

## **National Wildlife Refuge System Action Plan:**

Response to Independent Evaluation of the Effectiveness of the Refuge System  
June 2009

In June 2008, Management Systems International (MSI) completed an independent evaluation of the effectiveness of the National Wildlife Refuge System (NWRS). MSI's report, entitled "[\*An Independent Evaluation of the Effectiveness of the U.S. Fish and Wildlife Service's National Wildlife Refuge System\*](#)," assessed progress made toward the 12 strategic goals in the Refuge System's [2007 Strategic Plan](#). Never before has such an objective, comprehensive evaluation of the Refuge System been completed and the NWRS Leadership Team is using the evaluation as an opportunity to improve the Refuge System's effectiveness.

The Leadership Team believes the report accurately recognizes areas where the Refuge System is effective and where it needs improvement. This action plan is the first in what the Leadership Team intends to be a recurring annual plan to monitor and address overall Refuge System effectiveness.

Distinct actions to improve the performance of an organization as large and diverse as the Refuge System (approximately 150 million acres; 4,000 employees; \$500 million annual budget) must be chosen carefully. Some actions are accomplished by small subgroups of employees, such as information technology professionals implementing a Content Management System to improve Refuge System Web sites, while other actions, like integrating climate change considerations into land acquisition policies, are broad in scale and require collaboration with hundreds of Refuge System staff and dozens of external partners. All actions are important and will be monitored and adjusted in the coming year.

This action plan, which was developed to address MSI's recommendations, is structured along the 12 strategic goals in the [2007 Strategic Plan](#). Following the listing of each strategic goal is MSI's rating. Following the rating is a statement of "Agree" or "Partially Agree" indicating the Refuge System's response. Following that is a list of action items the Refuge System plans to undertake in the next 12 months to improve effectiveness within that strategic goal. Progress made as of May 2009 is detailed in the colored font below.

## **Goal 1. Conserve, Manage, and Where Appropriate, Restore Fish, Wildlife and Plant Resources and Their Habitats**

**MSI Rating: Partially Effective – Agree**

### Actions to Take Over the Next 12 Months to Improve Effectiveness

1) Increase Refuge System capacity for inventory and monitoring (I&M) with clearly articulated objectives and prioritized staffing and funding.

The Refuge System has identified development of a national Inventory and Monitoring Program as a priority under the FWS's FY2010 Climate Change Initiative. Coordination with the National Park Service and other agencies has been initiated to explore opportunities for collaboration and integration, and assess aspects of other programs that we could adopt and/or adapt to our needs. The design of a national I&M program for the Refuge System and to help meet FWS-wide needs will be initiated in the coming months.

2) Identify ways to expand capacity for geospatial data analyses and management.

A national I&M program for the Refuge System will require investment in data management and analysis capability, including geospatial systems. A national GIS workgroup has been formed and is developing recommendations for a national GIS system for the Refuge System.

We are presently reviewing how to implement the Refuge Lands Geographic Information System (or a comparable approach that provides the same end outcome) on a nationwide basis. A report is to be assembled by September 30, 2009.

3) Develop a schedule for completing Habitat Management Plans (HMP) for all refuges.

A schedule for the completion of HMPs has not yet been fully developed.

## **Goal 2. Provide Quality Environments with Adequate Water**

**MSI Rating: Unable to Evaluate – Partially Agree**

*The MSI rating apparently did not consider all current activities to detect, document, and clean up environmental contaminants on refuges. These activities are accomplished through current environmental audits and the Contaminant Assessment Process, including contaminant investigations and cleanup.*

### Actions to Take Over the Next 12 Months to Improve Effectiveness

1) Finalize strategic plan for water resources in the Refuge System and implement approximately 20 pilot Water Resource Assessments (WRAs) this year.

The Refuge System developed and finalized a strategic plan for water resources. We completed and evaluated a pilot WRA project for 23 field stations (19 refuges and 4 National Fish Hatcheries) in 6 FWS regions. We are currently developing a proposal for implementing a FWS-wide water resource inventory and assessment project.

2) Revise performance measures to more accurately track progress on protecting refuge water supplies.

We have discussed revising performance measures that would track the progress of the water resources inventory and assessment project. This discussion will be revisited.

- 3) Complete joint FWS-EPA-USGS project to develop a geo-database of waters identified by States as “impaired waters” (under Section 303(d) of the Clean Water Act) on and adjacent to units of the Refuge System and the National Fish Hatchery System.

Phase I and the Phase II analyses are complete. The results provide an overview of the "impaired" waters of the Refuge System as defined by section 303(d). By June 2009, FWS, Environmental Protection Agency (EPA), and U.S. Geological Survey (USGS) will begin to prepare briefing and outreach materials to apprise management of Phase II results. USGS has begun work on Phase III of the project. This entails more detailed analysis and interpretation of the Phase II data to help the Refuge System develop a master plan for correcting water impairments.

### **Goal 3. Ensure that Unique Values of Wilderness, Other Special Designation Areas, and Cultural Resources are Protected**

**MSI Rating: Partially Effective – Agree**

#### Actions to Take Over the Next 12 Months to Improve Effectiveness

- 1) Begin monitoring wilderness character in all Refuge System- designated wilderness in accordance with the interagency wilderness character monitoring protocols. In FY09:
  - a. hold interagency meeting to share lessons from the pilot wilderness character monitoring conducted in FY08
  - b. share lessons learned with wilderness managers
  - c. conduct monitoring in at least one wilderness per Region

The interagency meeting was changed to an interagency conference call, which was held in May 2009. The results of that call are currently being compiled and will be shared among all agency wilderness managers.

- 2) Complete a Wilderness Stewardship Plan (WSP) for one wilderness unit in every Region in FY09.

Work on this action item has not yet begun.

- 3) Increase the number of wilderness managers and refuge supervisors who have completed the required National Wilderness Stewardship Course.

Twelve NWRS employees will be attending the June 2009 National Wilderness Stewardship Course: 9 project or deputy project leaders, 2 Regional Wilderness Coordinators, and 1 Regional Division Chief for Natural Resources.

**Goal 4. Welcome and Orient Visitors**  
**MSI Rating: Partially Effective – Agree**

Actions to Take Over the Next 12 Months to Improve Effectiveness

- 1) Review Refuge System sign program, especially directional signs off the refuge.
  - a. Review and update the current sign manual and handbook to address sign planning guidance, design specifications and information related to all signs.

The FWS's sign handbook will be reviewed over the next year to ensure that sign specifications and guidance is accurate, and determine the need for sign planning information.

- b. Boost efforts to partner with state and local authorities to provide needed directional signage. This will improve the "branding" of the System.

The Refuge System will continue to work closely with the Federal Highway Administration and State Highway Programs to ensure that directional and other highway signage is accurate and helps with our public "branding."

- 2) Implement a Content Management System (CMS) to support development and management of all Refuge System field station Web sites. The CMS has the following goals:
  - a. Relieve field stations of the technical responsibilities associated with the Web to allow them to focus on creating high quality and timely content.
  - b. Unify the appearance of Refuge System Web sites, furthering the message that each refuge is part of a national system.
  - c. Reduce the cost of Web site development and maintenance.

Contracts for purchase of the CMS and for a consulting firm to assist with design of web templates were issued in May 2009. Over approximately the next 6 months we will be working with an already established work group to develop a set of standardized templates for use by all Refuge System field stations. Migration of information is planned to be completed during the spring of 2010. This will effectively convert the Refuge System's Web presence from a diverse group of independent Web sites to a collection of unified Websites that have all technical management done centrally in a single content management system database but with content input by users from each field station.

- 3) Develop new exhibit and interpretive guidance that addresses key messages and promotes Refuge System identity.

A final draft of exhibit/interpretive guidance is being developed and will be submitted by a contractor in summer 2009. The recommendations and refuge survey data on exhibits and programs will be analyzed for opportunities to strengthen our interpretive programs and improve visitor center exhibits over the next year.

- 4) Develop a new, updated version of the Refuge System overview video.

We will collaborate with the National Conservation Training Center (NCTC) to produce a new Refuge System video within the next year.

**Goal 5. Provide Quality Wildlife Dependent Recreation and Education Programs**  
**MSI Rating: Effective – *Agree***

Actions to Take Over the Next 12 Months to Improve Effectiveness

- 1) Update Refuge System National Environmental Education Strategy.

A new draft of the 2001 National Environmental Education Strategy is being prepared along with case studies highlighting our diverse programs and success stories. We anticipate completing this by the end of 2009.

- 2) Update Refuge System Visitor Services Handbook sections on how to evaluate the effectiveness of refuge visitor programs.

A final draft of the handbook addressing all FWS comments will be completed by summer 2009. After review by relevant divisions, it will be released as guidance to supplement the FWS's Wildlife-Dependent Recreation policies.

**Goal 6. Facilitate Partnerships and Cooperative Projects**  
**MSI Rating: Highly Effective – *Agree***

Actions to Take Over the Next 12 Months to Improve Effectiveness

- 1) Expand citizen science programs with national partners such as Cornell University's Lab of Ornithology. Benefits include building support for monitoring the effects of climate change.

We are working with the Cornell Lab of Ornithology, the National Phenology Network and Project Budburst to expand our citizen science programs and training on refuges. Some of this work will contribute to the FWS's climate change strategic plan by involving partners, Friends and the public in monitoring the effects of climate change.

We are integrating citizen science program sessions into national and regional Friends training programs, including the 2009 *Friends Unite!* Conference and the Friends Academy that is scheduled for October 2009.

- 2) Publish the new *Soaring to New Heights* publication that will provide our local non-profit partners (Friends organizations) with current information on how to organize and manage effective organizations.

We are in the final design stages and anticipate having the document published and distributed by fall 2009.

- 3) Work with national organizations and the Bird Education Network to improve our Refuge System Birding Initiative through donations, in-kind support and training.

The Refuge System's Birding Team is working with entities such as the Bird Education Network, the Cornell Lab of Ornithology, and the Wild Bird Feeding Industry to build partnerships that provide support and training to refuges. As an example, the Team was able to work with national partners in 2008 to provide 80 binocular/field guide kits to refuges for use with their birding programs.

- 4) Train our Friends organizations and volunteers in using and leveraging new technological tools and strategies for building and strengthening support for refuges and facilitating enhanced wildlife-dependent recreation on refuges.

We are building new training programs such as the 2009 *Friends Unite!* Conference, a Friends partnership training workshop in July 2009, the 2009 Friends Academy, proposed regional workshops for 2010, and webinars focusing on the use of social networking technologies to help in the recruitment of new members and support.

**Goal 7. Protect Resources and Visitors through Law Enforcement**  
**MSI Rating: Ineffective – Agree**

Actions to Take Over the Next 12 Months to Improve Effectiveness

- 1) Develop additional budget requests for a steady influx of new full-time officers.

Refuge law enforcement has been a continued Refuge System and FWS priority in budgets. In FY09, nearly \$5M was dedicated to refuge law enforcement.

- 2) Generate a nationally prioritized list for new full-time officer positions.

This is an ongoing effort that is targeted for completion in summer 2009.

- 3) Rewrite standard position descriptions to more completely reflect the complexity of the law enforcement officer responsibilities

This is an ongoing effort in collaboration with the FWS and DOI divisions of Human Capital. A GS-09 uniformed law enforcement officer (DOI-wide) has been classified and approved by the Firefighter and Law Enforcement Retirement Team. The Refuge System is working with DOI to step this up to GS-11 and down to GS-5/7.

**Goal 8. Provide Infrastructure and Equipment Adequate to Support Mission and Maintained in Good Condition.**  
**MSI Rating: Effective – Agree**

Actions to Take Over the Next 12 Months to Improve Effectiveness

- 1) Identify feasible energy efficiencies and renewable energy components (solar, wind, etc.) for use at Refuge System facilities.

Related to funding available from the American Recovery and Reinvestment Act, an extensive list of opportunities to implement energy conservation and renewable energy measures was created by the

FWS regions. Improved energy efficiencies are a part of deferred maintenance projects being completed under the Recovery Act, and \$7.7 million (22 projects) are devoted specifically to implementation of renewable energy projects. This is a good start but even more is possible with regard to increasing energy conservation and the use of renewables throughout the Refuge System. Field stations are expected to complete energy audits in 2009 to identify all opportunities for conservation or implementation of renewable energy. The FWS's carbon footprint working group will develop a plan to reduce or eliminate carbon emissions based on these energy audit findings. Additional project lists will be developed because we are not yet able to meet our energy reduction goals.

- 2) Develop greater facility/asset management expertise within the Refuge System.

Due to the use and efficiency of online training mechanisms, NWRS Headquarters is replacing a database trainer position with a program analyst focusing on construction justification, energy projects, visitor facility enhancements and the Recreation Fee 5-year plan.

- 3) Request additional funds to address the maintenance backlog.

This is an ongoing activity and we continue to communicate our deferred maintenance needs as the opportunity arises. In addition, we are striving to expand the construction budgets through mechanisms such as: 1) each Region identifying a minimum of 20 refuge construction projects each year as part of the annual data call for developing the construction 5 year plan; 2) maintaining a national list of top-priority visitor centers, 3) identifying component renewal needs through the condition assessment process. This will allow us to better identify significant building renewal costs before they become deferred maintenance and plan and request funds in a timely manner. Overall, our ability to identify deferred maintenance needs is quite good but our ability to give a comprehensive overview of our construction needs remains inadequate.

## **Goal 9. Complete Quality and Useful Comprehensive Conservation Plans on Schedule and With Full Engagement of Partners.**

**MSI Rating: Partially Effective – Agree**

### Actions Over the Next 12 Months to Improve Effectiveness

- 1) Conduct a Region-by-Region assessment of progress towards completion of Comprehensive Conservation Plans (CCP) by the 2012 deadline and identify resources options needed to meet the deadline.

Progress is monitored on a continuous basis via the CCP Accomplishments Database. At this point, meeting the deadline is possible but will be very challenging. The likelihood of meeting the deadline in 2012 varies widely by Region. We have not yet made a thorough and realistic assessment of the resources needed for all Regions to meet the deadline.

- 2) Develop a work plan for the next cycle of CCPs and CCP revisions that will establish priorities and improve CCP quality and consistency.

The CCP Accomplishments Database is currently being modified to establish a schedule for the next cycle of CCPs. A work plan has not yet been developed. All Refuge System Planners met in June

2009 at a National Planning Workshop. One of the primary purposes of the Workshop was to develop concrete recommendations for future improvements to our Conservation Planning program. These proposals could be integrated into a work plan related to the next cycle of CCPs.

- 3) Develop recommendations for integrating climate change considerations into future CCPs.

Each Region recently identified those CCPs that do not adequately address climate change and developed a prioritized list of CCPs that should be revised to better address the issue. Addressing climate change in CCPs was a major topic in the recent National Planning Workshop. Related to the workshop, we are revising a tool developed for our use by the University of Maryland Conservation Biology graduate program called, "A Primer on Climate Change and the Refuge System." This Primer contains specific recommendations for addressing climate change in CCPs. A next step will be development of formal guidance for integrating issues and challenges posed by climate change into CCPs.

- 4) Improve efficiency of CCP approval process.

FWS strives to improve efficiency in the CCP approval process on a continual basis. We have drafted a proposal to eliminate CCP-related Federal Register notices from Headquarters and Department-level review, as was required by the previous administration. If implemented, this change would create a significant time and financial savings without adding significant risk. This proposal will be presented to the incoming FWS Director.

## **Goal 10. Strategically Grow the Refuge System**

**MSI Rating: Ineffective – Agree**

### Actions Over the Next 12 Months to Improve Effectiveness

- 1) Develop the draft Refuge System Strategic Growth Policy and revisions to the Land Protection Planning and Land Acquisition Policies.

The Refuge System's Division of Natural Resources is responsible for drafting the Strategic Growth Policy and revising the Land Protection Planning Policy, and proposals for development of these policies will be presented to the incoming FWS Director. The Division of Realty has responsibility for 341 FW 1, Land Acquisition Policy and Responsibilities; 341 FW 2, Land Acquisition Methods; and other land acquisition policies, some of which must be based on the Strategic Growth and Land Protection Planning Policies. Realty has developed a schedule for revising its FWS Manual chapters, but some are dependent on completion of the Strategic Growth and Land Protection Planning policies.

- 2) Integrate climate change considerations into above policies and the Land Acquisition Priority System (LAPS).

Internal drafts of all three policies have been developed; further work has been put on hold temporarily to conduct analyses of: 1) existing land acquisition projects to determine status of lands within existing approved boundaries that have yet to be acquired; and 2) vulnerability of coastal refuges to sea level rise and implications to future acquisition in terms of both challenges and new opportunities and needs. Because LAPS is based on national datasets (as opposed to regional



datasets such as a coastal vulnerability index or sea level rise models), the team's approach is to outline a process that will address connectivity, including biome shifts. The LAPS team is continuing work on integrating climate change into LAPS and expects to deliver a product for consideration by the Refuge System Leadership Team in early 2010.

- 3) Develop recommendations for enhancing coordination between Refuge System land protection planning and landscape-level conservation planning and design efforts.

Using successful examples such as the ongoing coordination between refuge land protection programs and Habitat and Population Evaluation Team (HAPET) offices in the Prairie Pothole Region, recommendations are being developed through ongoing work on the Directorate Climate Change Priority Action - *Addressing Habitat Fragmentation*. This was also substantively addressed at the recent National Planning Workshop for all Refuge System conservation planners.

**Goal 11. Reduce Wildfire Risks and Improve Habitats**  
**MSI Rating: Effective – Agree**

Actions Over the Next 12 Months to Improve Effectiveness

- 1) Develop a strategy for increasing FWS capacity to cope with the larger and more complex wildfire workload expected to result from climate change.

This was discussed at the April 2009 joint meeting of the National Fire Leadership Team (NFLT) and Line Officer Team (LOT). The NFLT continues to work to expand FWS large wildfire capacity and LOT is working on improving line officer capability/preparedness and fire business support as two of its highest priority tasks. Climate change and resulting increases in wildfire workload and complexity will be addressed in the update of the FWS Wildland Fire Management Program Strategic Plan. This plan is scheduled for completion by March 2010 and will serve as the FWS's strategy for dealing with all wildland fire issues.

We will also develop strategies for addressing impacts of climate change, including changes in fire complexity and frequency, through the upcoming revision of the Fire Branch's Strategic Plan.

- 2) Convene a working group to evaluate options and develop recommendations regarding alternative funds to support certain high-priority burning projects.

This was discussed at the April 2009 joint meeting between NFLT and LOT. Refuge System staff will continue to work with the Office of Wildland Fire Coordination (OWFC) and partners (Cooperative Alliance for Refuge Enhancement, The Nature Conservancy, etc.) to educate congressional decision makers on the needs and methods of maintaining healthy ecosystems.

- 3) Complete a baseline analysis of existing workforce capability and compare this to expected future needs.

Refuge System staff completed an analysis and presented it to NFLT in November 2008. NFLT determined that no further analysis was needed at this time.

- 3) Establish a Fire Management Line Officer Team (LOT) to serve as advisors and consultants to the Chief of the National Wildlife Refuge System and the Chief of the Fire Management Branch to promote policies, programs and initiatives that will maintain and expand our ability to appropriately manage fire on FWS lands.

LOT was chartered by the NWRS Leadership Team in January 2009 and has conducted several conference calls and one joint meeting with NFLT since that time.

**Goal 12: Promote and Enhance Organizational Excellence.**  
**MSI Rating: Partially Effective – *Agree***

Actions Over the Next 12 Months to Improve Effectiveness

- 1) Begin re-designing the Refuge Annual Performance Planning (RAPP) system, including automation of the RAPP workbook, to provide information that is more useful for managers to use in decision-making.

The RAPP data elements are reviewed annually and adjustments made in a few cases to improve utility of data. The automation process for collecting RAPP data is undergoing a makeover that will be used in collection of FY 2010 data. The new system will allow automation of the workbook with the data collection, which will reduce redundancies and the time spent by field staff on RAPP reporting.

- 2) Charter a team to identify information needed nationally to aid Refuge System managers in decision-making. This would include information on budget, workforce, performance, operational needs, and geographic data. The team's report will be used to guide development and revisions of information management systems.

There has been some discussion at the national level of what data elements should be included in this strategy; however, this effort has not been formalized and no team has yet been established.

- 3) Schedule a session during the June 2009 Refuge System Leadership Team Meeting to discuss possible improvements for sharing best management practices on important topics across the Refuge System.

This session did not occur at the June meeting but will be on the agenda for the October 2009 meeting.