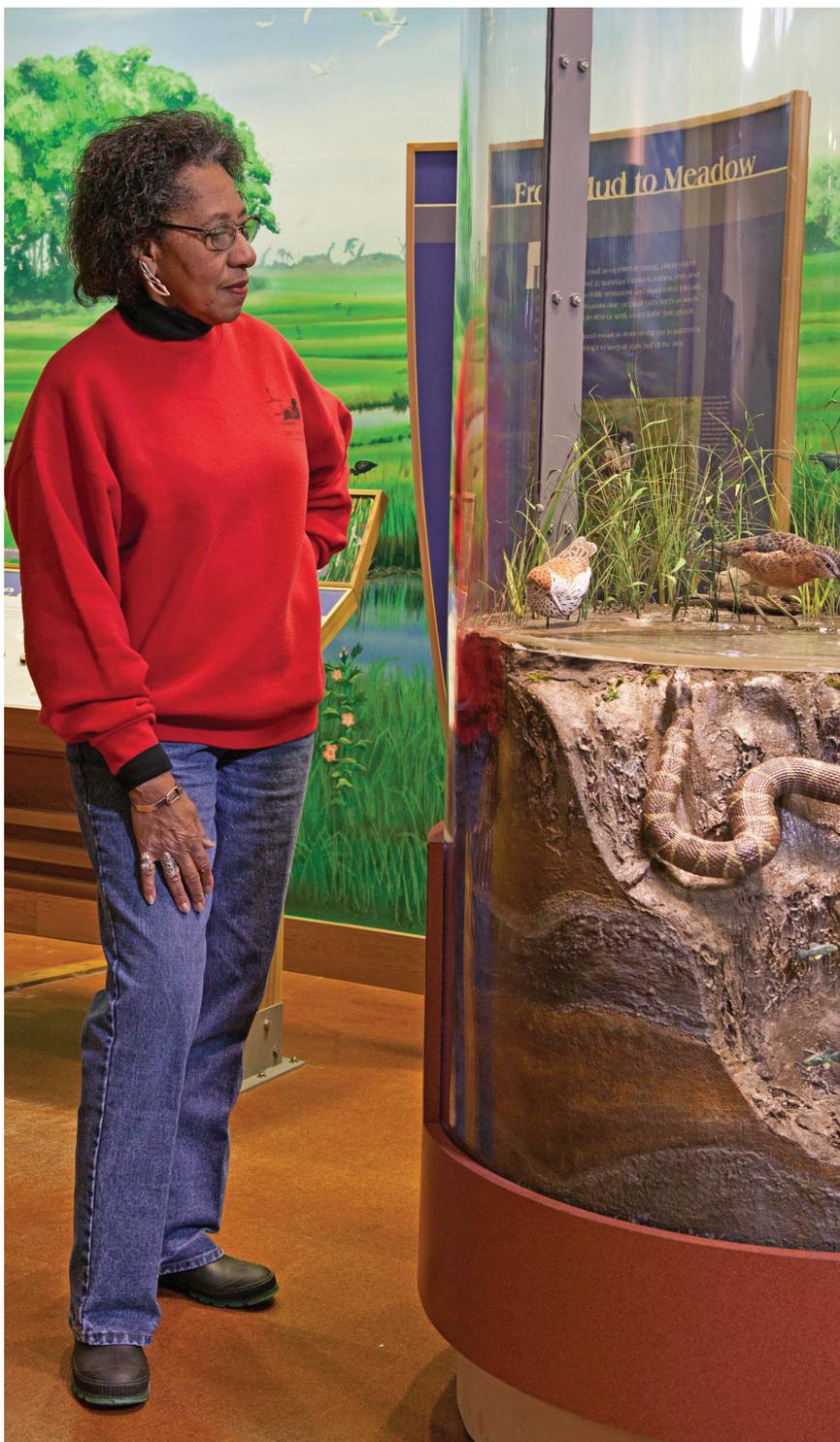
cultural resources we manage, for the benefit of all Americans. It facilitates awareness and provocation in our visitors on many levels, from complex topics like climate change, to more basic concepts such as how healthy and abundant wetlands matter to us as individuals and as a nation. New and innovative interpretation is one of the best tools for this task.

Basic interpretive skills are needed for all employees and volunteers who engage the public and our partners. We will use existing training and develop additional instruction to infuse the art of interpretive communication throughout the workforce. This will be delivered in part through a new *Refuge Ambassador Program: Customer Service Skills for Communicating Conservation*. The goal of this program is to teach the fundamentals of effective communication and interpretation to employees and volunteers to better welcome existing and potential visitors to national wildlife refuges. The *Refuge Ambassador Program* will offer learning through multiple delivery

*“Be
relevant
or become
a relic.”*

– David Larsen

“Basic interpretive skills are needed for all employees and volunteers who engage the public and our partners.”



Chincoteague National Wildlife Refuge Visitor Center (Photo: USFWS)

methods including in-person, online, and blended training elements. Recognizing projected budget and staffing constraints, we will also increase our reliance on

non-personal and self-guided interpretive methods to meet the goals and objectives of this strategy.

V. Interpretation National Priorities

In a program as far-reaching, diverse, and comprehensive as the Refuge System interpretation program, there are numerous national goals, objectives, strategies and actions. The complete list (Section VI), written with input from Service employees, partners, and the American public, will enable the Refuge System to improve in all areas of interpretation program design, training, and implementation.

While all of the actions in Section VI are designed to improve interpretation in the Service, the following are recognized as high priorities:

- Design and deliver the initial phase of the Refuge

System Ambassador Program

- Offer annual training opportunities for Service employees in the Aldo Leopold Foundation's Land Ethic Leaders program
- Establish partnerships with organizations and agencies that train and develop interpretation staff, volunteers and partners
- Offer training modules for using the *Visitor Services Handbook*
- Establish a minimum interpretation standard for welcoming and orienting the public to all National Wildlife Refuges

“In a program as far-reaching, diverse, and comprehensive as the Refuge System interpretation program, there are numerous national goals, objectives, strategies and actions.”



Silvio O. Conte National Fish and Wildlife Refuge mobile interpretive exhibit (Photo: USFWS)

“Building support internally among leadership, staff, and partners will allow us to connect with more visitors through quality interpretation.”

VI. Goal, Objectives, Strategies, and Actions

Goal: *Strengthen interpretation within the Refuge System to create a connected conservation constituency.*

Objective 1. Increase the capacity, recognition, and visibility of interpretation so that visitor services staff at field stations can provide effective interpretation programs.

Despite the long term, steady increase in the number of Refuge System visitors and volunteers, most field stations are constrained in their efforts to engage with new audiences and improve the quality of their interpretive and other visitor service programs. Building support internally among leadership, staff, and partners will allow us to connect with more visitors through quality interpretation.

To help explain the value of interpretation to delivering our mission, we will develop a variety of in-reach tools to demonstrate the need for investment and broad support among our leadership, staff, and partners.

Strategy 1.1: Ensure interpretation is recognized as critical to fulfilling the mission of the Refuge System.

Action 1: By July 2015, a national team will draft a revised 605 FW 7 Interpretation Policy to establish clear lines of responsibility and communication from the director down to field staff.

Action 2: By January 2015, a national team will develop an in-reach strategy to help our leadership, staff, and partners at all levels understand how interpretation plays a critical role in achieving our mission. The team will work with Service communication staff on a clear, coordinated message for this strategy.

Action 3: By July 2015, a national team will establish a



Kanuti National Wildlife Refuge (Photo: USFWS)

minimum interpretation standard for welcoming and/or orienting visitors to refuges, including those that are unstaffed or closed to the public. Every refuge should have a minimum on-site and/or digital interpretation element for actual or virtual visitors to access. All refuges should provide clear information and interpretation about their purposes and management priorities. Connecting constituents to remote refuges and those closed to public entry through interpretation is particularly important in creating awareness and building support for the overall Refuge System.

Strategy 1.2: A national team will research and recommend a strategy to ensure that every

refuge is represented by, and has access to, knowledgeable, trained, and skilled Service interpretation specialists.

Strategy 1.3: We will highlight interpretation leaders and program success stories to demonstrate how effective interpretation can be used to achieve our conservation mission.

Action 1: By December 2014, a national team will develop a plan with Service communication specialists to share excellence in interpretation stories with internal and selected external audiences.

Objective 2. Create and strengthen partnerships in order to maintain, improve, and expand quality interpretation.

Partners (including federal, state, tribal, and territorial agencies; businesses; nonprofit organizations; and, individual community members) are vital in enabling us to deliver quality interpretation for Refuge System constituents. Partners have the potential to bring specific expertise and different points of view to address challenges, add value to interpretation programs, and help us connect with under-served and other target audiences. The Service should seek partners with conservation missions and goals similar to ours, and we recommend establishing partnerships when conditions permit and when cooperating parties and the American public all benefit. Local partners are particularly important for establishing or strengthening relationships with the communities near National Wildlife Refuges.

Strategy 2.1: We will evaluate current and potential partnerships, and coordinate with suitable partners who have related conservation goals and the knowledge, skills, and ability to improve and expand our interpretive programs.

Action 1: By December 2015, a national team will analyze and report on the general composition and status of current Refuge System partnerships that support refuge interpretive programs, identifying gaps and noting trends and successes. Information will be posted on Visitor Services Connect or a similar community of practice website.

Action 2: By July 2016, a national team will draft succinct recommendations regarding partnerships and partners to deliver quality interpretation in the Refuge System. These recommendations and guidance will be adapted from the best practices handbook being developed as part of the Strategic Plan for Volunteer and Partner Involvement in the National Wildlife Refuge System.

Objective 3. Invest in training to empower employees, volunteers, and partners to create, implement, and improve interpretive

programs and products to meet Refuge System objectives and the needs of our constituents.

Interpreters help audiences make emotional and intellectual connections to the resource so they are moved to care for the resource. Professional development and skills-based training for those responsible for delivering interpretive programs and products is a basic prerequisite for achieving success. We will develop interpretive champions who demonstrate and teach others how interpretation can and should address complex resource challenges and improve public understanding. All quality interpretation has basic elements that include knowledge of the resource, knowledge of the audience, and use of appropriate technique. These all need to be learned through training.

Strategy 3.1: Adopt consistent use of the *Visitor Service Standards: A Handbook for Evaluating Visitor Services Programs (Visitor Services Handbook)*.

Action 1: By March 2015, Headquarters will create an expanded distribution plan for the *Visitor Services Handbook* to reach field interpreters.

Action 2: By July 2015, the National Conservation Training Center (NCTC) will coordinate development and implementation of distance-delivered training on how to use the *Visitor Services Handbook*, including guidance for using the interpretive analysis model.

Strategy 3.2: Deliver a new *Refuge Ambassador Program: Customer Service Skills for Communicating Conservation* that trains all employees, volunteers, friends, and close partners in providing excellent customer service and includes the principles of interpretation, how to strengthen community relations, and how to increase support for the Refuge System. The program will be offered through a variety of delivery modes, with assistance from NCTC and outside-agency customer service experts.



Laguna Atascosa National Wildlife Refuge tram tour
(Photo: Steve Hillebrand/USFWS)

Action 1: By March 2015, a national team will oversee delivery of the initial phase of the program.

Strategy 3.3: Use, improve, and promote existing career and employee development resources relating to interpretation in the Refuge System. As appropriate, develop a communications strategy to update staff of the changes to related resources, handbooks, and other guidance.

Action 1: By December 2016, a national team will update the interpretation standards of the *Visitor Services Career Pathways* handbook to reflect current needs, priorities, and initiatives in cooperation with other programs and offices addressing leadership and workforce development goals.

Action 2: Beginning in 2014, partner with the Aldo Leopold Foundation to offer annual training opportunities for Service employees in the Foundation's Land Ethic Leaders program.

Action 3: By July 2015, a national team will produce a digital handbook or equivalent resource for interpreting Refuge System cultural resources, and post to the Visitor Services Connect website.

Strategy 3.4: Design and incorporate a module on interpretation using the *Interpretive Process Model*, *Interpretive Analysis*

“A blended approach that combines traditional, personal interpretation and self-guided components with web-based and mobile platforms can effectively reach multiple audiences.”

Model, and the Visitor Services Handbook for appropriate NCTC training courses.

Action 1: By 2017, include an interpretation module in the curriculum of the Refuge Management Academy, Wage Grade Academy, Friends Academy, Stepping Up To Leadership Program, Advanced Leadership Development Program, External Affairs workshops, Service Employee Foundations course, and other training as appropriate.

Strategy 3.5: Create a core interpretive competencies training matrix and professional development guidelines for collateral duty employees, supervisors of interpretation program leaders, entry, mid- and full-performance level employees, friends group members, and volunteers.

Action 1: By October 2016, the Refuge System will develop formal partnerships with NAI, National Center on Accessibility, National Park Service, and Eppley Institute to evaluate and provide a progression of interpretive training opportunities specifically developed to meet the needs of Service interpretive staff, volunteers, and partners.

Objective 4. Assess and develop effective interpretation delivery modes to reach diverse audiences.

We will strive to offer a variety of delivery modes that maximize our reach and program outcomes to welcome, orient, and connect our visitors with the resources we protect.

A blended approach that combines traditional, personal interpretation and self-guided components with web-based and mobile platforms can effectively reach multiple audiences. A strategic assortment of interpretive elements enables refuges to deliver program content to the public anytime, anywhere, and with or without direct (person-to-person) staff delivery. In the absence of staff presence, quality interpretation can be provided through kiosks, signs, mobile programs, accessible facilities, wildlife observation and photography opportunities, websites and social media tools (including apps). For remote and closed refuges, the internet may be the best or only option for the public to learn about the resources protected there. Staff should use the Department of the Interior’s Section 508 policies and guidelines to design programs and products that are accessible to the broadest range of users.

Freeman Tilden said that “Interpretation is an art, which combines many arts...” Refuges should consider using art and demonstrations to transcend language and cultural barriers and reach out to new audiences. Performing arts may include storytelling, poetry reading, dance, drama, or music.

Demonstrations may include historical vignettes, living history, or recreational safety and skill displays.

Strategy 4.1: Leverage existing financial resources to implement interpretive standards for welcoming and orienting visitors as defined in the Visitor Service Handbook and through our national Sign Guidelines.

Action 1: By December 2016, in order to identify funding needs, all field stations should have entered their interpretive facilities, signs, and kiosks into the centralized regional property database system including recommended updates to meet the needs of diverse audiences.

Action 2: By July 2017, each region will evaluate interpretive facilities using the *Visitor Services Handbook* and identify and prioritize needed facility upgrades.

Action 3: By December 2017, the Service will identify strategies for supporting a more systematic and integrated approach to funding outdoor exhibits and signs, high priority trails, photography and observation blinds, learning areas, and other interpretive facilities.

Strategy 4.2: Each refuge without bilingual staff or volunteers should identify



any need for services to reach those with limited English proficiency (LEP) (Executive Order 13166).

Action 1: By December 2016, where applicable, each refuge will develop and implement a system to provide identified services for LEP persons in the local community.

Strategy 4.3: Use the *Visitor Services Handbook* and Urban Audience Analysis to evaluate

Kilauea Point National Wildlife Refuge (Photo: John DeMello)

“Regular and consistent evaluation is vital to determine the strengths and weaknesses of a field station’s programs and products.”

programs and their relevance to the local community.

Action 1: By December 2015, regional teams of Service visitor services professionals and partners such as friends groups, sister agencies, states, and universities, will use the *Interpretive Process Model* to identify effective interpretive programs to share as models for success.

Action 2: By March 2018, a national team will engage with the workforce planning team to explore local hire or other options to diversify our interpretive workforce.

Strategy 4.4: Employ the use of emerging technologies to broaden and improve delivery success.

Action 1: By March 2015, in partnership with Service national and regional social media specialists, a national team will share digital media policy, recommendations, and successful examples of innovative message-driven technological experiences on a sharing site such as Visitor Services Connect.

Action 2: By March 2016, a Service national team will draft an Indefinite Delivery Indefinite Quantity (IDIQ) contract for new interpretive media/technology delivery methods including, but not limited to, virtual field

trips, digital photography, podcasts, interactive webcams, and social media apps.

Action 3: By July 2016, the Service will develop a Center of Expertise that will research and provide technical assistance and support for using emerging technologies for interpretation.

Action 4: By July 2015, the Service’s Center of Expertise will develop a pilot program for providing virtual access to refuges for remote and urban audiences. We will work with the Service’s Digital Media working group to develop these programs.

Strategy 4.5: Refuges should transcend language and cultural barriers to engage with new audiences.

Action 1: By July 2015, share examples of innovative and successful cultural demonstrations and interpretation-through-art via a sharing site such as Visitor Services Connect.

Objective 5. Monitor interpretive program planning, content, and outcomes to evaluate effectiveness and guide future priorities.

Regular and consistent evaluation is vital to determine the strengths and weaknesses of a field station’s programs and products. Putting together a knowledgeable evaluation

team, gathering the proper information, and asking the most effective evaluation questions will help stations develop a successful interpretive plan. Through the use of other experts in the field of visitor services, field station staff will gain a fresh perspective that can breathe new life into their interpretive programs.

Strategy 5.1: Measure output and outcomes from non-personal interpretation.

Action 1: By December 2016, the regional visitor services chiefs will create Refuge Annual Performance Plan (RAPP) measures to capture public use data on non-personal interpretation (i.e., signs, kiosks, digital media, and outdoor skills and learning areas).

Strategy 5.2: To ensure that interpretive services remain relevant, every refuge should do an annual visitor services self-review and have a complete review by an outside team at least every 10 years using the *Visitor Services Handbook*.

Action 1: By December 2016, a national team will develop a rapid assessment checklist (based on the *Visitor Services Handbook*) to help stations complete annual visitor services self-reviews.

Action 2: By 2018, regional visitor services chiefs will ensure that 25 percent of their refuges have conducted a Visitor Services Review using the *Visitor Services Handbook*. The review may be accomplished by teams of field and regional visitor services professionals and/or others from sister agencies, partners, States, or colleges and universities.

Strategy 5.3: Field stations will use their annual visitor services reviews to create annual work plans.



National Elk Refuge sleigh ride
(Photo: Lori Iverson/USFWS)

Action 1: By 2017, each refuge will develop an Interpretive Plan (as part of their Visitor Services Plan) using the results of their annual visitor services reviews. The plan will address the range of interpretive opportunities including programs, publications, signs, exhibits, websites, social media, and other methods.

Strategy 5.4 Evaluate the relevance and effectiveness of the Refuge System Visitor Satisfaction Survey.

Action 1: By June 2015, a national team, in consultation with the Office of Management and Budget, will review and recommend changes to Visitor Satisfaction Survey questions to effectively capture the effectiveness of our interpretive programs using qualitative and quantitative measures.

U.S. Fish and Wildlife Service
National Wildlife Refuge System

www.fws.gov/refuges

March 2014



Recommendation 19: *Develop an interpretation strategy that builds upon current Service standards and guidelines, takes advantage of multiple modes of delivering messages, reaches diverse audiences, and measures the effectiveness of our programs in partnership with key government agencies, the National Association for Interpretation and other professional organizations.*