

## **Federal Collaboration in State Wildlife Management: Cooperation through Compatible Objectives**

### I. INTRODUCTION

Comprehensive state wildlife management has become an area of increasing interest over the past decade. While past wildlife management programs often focused on either game species or threatened and endangered species, there was increasing recognition that many species did not meet these criteria and were not adequately addressed in existing management programs. Pursuant to the State Wildlife Grants (SWG) Program, each state was required to create a Comprehensive Wildlife Conservation Strategy by 2005.<sup>1</sup> Completion of the plans was a requirement for obtaining federal funding through the SWG program and they were intended to close the management gaps that had previously existed. While the creation of the plans has been beneficial from a conservation standpoint, the identification of threats and necessary conservation actions for a host of new species and habitats has also vastly increased the scope of the conservation mission of the states. Meeting the goals established in the plans will require new strategies for wildlife management, but also increases in both manpower and fiscal resources dedicated to wildlife management.

Despite confidence that the strategies outlined in the plans can be achieved, it is clear that the state agencies charged with wildlife management responsibilities will need to seek additional partners and funding sources in order to meet their objectives. While these partnerships and funding sources will need to come from a variety of sources, this paper will address opportunities for collaboration with federal agencies to meet goals related to state wildlife management initiatives. Although the CWCS was a primary driver for undertaking this research and will be the primary focus of this paper, the concepts and strategies outlined here are equally applicable to other wildlife management programs.

In order to determine the potential for collaboration with federal agencies in wildlife management, four primary research questions were addressed:

1. What are the opportunities for collaboration with federal agencies in wildlife management?
2. What are examples of successful collaboration in wildlife management between state and federal agencies?
3. What are the benefits and limitations of state/federal collaboration in wildlife management?
4. What factors can facilitate increased state/federal collaboration in wildlife management and overcome existing limitations?

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<sup>1</sup> Rhode Island Department of Environmental Management Division of Fish and Wildlife, (RIDEM), "Rhode Island's Comprehensive Wildlife Conservation Strategy." (Wakefield, RI: 2005) 22.

These questions were addressed by undertaking a systematic review of federal programs which provide opportunities for collaboration in wildlife management, followed by a detailed assessment of opportunities for collaboration between state agencies and the Department of Defense.

This research has demonstrated that there are many programs, outside of the traditional federal programs such as SWG and Pittman-Robertson which can be utilized by state wildlife agencies to provide additional assistance in meeting wildlife action goals. These programs have the potential to open up new funding opportunities, engage new federal partners in wildlife management, and to attract new conservation partners in both local government and the NGO community. Through identifying and leveraging these programs, state wildlife management agencies will be more likely to achieve the goals set out in the CWCS.

The goal of this paper is to demonstrate the breadth of collaborative opportunities that exist within the federal government. While traditional partnerships with land use and wildlife management agencies are well established, these are not the only opportunities for collaboration. Despite their primary mandate in other areas, many federal agencies administer programs with a direct focus on natural resource and wildlife management and are required to consider impacts in these areas. In other cases, agency mandates and objectives may have little to do with wildlife management, but may still be compatible with wildlife management objectives. Successful implementation of CWCSs and wildlife management goals will require leveraging resources from as many sources as possible and this paper will demonstrate the breadth of opportunities that exist. In this sense, the goal is not necessarily to identify programs which have shared objectives with CWCS goals, but to identify programs which are compatible with the CWCS and will allow multiple objectives to be met through collaborative processes.

## II. BACKGROUND AND RESEARCH QUESTIONS

This paper is part of a larger CWCS research project. The National Council for Science and Environment funded a national study of the development and implementation of the CWCS. The University of Michigan was one of eight universities selected to take part in this study. The project at the University of Michigan was organized as a master's project involving nine students from the School of Natural Resources and Environment. Along with created a detailed characterization of nine CWCSs in the Northeastern US, the project involved a regional synthesis of plan development and implementation and individual research projects. This paper, the outcome of an individual research project has been informed significantly by the other findings of the master's project at the University of Michigan. Specifically, this paper is a response to some of the challenges identified at the regional level in the Northeastern US.

While there has been significant progress on plan implementation over the past two years, it is also apparent that significant changes will be needed to successfully implement the plans. In keeping with the CWCS goal of expanding the scope of state wildlife management to include all species rather than limited subsets such as game species and threatened and endangered species, there has been a vast expansion in the necessary conservation actions identified in the plans. This expansion has stretched the capacities of many state wildlife agencies and funding and staffing constraints were noted as significant barriers to implementation in the majority of states. This problem is exacerbated by local economic challenges which place further budgetary and hiring constraints on the agencies. While SWG funds are being used by all of the states to implement the plans, it is clear that this will not be sufficient and collaboration with outside partners will be necessary to provide both the funding and manpower for successful implementation. In addition, the comprehensive nature of these plans presents a unique

opportunity to develop collaborative partnerships and maintain efficiency in wildlife management by assuring that all interested parties are working with shared goals and missions.

In light of these challenges, it is likely that increased emphasis on collaboration with federal agencies can provide significant benefits for state wildlife management and plan implementation. While there are many examples of existing collaborative efforts between state and federal agencies, these partnerships often occur between agencies with very similar missions and mandates.<sup>2</sup> To the extent that these partnerships are fully utilized, there is less room for additional gains. However, there are additional opportunities for collaboration beyond the traditional federal partners and more complete utilization of these partnerships may be able to alleviate some of the challenges identified above.

Opportunities for collaboration exist with two distinct types of federal agencies and programs, those with direct conservation mandates and those with compatible mandates. In some cases, federal agencies administer programs which have a direct mandate for conservation and wildlife management. These may come from traditional conservation agencies such as the USFWS<sup>3</sup> or other agencies such as the Department of Defense.<sup>4</sup> These programs have mandates that are substantially similar to the CWCS and state wildlife management generally. In other cases, a federal agency may have a mandate that is not related to wildlife management or conservation, but may nonetheless be compatible with wildlife management goals, allowing federal program mandates to be met while simultaneously providing a conservation benefit. For example, EPA enforcement actions, whose primary goal is to punish and deter violations of existing federal environmental statutes, can include a Supplemental Environmental Project whereby a violator of environmental statutes funds or undertakes an environmentally beneficial program rather than paying a fine.<sup>5</sup> While focused primarily on compliance with EPA regulations, the SEPs can be used to further the goals of state wildlife management agencies. Outside of agencies traditionally associated with conservation mandates, programs with both direct and compatible mandates may not be familiar to state wildlife management agencies, yet collaboration with the departments administering these programs offers significant benefits for implementation of CWCSs and other state programs.

Programs administered by federal agencies, such as those described above, provide an opportunity for increased federal/state collaboration which can provide four key benefits for state wildlife management. First of all, these federal programs can provide an additional source of funding for implementing state wildlife management plans. By identifying compatible actions between state and federal programs, state agencies can leverage the funds provided for federal program implementation to simultaneously address issues included in the state plans, allowing state funds to be used for alternative programs. Similarly, many federal programs are administered by dedicated federal staff which can reduce the demand on state wildlife

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<sup>2</sup> Many state wildlife agencies have strong existing relationships with federal agencies having direct conservation mandates such as the USFWS, USFS, and NPS.

<sup>3</sup> The Endangered Species Act is an example of a program with a direct conservation mandate administered by the USFWS. This program requires the USFWS to develop lists of species that are threatened or endangered in the US, to create a recovery plan, to designate critical habitat for these species, and to consult with other federal agencies whenever a federal project may impact these species. 16 U.S.C. 1531-1544.

<sup>4</sup> The Sikes Act is an example of a program with a direct conservation mandate administered by the Department of Defense. This program requires the DoD to create an Integrated Natural Resources Management Plan for the conservation and rehabilitation of natural resources on all military installations with significant natural resources. 16 U.S.C. 670a-670o.

<sup>5</sup> EPA Memo, Issuance of Final Supplemental Environmental Projects Policy, Apr. 10, 1998.

management staffs by directly implementing the programs, again allowing the states to focus on other aspects of implementation. Third, federal agencies can facilitate outreach and increased collaboration with local governments and NGOs, either through their existing partnerships or through grants that they provide to these organizations. To the extent that the federal agencies decisions are informed by collaboration with state wildlife management agencies and incorporate state wildlife management plans, these partnerships can become an additional form of outreach. Finally, increased collaboration between state and federal agencies can improve the efficiency of wildlife conservation by ensuring that the management goals of the various programs are in agreement rather than in contradiction and by ensuring the sharing of data and other resources to prevent duplicative efforts. By actively seeking out these collaborative opportunities, state wildlife management agencies can alleviate many of the challenges that they currently face.

However, there are also a number of challenges which may limit the effectiveness of state/federal collaboration in some circumstances. First of all, many of the federal programs that offer potential benefits are limited in scope and do not contain the same flexibility as SWG funds for meeting goals identified in the CWCS. Agencies may not exceed their Congressional mandates and limitations based on geography, habitat types, or purpose may prevent collaborative projects with federal agencies from addressing the highest priority issues identified by state wildlife agencies. In addition, many federal agencies and programs retain a focus on the agencies dominant use and conservation goals remain secondary in nature. For example, Integrated Natural Resource Management Plans created by the DOD are intended to promote the conservation and rehabilitation of natural resources, but cannot result in the net loss in the capability of military installations to support their military mission.<sup>6</sup> Similarly, the importance of the dominant mission of agency may result in exemptions from certain federal conservation requirements.<sup>7</sup> In addition, the precise relationship between state and federal agencies can create difficulties in establishing successful partnerships as a single federal agency can act as a landowner within the state, as a regulatory and zoning body over the lands it owns in a state, as a partner organization, and as an organ of a superior government authority. Establishing a partner can be difficult if the agencies do not have a full understanding of the relationships at issue when they seek to collaborate.

Within this framework of potential benefits and challenges to collaboration between federal agencies and state wildlife management agencies, the following research questions were addressed:

1. What are the opportunities for collaboration with federal agencies in wildlife management?

This research question was based on the belief that collaboration with federal agencies is being under-utilized by state agencies seeking to implement CWCSs. This under-utilization may be due to a lack of knowledge of existing programs which could be leveraged for implementation of the plans. Identification of such programs and opportunities for collaboration is an important first step in utilizing effective collaboration as a tool for implementation.

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<sup>6</sup> 16 U.S.C. 670a-670o.

<sup>7</sup> Section 315 of the FY 2003 National Defense Authorization Act provides an exemption from Migratory Bird Treaty Act requirements for military readiness activities at military installations. Peter Boice, "Integrated Natural Resource Management Plans "INRMPs" and the Sikes Act Improvement Act." Presentation, May 9, 2006. [http://www.swap-inrmpworkshops.net/events1\\_seswap1\\_summary.pdf](http://www.swap-inrmpworkshops.net/events1_seswap1_summary.pdf).

2. What are examples of successful collaboration in wildlife management between state and federal agencies?

This question delves more deeply into programs that provide opportunities for federal/state collaboration. Based on the results of the previous question, the examples in this section were drawn from the Department of Defense. The DOD has a robust set of programs which have been effectively used for collaboration in wildlife management and also show that conservation goals are compatible with many federal agency objectives, even military readiness. By identifying successful examples of collaboration through these programs, we can demonstrate their effectiveness and provide additional incentive to undertake the initial costs of beginning a collaborative relationship.

3. What are the benefits and limitations of state/federal collaboration in wildlife management?

This question seeks to draw general lessons from past examples of federal/state collaboration. By distilling the benefits and limitations of these programs, we can provide further guidance to organizations seeking to implement the plans. By understanding the benefits that accrue from these programs, as well as their limitations, organizations can make informed choices about when collaboration with federal agencies will be beneficial and when collaboration may be ineffective in meeting the goals of the plan or organization.

4. What factors can facilitate increased state/federal collaboration in wildlife management and overcome existing limitations?

This question seeks to assist organization interested in federal/state collaboration in overcoming the limitations and challenges that collaboration can pose. This question addresses issues of adaptive management, seeking to learn from past collaborative experiences both from empirical study and debriefing of collaborating parties in order to understand how they were able to facilitate effective collaboration and as well as the changes that might make collaboration more effective.

### III. METHODOLOGY

This research project utilized three primary methods for addressing the research questions outlined above. The first two methods were undertaken in coordination with ConservationStrategy LLC and the Doris Duke Charitable Foundation and involved identifying federal programs that could be leveraged in CWCS implementation and in assessing funding levels for these programs over the past six years. The final method sought to address the final three research questions and involved an in-depth analysis of Department of Defense programs that could be leveraged for CWCS with an emphasis on identifying examples of collaboration, assessing the benefits and limitations, and identifying facilitating factors.

In conjunction with this research project, the author worked on a contract basis with ConservationStrategy LLC, a consulting firm focused on environmental issues, to research and identify federal funding sources that may be available to support implementation of the CWCS. This project was funded by the Doris Duke Charitable Foundation. This project served as the impetus for the larger research project described in this paper and only addressed the first research question identified above. As a result, only summarized findings will be presented for this issue and readers seeking additional information are encouraged to contact the Doris Duke Charitable Foundation directly. The remainder of this project was an extension of the original consulting work and seeks to provide greater context and detail for a select set of programs

within a single federal agency in an effort to provide added depth regarding federal/state collaboration.

### *Identification of Opportunities for Collaboration*

The first step in this research project was to identify federal projects that could be leveraged for CWCS implementation. As noted above, these programs could be the result of a direct conservation mandate or from a compatible mandate. Given the goal of identifying new resources that could be leveraged by state wildlife management agencies, this research focused on non-traditional programs and partners. There are number of federal programs and funding sources that have a direct nexus to state wildlife management that were not included in this study due to the fact that they are already substantially utilized by state agencies in wildlife management. For example, section 6 of the Endangered Species Act, the Pittman-Robertson Act, and even State Wildlife Grants are all clearly relevant to state wildlife management and the CWCSs, but to the extent that these programs are already being fully utilized for those purposes, they do not provide an additional source of funding or assistance in plan implementation. Instead, this research focused on programs that were either located in federal agencies whose primary mandate is not ecological in nature or on programs that are only tangentially related to ecological issues in the hope of finding under-utilized programs that could be leveraged for CWCS implementation through collaborative efforts. The following paragraphs provide the primary strategies used to identify these programs.

1. *On-line searches of the United States Code were conducted using Westlaw® and LexisNexis® legal databases:* This strategy utilized Boolean logic searches for key words such as “funding,” “conservation,” and “environment” to identify statutes and programs which included a focus on conservation activities. This strategy went beyond programs with a conservation mandate, however, and included programs where the conservation benefits were secondary or tangential goals. Once programs were identified, additional research using legal and general searches was used to gain additional information about the program.
2. *A comprehensive electronic search was conducted of all federal appropriations bills for Fiscal Year 2006:* This strategy focused specifically on federal funding programs and sought to identify direct appropriations from Congress for the purpose of conservation. The appropriations bills were searched for the following words (or any derivations of those words): (1) “acquire,” (2) “lease,” (3) “conserve,” (4) “buffer,” (5) “land,” and (6) “easement.” Fiscal year 2006 was selected as the most recent year (at the time of research) when full appropriations bills were passed by Congress. Once programs were identified, additional research using legal and general searches was used to gain additional information about the program.
3. *Electronic searches using Westlaw, LexisNexis and Google for specific programs identified by knowledgeable individuals as having the potential for supporting implementation of State Wildlife Action Plans:* Once initial lists of programs were identified using the two methods above ConservationStrategy circulated these lists to other knowledgeable persons in the field of wildlife conservation to solicit comments and advice. These individuals were able to identify additional federal programs which could be utilized for CWCS implementation and

demonstrate the importance of institutional knowledge within the conservation field as a source of information. Once programs had been identified, research through legal and general search programs was utilized to find more detail about these programs.

4. *Identification of Existing Compilations of Conservation Programs:* The general research used to generate additional information about programs, as well as the advice from individuals in the field of wildlife conservation also resulted in the identification of existing compilation of federal programs that benefit conservation actions. This strategy sought to leverage the past research of other organizations with an interest in wildlife and habitat conservation in identifying beneficial federal programs.

A short summary was prepared for each identified program which included: (1) the statutory basis for the program, if available, (2) the basic tenets of the program, and (3) its potential uses in CWCS implementation.

#### *Assessment of Funding Levels*

Once these programs were initially identified, ConservationStrategy again met with knowledgeable individuals in the field of wildlife conservation, as well as with the Doris Duke Charitable Foundation to identify the most promising of those programs. Sixteen programs were identified and funding levels for those programs were evaluated for Fiscal Years 2003-2008. This method was intended to provide a sufficiently large sample size of funding, as well as a funding trajectory to assess the importance and potential opportunities presented by each of these programs. The following paragraphs provide the primary strategies used to assess these funding levels.

1. *Federal Appropriations for Selected Programs:* This method sought to identify funding levels for selected programs which were directly addressed by Congress through the appropriations process. Appropriations bills for FY 2003-2008 searches were conducted for each of the selected programs using key terms and statutory designations. Funding levels identified through this method only applied to federal appropriations, which may differ from the total disbursement of federal funds in each fiscal year.
2. *A comprehensive electronic search using Google was conducted for all remaining programs which were the subject of federal reporting:* Official federal sources of program spending were searched electronically when information was not available in Federal Appropriations Bills. These sources were considered the most reliable among those existing in electronic form. General electronic searches using key terms for each program were utilized to identify sources with consistent agency spending levels, including Annual Reports (including reports to Congress) and funding databases maintained by the agencies.
3. *A comprehensive search using Google was conducted for all remaining programs which were the subject of reporting by reputable NGOs:* This method sought to leverage the past research of other reputable organizations with an interest in wildlife and conservation funding in cases where consistent federal reporting was unavailable. General electronic searches using key terms for each program were utilized to identify

annual reports generated by well-known conservation NGOs which included consistent spending data.

The data from this research was entered into a spreadsheet to allow for data analysis and comparison between program and over time.

### *Research Regarding Collaboration with the Department of Defense*

After conducting general research across all federal agencies, an in-depth study of collaboration between the Department of Defense and state wildlife management agencies was conducted. This research identified programs of interest from the previous studies and analyzed these programs in more detail. Initial research was conducted regarding the programs themselves including their histories, their mandates and their past activities and funding of conservation initiatives. This research primarily involved extended use of the methods identified above.

Three primary projects, the Sustainable Ranges Initiative, the Sikes Act, and the Legacy Resource Management Program were identified as programs within the Department of Defense that presented the greatest opportunities for collaboration with state wildlife management agencies. Additional research into specific examples of projects initiated through these programs, along with interviews of individuals familiar with these program were utilized to gain additional information. The goal of this research was to identify exemplars of programs in place which demonstrate the existence and benefits of collaboration with state wildlife management agencies. This research was also used to identify the most significant benefits and challenges of collaboration between DOD and state wildlife management agencies, as well as factors that can facilitate additional collaboration.

## IV. RESULTS

This research demonstrated that federal agencies already administer a wide range of programs that could be utilized to implement the CWCSs through collaborative partnerships between federal agencies and state wildlife management agencies. Programs exist within a wide range of federal agencies and administer significant levels of funding which could be directed toward projects that contain CWCS implementation as a primary or secondary goal. Research regarding DOD programs also demonstrates that there is significant interest on the part of federal agencies to enter into collaborative partnerships and to utilize the CWCSs as a tool in agency decision-making at the project level. While certain challenges exist in forming collaborative partnerships, existing programs in the Department of Defense demonstrate that these challenges can be overcome and these existing programs provide groundwork for facilitating additional collaboration in the future.

### *Opportunities for Collaboration*

Research conducted with ConservationStrategy and the Doris Duke Charitable Foundation regarding the identification and assessment of federal programs with potential for use in CWCS implementation identified a total of 56 programs. The number of potential programs becomes even more meaningful, given the decision to ignore well-known and utilized programs within agencies with a primary focus on conservation or natural resource management. Programs were identified in eleven federal department and regulatory agencies, demonstrating



that opportunities for collaboration are not limited to a select few federal agencies. Instead, state wildlife agencies can likely identify opportunities for collaboration with virtually any federal agency that has a significant presence in their state. The table below provides a breakdown of the number of programs identified by agency:

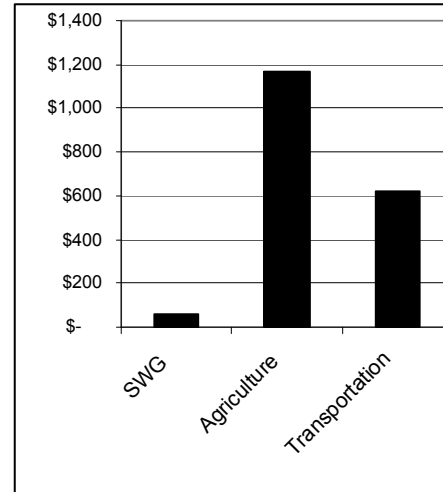
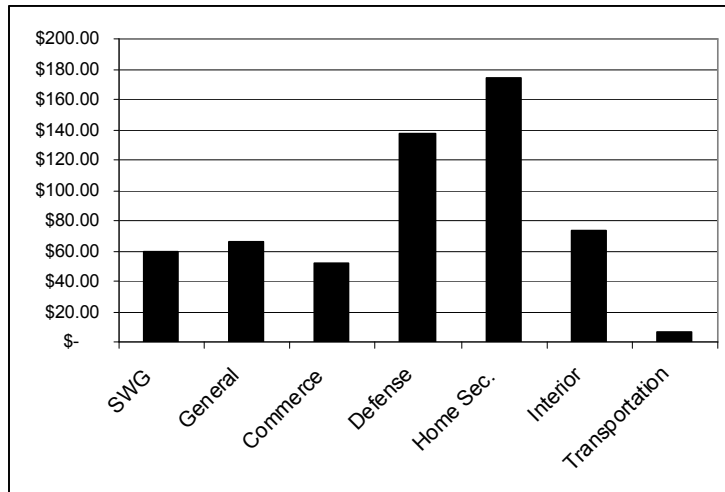
General Programs	2
Dept. of Agriculture	11
Dept. of Commerce	8
Dept. of Defense	7
Dept. of Energy	3
Dept. of Homeland Security	2
Dept. of Hous. & Urban Dev.	1
Dept. of Interior	13
Dept. of Transportation	4
Dept. of Treasury	2
Environmental Protection Agency	2
Federal Energy Regulatory Commission	1

The table above shows the range of programs that have potential benefits for CWCS implementation. While the programs identified span nearly the full range of federal agencies, those agencies that also serve as large landowners or have mandates directly related to land use issues tended to have larger numbers of programs. In addition, there was significant variation in the potential compatibility between the programs and the goals of state wildlife management agencies. Therefore sixteen of the most promising programs were selected for further research regarding program funding levels in order to provide additional information about the extent to which these programs could be leveraged for CWCS implementation. The table below shows the number of programs selected within each agency and the average funding levels for each program for Fiscal Years 2003-2008.

General Programs	2	\$ 66
Dept. of Agriculture	3	\$ 1,169
Dept. of Commerce	2	\$ 52
Dept. of Defense	6	\$ 137
Dept. of Homeland Security	1	\$ 174
Dept. of Interior	1	\$ 73
Dept. of Transportation	1	\$ 6 (619)

The program listed under the Department of Transportation is the Transportation Enhancement Program. This program funds projects that fall within any of 12 criteria, one of which is Highway Runoff Mitigation and Wildlife Crossings. There is no fixed allocation for each of the 12 criteria and projects addressing each criterion are treated alike under the program. An average of \$6 million has been spent annually on Highway Runoff Mitigation and Wildlife Crossings projects, while a total of \$619 million is spend on all 12 criteria combined.

The following charts show the funding with the appropriations for the State Wildlife Grants for comparison:



The charts above show the annual funding levels for the programs described above, aggregated by Federal Department. State Wildlife Grant funding (\$60 million) was added for comparative purposes. The graph on the right was separated out due to the large funding levels for Agriculture and Transportation.

When compared to the funding available from the SWG program, the funds most commonly utilized by the state wildlife management agencies for CWCS implementation, it is clear that there are significant funding opportunities from a variety of other sources. Many of these sources are funded at similar levels, or even much higher than the SWG program. While SWG funding provides more flexibility than other programs, utilizing these programs in for specific CWCS actions that are compatible with them can produce additional sources of funding.

There are two primary ways that these sources of funding can be leveraged to benefit CWCS implementation. First of all, state agencies may be unaware of the programs or may not have identified sources of overlap between the goals of these programs and CWCS actions. In these situations, the programs can provide an additional source of funding that can be used for CWCS implementation. Given the funding challenges identified by many states, leveraging funds in this manner can significantly increase the number of projects that can be implemented, while leaving discretionary funds such as SWG for other projects where such collaboration is not feasible. In addition, many of these programs are already being utilized by federal agencies, local governments, and NGOs to engage in conservation activities. The Transportation Enhancement Program provides an excellent example of this under-utilization of federal programs. The TEP authorizes the Department of Transportation to fund project related to surface transportation that meet one of twelve eligible TE activities.<sup>8</sup> Among the eligible activities are projects that address environmental mitigation of highway runoff pollution, vehicle-caused wildlife mortality, and habitat connectivity.<sup>9</sup> These eligible activities fit well with some of the needs identified by the CWCSs, yet less than 1% of TEP funds are directed toward this criteria. This is clearly an under-utilized program from a wildlife conservation standpoint and additional focus on collaboration with the Department of Transportation could produce additional funds for CWCS implementation.

<sup>8</sup> "Transportation Enhancement Activities," US Department of Transportation, available at <http://www.fhwa.dot.gov/environment/te/>.

<sup>9</sup> "Transportation Enhancement Activities," US Department of Transportation, available at <http://www.fhwa.dot.gov/environment/te/>.

While these programs are currently beneficial from a conservation standpoint, inefficiencies may exist. The CWCS process has resulted in comprehensive plans designed to protect species and habitats within each state. Through collaboration with existing conservation programs funded by the federal government, the states can increase the efficiency of conservation efforts by focusing these existing efforts toward the priorities identified in the plans and by ensuring that conservation efforts are undertaken in concert, preventing duplicative efforts and creating synergies among conservation actors. Given the limited funding and staffing for conservation among federal and state agencies, as well as other organizations, effective organization and prioritization are essential for successful conservation efforts. The CWCSs provide a comprehensive strategy for wildlife conservation and state wildlife management agencies will be able to increase their effectiveness by ensuring that all interested parties are aware of an informed by these plans.

#### *Department of Defense Programs*

While the sections above have shown that there are a large number of programs and significant sources of funding which can be utilized for wildlife management purposes, they are often much more limited in scope than programs such as the State Wildlife Grants program. This section will provide a more detailed analysis of collaborative opportunities with the Department of Defense in order to demonstrate both the potential for wildlife management that these programs exhibit and their inherent limitations. The Department of Defense was selected for a number of reasons. First of all, the DOD has programs which encompass a direct conservation mandate, as well as programs which are designed primarily to enhance the military mission, but are still compatible with wildlife management goals. Thus the examples below will show that collaboration can occur when an agency has a direct conservation mandate or when a direct mandate is absent, but objectives are still compatible. In addition, the DOD has taken a proactive approach to collaboration in a number of settings and thus provides a greater opportunity for analysis of both the benefits and limitations to collaboration for wildlife management. Finally, the DOD has a primary mandate of military readiness that is unrelated to wildlife management or conservation, yet the success of the programs below shows that collaboration can occur when partners' objective are merely compatible and not only when they are shared.

Despite its primary emphasis on military readiness, the Department of Defense's interests are often well aligned with conservation goals. In fact, former Secretary of Defense Donald Rumsfeld has stated, "Some folks seem to assume that the Department's conservation efforts tend to be in conflict with military readiness. In fact, the opposite is usually true. U.S. military ranges provide space to train our forces and to test equipment. And their preservation is essential, because training wins wars and saves lives."<sup>10</sup> In addition, the DOD has considerable influence over conservation in the United States as it manages 30 million acres of land on military installments nationwide. While a small landowner compared with other federal agencies such as the USFS or BLM, the DOD has more threatened and endangered species present on its lands than any other federal agency.<sup>11</sup> As a result, the DOD has the capability to significantly impact the success of conservation efforts in many states.

In addition to the critical importance of DOD land for wildlife conservation, the department administers a number of programs that have the potential to benefit wildlife

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<sup>10</sup> Donald Rumsfeld, "White House Conference on Cooperative Conservation," May 29, 2005.

<sup>11</sup> DOD Representative, "State Wildlife Action Plans and the Military," Presentation, January 25, 2008.

conservation. Despite its primary focus on military readiness, DOD also has a number of direct conservation mandates and administers programs specifically designed to promote conservation. In addition, there a number of opportunities to advance DOD’s military mission while also promoting wildlife conservation. Threats from development and encroachment are a significant concern for DOD and actions to alleviate that threat can also provide important open space and habitat for species of greatest conservation need identified in the plans. The DOD is also active in protecting species listed as threatened or endangered under the Endangered Species Act. As a federal agency, the DOD must consider the effect of its actions on T&E species and through proactive measures; the department can promote species restoration and prevent ESA requirements from compromising the agency’s military mission. For example, the Marine Corps Air Station at Yuma, Arizona has been engaged in captive breeding of Sonoran Pronghorn Antelope on its base in efforts to restore the population of this endangered species.<sup>12</sup> The following section will outline three of the primary programs through which state wildlife management agencies can collaborate with the DOD

### Compatible Land Use Programs

One of the most significant challenges to military readiness stems from encroachment on military installations. This encroachment can take a variety of forms, from light pollution that interferes with night vision training, to conflicts between military training and nearby housing developments, to competition for radio frequency spectrum.<sup>13</sup> In response to these concerns over encroachment, the DOD has instituted a number of programs under the umbrella category of Compatible Land Use Programs such as the Readiness and Environmental Protection Initiative (REPI) and the Army Compatible Land Use Buffer Program (ACUB).<sup>14</sup> These programs seek to further the military mission by creating buffers around military installations to prevent problems associated with incompatible land uses. These programs allow the military to work with state and local governments, NGOs, and willing landowners to prevent encroachments.<sup>15</sup>

<p><u>Camp Ripley, Minnesota:</u></p> <ul style="list-style-type: none"><li>• Conservation Easements covering 4,600 acres.</li><li>• Partnership with DOD, MN National Guard, MN Dept. of Natural Resources and TNC.</li><li>• Provides noise buffer between base and community.</li><li>• Provides key habitat and restoration for wildlife.</li></ul>
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Projects initiated under the Compatible Land Use Program are designed to be collaborative in nature. The military typically works with an NGO who serves as a Cooperative Agreement Partner, usually a land trust, who takes title to the land or easements that are acquired through the program. As noted above, both state and local governments, as well as additional NGO partners are also included in projects. These partners are able to leverage their funds and staffing capacities to create buffer zones which mitigate the conflicts between competing land uses.

<sup>12</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>13</sup> Department of Defense, “Readiness and Environmental Protection Initiative: Diverse Partners, Common Goals, Uncommon Results,” available at <https://www.denix.osd.mil/portal/page/portal/denix/range/Compatible:REPICongress>.

<sup>14</sup> These programs are authorized by 10 USC 2684a “Agreements to Limit Encroachments and Other Constraints on Military Training, Testing, and Operations.”

<sup>15</sup> Department of Defense, “Readiness and Environmental Protection Initiative: Diverse Partners, Common Goals, Uncommon Results,” available at <https://www.denix.osd.mil/portal/page/portal/denix/range/Compatible:REPICongress>.

However, these programs produce significant benefits from a conservation perspective. This is one of the goals mentioned in the statutory authorization for the projects and is a primary reason that many NGOs become involved in these projects.

These projects have the capacity to meet multiple goals and serve conservation goals while also meeting primary military objectives. Incorporation of these programs into CWCS implementation provides several advantages for state wildlife management agencies. First of all, these programs directly address issues of development and fragmentation that were identified as prevalent threats in many CWCSs and also promote habitat corridors. In addition to their direct conservation benefits, they also provide an effective forum for multiple parties interested in conservation to come together. By providing a program that fits within the agendas of the DOD, state agencies, and many NGOs these organizations have an opportunity to develop relationships that may result in future collaborative plans as well.

“These buffer projects represent a win-win partnership bringing together federal, state, local and nonprofit groups to achieve their mutual interests.”  
-- Peggy Booth, MN Dept. of Natural Resources

DOD’s activities under the Compatible Land Use Programs have had significant effects in just a few short years of implementation. Since 2003, the ACUB program has successfully protected 42,000 acres on 16 military installations, with the DOD spending \$176 million.<sup>16</sup> Similarly the REFI program protected 14,688 acres on 7 military installations in 2005 through \$12.5 million in military funds.<sup>17</sup> These funds have increased to \$37 million in FY 2006 and \$40 million in FY 2007.<sup>18</sup> In addition to these military funds, NGOs also provide funding, allowing each group to leverage the funding from the other organizations to meet their objectives. The specific funding level for each project differs, depending on the interest and commitment of the partners in each project.<sup>19</sup>

#### Case Study: The Fort Bragg Army Compatible Land Use Buffer

Fort Bragg is located in the Sandhills region of North Carolina. The installation contains some of the last remaining mature long-leaf pine forests in the southeast, the primary habitat of Red Cockaded Woodpeckers. This woodpecker is an endangered species and the presence of the species on the base resulted in training restrictions and other measures which sought to protect the bird, but also limited the ability of the army to engage in military readiness training. This situation created a unique opportunity where efforts to increase habitat protection for the Red Cockaded Woodpecker were fully compatible with Fort Bragg’s desire to restore their full training programs for military readiness. Beginning in 1999, Fort Bragg, along with the North Carolina Wildlife Resources Commission, the Sandhills Ecological Institute, the Nature Conservancy, the US Army Environmental Center, and the USFWS began a collaborative program designed to protect Red Cockaded Woodpecker habitat.

This program actually predated the official Compatible Land Use Programs and demonstrates the opportunities for collaborative partnerships with federal agencies, even without official conservation programs in place. However, once the ACUB program was instituted, this

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<sup>16</sup> US Army Environmental Center, “Army Compatible Use Buffer Program: End of Year Report: 2005.” US Army Environmental Center, “Army Compatible Use Buffer Program: End of Year Report: 2006.”

<sup>17</sup> Department of Defense, “Readiness and Environmental Protection Initiative: Fact Sheet.”

<sup>18</sup> Department of Defense, “Readiness and Environmental Protection Initiative: Fact Sheet.”

<sup>19</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

project was incorporated into the larger program. The partnership formed with these organizations had three primary objectives: (1) to protect longleaf pine habitat critical for managing the Red Cockaded Woodpecker, (2) to relieve training restrictions at Fort Bragg, and (3) to buffer firing ranges and drop zones on Fort Bragg.<sup>20</sup> Clearly these objectives were not shared equally by all partners, but they demonstrate that a collaborative project can be undertaken when parties have somewhat differing objectives, so long as they are compatible. The Cooperative Agreement Partners for this project were the Nature Conservancy and the Sandhills Area Land Trust and these organizations took title to the real property that was acquired through the project. In addition to these partners, the NC Wildlife Resources Commission, the Sandhills Ecological Institute, the NC Department of Transportation, the USFWS, the NC Department of Agriculture, the NC Division of Parks and Recreation, and many other organizations have been involved as collaborative partners in this project.

The project has also demonstrated considerable results. Since 1999, this partnership has resulted in the acquisition of 24 parcels of land and over 12,000 acres of habitat for the Red Cockaded Woodpecker in the area surrounding Fort Bragg.<sup>21</sup> These results have required the pooling of resources from all of the collaborating partners. The Army has provided over \$12 million for this project while conservation partners have provided almost \$23 million.<sup>22</sup> There has not been a set formula for land acquisition under this plan and, in FY 2006, 412 acres of land were acquired using Army funds while 2,000 acres were acquired using partner funds.<sup>23</sup> This is common for Compatible Land Use Programs where funding decisions are made on the basis of the interest of each party in including a particular parcel of land in the program.<sup>24</sup> What is important, however, is that the partners are still working together and assuring that their actions and funding decisions are informed by the larger project goals. This project has also been successful. In 2006, five years ahead of its target date, the project met its population goal with 23 breeding pairs of Red Cockaded Woodpeckers in the buffer areas.<sup>25</sup>

The final count of breeding pairs of Red Cockaded Woodpeckers is a primary and significant indicator of the success of this program. From an ecological perspective, meeting a conservation goal is an essential part of any collaborative project. However, the benefits of this project extend far beyond that single metric of success. First of all, the collaboration of these actors at Fort Bragg provided Congress with an example of collaboration in action and was a primary driver behind Congress' passage of the statutory authorization for the Compatible Land Use Buffer Program. By demonstrating the existence of mutual benefits between military installations and the military mission, state agencies, and conservation NGOs, this partnership was instrumental in the creation of a dedicated source of federal funding for similar programs.

In addition, this project was only the beginning of a long term collaborative relationship between these partners. In 2000, these partners formed the North Carolina Sandhills Conservation Partnership, an organization formed to continue to facilitate collaboration between federal, state, and non-profit conservation organizations. NCSCP is a permanent organization complete with a director, steering committee and other institutional features that make it a stable part of the conservation landscape in the Sandhills regions that surrounds Fort Bragg. The

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<sup>20</sup> Department of the Army, "Army Compatible Land Use Buffer Program: End of Year Summary FY06."

<sup>21</sup> Department of the Army, "Army Compatible Land Use Buffer Program: End of Year Summary FY06."

<sup>22</sup> Department of the Army, "Army Compatible Land Use Buffer Program: End of Year Summary FY06."

<sup>23</sup> Department of the Army, "Army Compatible Land Use Buffer Program: End of Year Summary FY06."

<sup>24</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>25</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

membership in the partnership has since increased beyond these original partners and continues to be an active player in regional conservation activities. While such an organization may not result from every collaborative project between federal and state agencies, this project demonstrates that collaborative projects can serve as stepping stones to the establishment of long-term relationships between agencies, and also with NGOs who may not have had such a close relationship with the government agencies prior to these collaborative programs.

#### Sikes Act and Integrated Natural Resource Management Programs

The Sikes Act is a federal mandate to the Department of Defense which authorized a program for the conservation and rehabilitation of natural and cultural resources in military installations.<sup>26</sup> Each military installation with significant natural resources is required to complete an Integrated Natural Resource Management Program designed to accomplish the program's goals. Like the CWCSs, there are a number of required elements and each plan must provide for:

- a. Fish and wildlife management, land management, forest management, and fish- and wildlife-oriented recreation,
- b. Fish and wildlife habitat enhancements or modifications,
- c. Wetland protection, enhancement, and restoration, where necessary for support of fish, wildlife, or plants,
- d. Integration of, and consistency among, the various activities conducted under the plan,
- e. Establishment of specific natural resource management goals and objectives and timeframes for proposed action,
- f. Sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources,
- g. Public access to the military installation that is necessary or appropriate for the use described in subparagraph (f), subject to requirements necessary to ensure safety and military security,
- h. Enforcement of applicable natural resource laws (including regulations),
- i. No net loss in the capability of military installation lands to support the military mission of the installation, and
- j. Such other activities as the Secretary of the military determines appropriate.<sup>27</sup>

In addition, the military installations are required to consult with the USFWS and relevant state agencies in creating these plans.<sup>28</sup> The military installations are also required to consult with the USFWS and relevant state agencies during a yearly review and official five-year INRMP reviews.<sup>29</sup>

Like Compatible Land Use Buffers, INRMPs have been used effectively to promote conservation action while also achieving military objectives. For example, Camp Pendleton conducts more than 40,000 training exercises annually, but also contains 18 federally endangered species. The base's INRMP has resulted in a GIS-based Environmental Operations Map which is updated every six months and ensures that training exercises do not further threaten these

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<sup>26</sup> 10 USC 670 *et seq.*

<sup>27</sup> 10 USC 670(a)

<sup>28</sup> DOD Representative, "State Wildlife Action Plans and the Military," Presentation, January 25, 2008.

<sup>29</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

species.<sup>30</sup> Similarly, Marine Corps Base Hawaii has shifted its “mud-ops” training in order to facilitate breeding of the endangered Hawaiian Stilt. By conducting these operations just before breeding season, the birds can nest without interruption and the military operations also remove weeds and improve the nesting habitat.<sup>31</sup> These programs demonstrate that the objective of military readiness can be achieved without degradation of (and in some cases enhancement of) important wildlife habitat.

The INRMPs are not merely an administrative exercise. As noted above, the installations are required to establish specific goals and objectives, as well as timetables for their implementation. A DOD consultant noted that “INRMPs are not documents that sit on the shelf; they are referenced all the time.”<sup>32</sup> These creation and implementation of INRMPs represent a significant commitment to conservation on the part of the DOD and funding under the Sikes Act has averaged \$105 million from FY 2004-2006.<sup>33</sup> In short, these are living and well funded plans that provide significant conservation benefits on military installations. As shown below, these plans have much in common with the CWCSs and the DOD has shown remarkable interest in collaborating with state wildlife management agencies in the development and implementation of both agencies’ plans.

#### *Legacy Resource Management Program*

The Legacy Resource Management Program was created in 1990 in order to provide financial assistance to DOD efforts to preserve the nation’s natural and cultural heritage.<sup>34</sup> The Legacy Program is administered through the Office of the Secretary of Defense, Office for Installations and Environment and provides assistance for conservation by funding specific programs within the Department of Defense. Like the programs described above, it seeks to increase the compatibility of the military mission with conservation objectives and also has a strong focus on collaborative efforts. Legacy Programs funds are subject to a competitive application process and are open to all applications, not just military installations. As a result, any organization, including state wildlife management agencies can apply for Legacy Program funding, as long as their proposed projects also incorporate military readiness considerations. Awards from the Legacy Program are contractual relationships for services which are then funded by the DOD.

The Legacy Program has been used complete projects related to a variety of conservation issues, including habitat preservation, invasive species control, and species and habitat monitoring. In general, the Legacy Program is notable for the wide degree of discretion that exists within the two broad requirements of military readiness and preservation of natural and cultural resources. This discretion permits broad opportunities for collaboration and has a strong emphasis on collaborative project and interactions with outside organizations. As shown below, the program can also fund projects with a focus on collaboration and establishing partnerships as opposed to “on-the-ground” conservation action and has been used as a platform to explore the overlap and opportunities for collaboration between CWCSs and INRMPs.

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<sup>30</sup> Horne Engineering Services, Best Practices for Integrated Natural Resource Management Plan (INRMP) Implementation, p. 9-10 (2005), available at <https://www.denix.osd.mil/portal/page/portal/content/environment/NR/conservation/CooperativeConservation/Value%20of%20Partnerships/Best-Practices-for-INRMP-Implementation-August-2005FINAL.doc>.

<sup>31</sup> Alison Dalsimer, DoD Pacific Islands Region Threatened, Endangered, and At-Risk Species Workshop Proceedings, p. 26-27 (2007).

<sup>32</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>33</sup> Defense Environmental Programs, “Annual Report to Congress,” 2004, 2005, 2006.

<sup>34</sup> Department of Defense Legacy Program, “Legacy Guidebook.”



The Legacy Program has considerable flexibility and provides support for conservation and wildlife management in a variety of ways. For example, by collaborating with Partners in Flight, the Legacy program was able to negotiate military personnel access to the Birds of North America online database, a valuable tool for bird conservation.<sup>35</sup> The Legacy Program also contracted with NatureServe and The Nature Conservancy to update the DOD Biodiversity Handbook, another important tool for wildlife management on military installations.<sup>36</sup> Through projects like these, the Legacy Program ensures that military installations and their natural resource staff have the information and resources that they need to achieve environmental goals while also sustaining the military mission.

The Legacy Program has administered an average of \$8 million per year from FY 2004-2006. While this is a smaller funding level than the other programs, the increased discretion provided by the program and ability for state agencies and other interested parties make it an extremely promising program for CWCS implementation. In addition, the strong emphasis on collaboration make this program a unique vehicle for initiatives designed specifically to foster relationships between state agencies and military installations.

#### Case Study: SWAP & INRMP Workshops

The Department of Defense, through the Legacy Program has also taken the lead in trying to identify opportunities for collaboration in the implementation of SWAPs and INRMPs. In 2006, shortly after the SWAPs were completed, the Legacy Program hosted its first SWAP & INRMP workshop. The goal of this workshop was to bring together the people responsible for managing and implementing both plans to see where the plans overlapped and how the military and state agencies could work together to further implementation goals. DOD felt that “it would be a good idea to try and meld those two things together to see what kind of overlap there might be in plans and where DOD could work better with the state agencies and maybe do collaboration projects.”<sup>37</sup> This program began with two workshops in 2006, one in the Southeast which included North Carolina, South Carolina, Georgia, and Florida; and one in the Southwest which included California, Nevada, Utah, and Arizona. Again, it is important to note that the Department of Defense, through the Legacy Program, has used the existence of these complementary plans to reach out and seek to collaborate with state agencies.

The workshops lasted for two days and included representatives from military installations, state wildlife management agencies, and other federal agencies. The workshops began with overview presentations on both the State Wildlife Action Plans and the Integrated Natural Resource Management Programs. The organizers of the workshop felt that an important first step in this process was to ensure that every participant was on the same page and has at least a basic understanding of the scope and objectives of each plan.<sup>38</sup> After these initial presentations, the workshops consisted primarily of breakout sessions where participants were able to develop relationships with individuals from other organizations. The breakout sessions were also used to explore the potential for collaboration in the implementation of the two plans. Each state developed a potential collaborative project throughout the workshops, including basic project goals, a general structure for the project, and potential sources for funding. These

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<sup>35</sup> Stepping Stones: Newsletter of the Department of Defense Partners in Flight Program, p. 5 (August 2005).

<sup>36</sup> J. Douglas Ripley, Revision of the DoD Biodiversity Handbook, presentation at Sustaining Military Readiness Conference, August 1, 2007.

<sup>37</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>38</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

workshops have been able to provide two significant benefits for participants. First of all, they help build relationships between the military installations and state agencies, allowing participants to meet their counterparts in the other organization and gain a better understanding of what they do. Second, the breakout sessions and development of collaborative projects clearly demonstrate the compatibility of the two plans and the potential for integrating them during implementation.

The breakout sessions resulted in a wide variety of projects that could be implemented through collaboration between the state agencies and the DOD. Proposed projects from the Southeast Workshop included a state-wide conservation forum in Georgia that would foster further collaboration regarding Gopher Tortoise management and Army Compatible Use Buffers as well as a collaborative management program for species at risk in North and South Carolina to eliminate the need for federally listing three species.<sup>39</sup> Proposed projects from the Southwest Workshop included assessment and restoration of seeps, spring, and riparian systems in Nevada with the goal of improving habitat for Species of Conservation Priority including desert bighorn sheep, mountain quail and sage grouse.<sup>40</sup> A proposed project from the Great Plains Workshop included a DOD liaison pilot project which would fund a state wildlife management employee in Texas and New Mexico who would be tasked with enhancing coordination and communication between partners and standardizing procedures across military services.<sup>41</sup> These proposed programs demonstrate the need to develop relationships between agencies as a prerequisite for effective collaboration, but also show that important on-the-ground conservation initiatives can be undertaken.

The workshops have proven to be a successful project in two primary ways. First of all, these initial pilot projects have generated enough support among participants and the Legacy Program organizers that additional workshops were planned. In 2007, workshops were conducted for the Southern Plains states and for the Mid-Atlantic States and a 2008 workshop has been planned for the Northeast states. This interest in future workshops is a clear indication that they are producing benefits for participants. In addition, the Legacy Program has funded six of the projects that were identified in the Southeast and Southwest workshops during fiscal year 2007.<sup>42</sup> Peter Boice, the director of the Legacy Program has made SWAP implementation projects a point of emphasis for Legacy Program funding and has used the workshops as a way to encourage participants to submit the projects that they have identified. Legacy Program awards have not been finalized for fiscal year 2008, but several additional projects from the workshops were submitted. Based on the level of interest from participants, additional projects are expected for upcoming funding cycles as well. By providing both a forum to explore collaborative partnerships and a funding mechanism to support the projects that are identified through the workshops, the Legacy Program and SWAP & INRMP workshops are a powerful method of encouraging collaboration between the military installations and state wildlife management agencies.

### *Benefits, Challenges and Facilitating Factors*

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<sup>39</sup> Southeast State Wildlife Action Plan & Integrated Natural Resource Management Plan Workshop Summary, p. 133, 135, available at [http://www.swap-inrmpworkshops.net/prior\\_workshops.html](http://www.swap-inrmpworkshops.net/prior_workshops.html).

<sup>40</sup> Southeast State Wildlife Action Plan & Integrated Natural Resource Management Plan Workshop Summary, p. 60, available at [http://www.swap-inrmpworkshops.net/prior\\_workshops.html](http://www.swap-inrmpworkshops.net/prior_workshops.html).

<sup>41</sup> Great Plains State Wildlife Action Plan & Integrated Natural Resource Management Plan Workshop Summary, p. 14, available at [http://www.swap-inrmpworkshops.net/prior\\_workshops.html](http://www.swap-inrmpworkshops.net/prior_workshops.html).

<sup>42</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

This detailed analysis of collaboration with the Department of Defense reinforces many of the initial assumptions regarding the potential benefits and challenges to collaboration between state and federal agencies. This section will describe some of the lessons learned from these programs by considering the benefits to collaborative efforts, challenges, and facilitating factors that can improve collaborative efforts.

### Benefits

Participants in these collaborative efforts identified all of the benefits of collaboration that were discussed at the beginning of this paper. In almost every instance where collaboration occurred, the ability to leverage staff and funding by pooling resources was listed as a significant benefit to collaboration. While the ability to leverage funding is not surprising, given the strong investments that DOD has made in conservation fields, the ability to leverage staffing may be more unique as DOD is one of the federal agencies with a large staff dedicated to conservation efforts. In addressing the issue of leveraging resources, a DOD representative noted that both the states and DOD are constantly faced with resource constraints, but emphasized that “by working together, you can probably get some more stuff done than you would by yourself.”<sup>43</sup> This is clearly a significant benefit where it exists, but may not be possible in all situations. The Legacy Programs funding of both the SWAP & INRMP workshops and subsequent projects provides an excellent example of this benefit as leaders from both agencies are working together to achieve their conservation goals. In addition, the Compatible Use Buffer Programs demonstrate that the ability to pool resources and funding can extend beyond these agencies as a number of NGOs and local governments are also active participants in these programs. At a time when virtually every party with an interest in conservation is strapped for both staff and funding, the ability to pool these resources is a powerful tool.

While the ability to pool resources is perhaps the most obvious benefit of collaboration, participants in these programs also identified a wide variety of benefits that fall under the general heading of efficiency. Perhaps the simplest of these benefits is the ability to share information and data between agencies. Both state agencies and the DOD develop discrete data as well as institutionalized knowledge about conservation needs and actions and increased collaboration allows them to share this information with each other. Given the high costs of generating this information, the ability to obtain in a relatively cost-free manner from another organization is a significant benefit. A DOD representative highlighted the benefit of the CWCSs as an information tool, stating, “[N]ow we can see what [the states’] priorities are, which gives a larger context. In the sense, you know the field guys certainly have their priorities, but now this is from a state priority.”<sup>44</sup> Thus the state priorities and research can be used as a tool in DOD planning. This benefit is seen most clearly when agencies undertake duplicative efforts which can either be eliminated if the same information can be gained from another source or can be streamlined by shifting the effort to a joint project. For example, the DOD has one of the most active bird conservation programs among federal agencies and recently developed a Bird Conservation Database which consolidates existing information and allows for dissemination to anyone who acquires a login for the system.<sup>45</sup> Programs such as this ensure that data collected by one organization is available to potential partners with overlapping interests and prevents the need to duplicate the data.

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<sup>43</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>44</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>45</sup> Steppingstones: Newsletter of the Department of Defense Partners in Flight Program, p.1 (August 2005).

In addition, collaborative efforts can produce a more holistic approach to conservation efforts. Without collaboration there is a significant chance that the agencies will undertake conflicting management programs and collaborative projects, such as the SWAP & INRMP workshops can reduce land use and management conflicts by allowing the agencies to share information and goals. The need for a holistic approach was a driving force behind the SWAP & INRMP workshops and Bruce Beard noted that a common problem was having “groups of people that are working *near* each other, but not necessarily *with* each other.”<sup>46</sup> By collaborating and working with each other, partners can identify common goals and set priorities for large scale issues such as habitat protection, corridors, and buffer zones. A DOD representative stated that holistic and shared management goals are important because “ecosystems don’t stop at even at a state necessarily, so having those documents and having it written down somewhere is hugely helpful.”<sup>47</sup> Even if the agencies continue to work independently on their own land, the ability to set priorities and goals at a larger level assures that these independent actions will be compatible and produce a consistent conservation strategy through management continuity. In addition, each agency brings a unique set of skills and strengths to the table in these settings and a collaborative approach to conservation management allows the partnership to effectively utilize the strengths of all of the stakeholders.

While there are clear benefits for state wildlife management agencies that arise from collaborative efforts, it is also important to recognize that the federal agencies also derive significant benefits. Highlighting the importance of these benefits can be an important step in beginning collaborative programs. Participants in the SWAP & INRMP workshops identified several DOD benefits that can arise from collaboration. First of all, a better understanding of the SWAPs provides a larger, holistic perspective for the INRMPs. The INRMPs are limited in scope to a specific military installation, but ecosystems are not limited to DOD fence lines. The information contained in the SWAPs as well as the ability to communicate to state agency personnel can allow the DOD to properly place their own installation within a larger conservation context and design plans that will be more effective from a conservation standpoint. In addition, the SWAPs can help DOD to prioritize its own actions as these plans provide a better understanding of the threats to wildlife on a state-wide level and provide a context for DOD action. Finally, collaboration can produce tangible benefits such as avoiding or mitigating future species listings which can benefit DOD’s military mission by preventing conflicts between training and conservation needs.

### *Challenges to Collaboration*

Despite the promising results from existing collaborative projects, participants have identified a number of challenges that can impede efforts at collaboration. These challenges include a lack of awareness between agencies, inconsistencies between and within agencies, a lack of resources, and constraints on federal agencies.

One of the primary challenges identified by participants in collaborative efforts is a lack of awareness between the agencies. This is seen most clearly in a lack of awareness of the programs and projects that are already in place. Participants highlighted a lack of awareness of SWAPs among DOD personnel, a lack of awareness of INRMPs among state agency personnel,

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<sup>46</sup> Southeast State Wildlife Action Plan & Integrated Natural Resource Management Plan Workshop Summary, p. 9, available at [http://www.swap-inrmpworkshops.net/prior\\_workshops.html](http://www.swap-inrmpworkshops.net/prior_workshops.html) (quoting Bruce Beard, Office of the Deputy Under Secretary of Defense (Installations and Environment)).

<sup>47</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

and a lack of awareness of the JLUS program among local governments as challenges to collaboration. All of these programs present opportunities for collaboration, but unless other organizations are aware of these programs and understand them, they will be under-utilized. Similarly, a lack of understanding of military objectives and the military mission on the part of state agencies serves as a barrier to collaboration. The DOD is not primarily a conservation agency and unless state agency personnel are able to gain an understanding of military objectives and how conservation fits into those objectives, collaboration will be difficult. A DOD representative noted that “a lot of times the impression is that DOD isn’t doing all of the things that they should, and that isn’t always necessarily the case.”<sup>48</sup> This demonstrates both the problem of lack of communication regarding existing programs within the DOD as well as an improper understanding of the military mission. However, even when these barriers are overcome there are additional challenges on the individual level. Both state agencies and the DOD can be hard for outsiders to navigate and it can be challenging to connect the right people in each agency so that effective collaboration can occur. High levels of turnover in each agency exacerbate this problem through a loss of established contacts and institutional knowledge developed from past collaborative efforts.

In addition, differing standard operating procedures, databases and program requirements were identified by many participants as a significant barrier to collaboration. As noted above, the ability to share information and data is a substantial benefit, but a lack of standardized methods and compatible data and databases can stymie efforts to share valuable information in a form that can be readily used. In addition, there are significant language and “acronym” barriers that occur among specialized agencies. These agencies develop their own language through internal standard operating procedures and it can be difficult for an outsider to navigate this space. Even the use of acronyms described above such as CWCS, SWAP, INRMP, and ACUB may be commonplace within an agency, but unintelligible to outsiders without explanation. This problem was identified in the SWAP & INRMP workshops and the conference started with presentations by military and state agency personnel to “get everyone on the same page.”<sup>49</sup> Finally, there are significant inconsistencies within DOD between military installations, conservation programs, and military branches. A DOD representative noted that complications for other organizations can arise because “each of the services implements this program differently and has different requirements based on their internal decisions.”<sup>50</sup> Thus, even after a state agency has developed collaborative projects with a single base, it may be unable to effectively transfer its knowledge of DOD to another program or military installation.

In addition, a general lack of resources is a challenge to collaboration. Many agencies and specific military installations face constraints with respect to time, staff, and funding. While collaborative efforts can alleviate some of these challenges through increased efficiency and pooling of resources, the initial steps in a collaborative project also require significant resources and commitments that do not produce immediate tangible results. The agencies are often compliance driven and focus on meeting legal obligations and requirements before expending resources on other pursuits. Because there is a tendency to focus internally before exploring collaborative projects, opportunities to create efficient collaborative projects may be lost.

Finally, there are challenges associated with the unique nature of each federal agency which can impede collaborative efforts. Given the DOD’s primary focus on its military mission,

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<sup>48</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>49</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>50</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

there are times when security concerns may constrain communication, limiting the ability of these agencies to work together. Security concerns may also force DOD to limit public use and information about on-base activities which constrain collaboration and prevent valuable information from being exchanged. Issues of sovereign immunity and DOD exceptions from certain conservation statutes such as the Migratory Bird Treaty Act may also serve to impede collaboration as they create differences in agency objectives and can create conflicts in management goals. In addition, there can be larger-scale political differences between state and federal governments which impact the ability of agencies within the executive branches to work well together.

### *Facilitating Factors*

Despite the existence of the challenges outlined above, there are a number of activities that can be utilized to facilitate future collaboration. These factors include increased and facilitated interaction between agencies, standardization of data and procedures, and early involvement in planning processes.

Participants in the SWAP & INRMP workshops identified increased interaction between agencies as the primary means of overcoming challenges to collaboration. This highlights the perceived importance of a lack of awareness as a primary challenge. Establishing strong relationships is central to collaboration, and it is no surprise that this was a key facilitating factor. Issues which could improve collaboration begin at the highest level within the agencies and an emphasis on buy-in from agency leadership was seen as a priority. A DOD representative noted a benefit of the SWAP & INRMP Workshops was that “we had some of our headquarters people come and attend these as well and they get to hear and we also report back to our committee within DOD internally.”<sup>51</sup> In addition, DOD representatives suggested a need for a military liaison within state offices. Such a person, located at a higher level within the agency, could serve in a coordinating role and develop knowledge of the activities and procedures across multiple military branches and installations. Liaisons of this kind were proposed in the Great Plains Workshop<sup>52</sup> and already exist between the DOD and USFWS. In reference to the USFWS liaison in the Southwest, a DOD representative noted “[h]e knows each of the bases, he goes to the review meeting, so he’s one constant at multiple installations which is been a huge help.”<sup>53</sup> Continued and regular meetings such as the SWAP & INRMP workshops were also seen as a key facilitating factor and an essential feature for effective collaboration. An extreme version of this is the Sustainable Sandhills Conservation Partnership in North Carolina where representatives from the DOD, the USFWS, and the state all work from the same office, ensuring that a continuous flow of information between agencies.<sup>54</sup> Suggestions such as provision of funding for travel and meals, along with mandatory attendance were seen as potential methods to ensure that the necessary personnel were taking part in these meetings. Finally, increased awareness of the day-to-day activities of each agency was considered to be important and activities such as visits to military installations, and job shadowing were seen as potential methods to increase this awareness. While such activities should be encouraged in an informal setting, the inclusion of a field trip to the Marine Corps Base Hawaii as part of the DOD Pacific

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<sup>51</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>52</sup> Great Plains State Wildlife Action Plan & Integrated Natural Resource Management Plan Workshop Summary, p. 14, available at [http://www.swap-inrmpworkshops.net/prior\\_workshops.html](http://www.swap-inrmpworkshops.net/prior_workshops.html).

<sup>53</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>54</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

Islands Region Threatened, Endangered, and At-Risk Species Workshop was extremely beneficial for the non-military attendees.<sup>55</sup>

The need for standardization was also seen as a requirement for effective collaboration. As a direct recognition of the challenges faced by a lack of standardization, this is a rather obvious need. However, there is not an easy way to assure standardization. Instead, this will require a committed effort on the part of both state and federal agencies to consider their current procedures and whether they can be changed in a way that produces additional standardization. This is also dependent on increased awareness of the standard operating procedures and methodologies of each agency and can only be achieved through increased awareness and relationship building as described above.

Finally, increased involvement at the planning level was seen as important. There is substantial overlap between activities and programs between the agencies and integration of these activities and programs is seen as essential. The overlap between SWAPs and INRMPs is a great example of this and the SWAP & INRMP workshops is a significant step in the right direction. It is important, again, to develop strong relationships between agencies so that there is adequate involvement at early stages in the planning process to establish common goals and objectives and to prioritize plans in a manner that will facilitate collaboration. As an example, DOD staff has expressed a strong interest in utilizing SWAPs in INRMP planning and feel that this will be facilitated through an increased emphasis on prioritization within the plans and have helped to fund AFWA's general characterization of the 50 SWAPs in the hope that such priorities will emerge from that process. Increased emphasis on prioritization in future revisions of the SWAPs will greatly assist DOD in assuring that its own efforts are consistent with state goals and objectives.

#### V. CONCLUSIONS

As the sections above describe, there are many opportunities for organizations interested in wildlife management to collaborate with federal agencies. These agencies have a host of programs and substantial funding that can be leveraged for conservation and wildlife management initiatives. In addition, the CWCS process has created plans in each state which outline important wildlife management threats and the actions which might mitigate them. Utilizing the CWCSs as a means of informing federal agencies of opportunities for collaboration can provide substantial benefits for state wildlife conservation. This concluding section will consider the actions which are required to achieve the benefits of collaboration and make recommendations for effective collaboration.

The initial results of this paper have shown that there are a multitude of federal programs which can be utilized to enhance wildlife management efforts, yet many of these programs are under-utilized. The first and most important recommendation for state wildlife conservation is to broaden the scope of inquiry regarding federal funding. While traditional partners such as the USFWS and funding programs such as SWG and the Pittman-Robertson program should remain central to state wildlife management, an exclusive focus on these programs is not efficient. Rather than simply focusing on shared wildlife management objectives, states and other organizations must broaden their scope to programs with compatible objectives. As DOD's Compatible Buffer Program demonstrates, objectives of noise control and wildlife management are not the same, but they can be compatible and achieved simultaneously. By broadening the search for conservation partners to include federal agencies administering compatible programs,

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<sup>55</sup> Alison Dalsimer, DoD Pacific Islands Region Threatened, Endangered, and At-Risk Species Workshop Proceedings, p. 25-27 (2007).

significant gains for wildlife management can be achieved. A DOD representative noted that many in the conservation community are amazed at the positive conservation work that the DOD does.<sup>56</sup> Given the scope of the problems confronting wildlife management, the conservation community needs to seek out these partners and programs and utilize them to their fullest extent. Achieving compatible – rather than solely mutual – goals will leverage a new range of programs and funding sources and create many new opportunities for wildlife conservation.

In addition to taking a broader approach to collaboration, states and other conservation agencies must gain familiarity with the federal agencies and programs that are active in their regions. While many federal agencies and programs have the potential to benefit wildlife conservation, the dominant uses and spatial limitations of these agencies will dictate where collaboration can occur. For example, the DOD programs discussed above are largely limited to military installations and will not be applicable to state which does not contain such installations. However, virtually every state has a strong federal agency presence of some kind, whether through the military, energy facilities, commerce, or merely transportation programs. Effective collaboration will require a familiarity with federal activities within the relevant geographic sphere and with the programs that are administered there. This clearly takes effort and one state wildlife management representative has asserted that a staff member dedicated to federal funding and grant opportunities would be beneficial.<sup>57</sup> Given resource and staffing constraints, dedicating salary and time to such pursuits can be difficult, but the potential rewards of leveraging new sources of funding through collaborative efforts may well be worth the initial cost.

Effective collaboration will require more than merely identifying federal agencies and programs active within a state. The establishment and development of relationships between organizations is also essential. When collaboration is based on the premise that compatible objectives, rather than mutual objectives, can be achieved, there is a stronger need for trust and respect among parties. As noted above, a lack of understanding of the operations and goals of other agencies is a barrier to collaboration. Through long-term communication and increased knowledge of the actions and objectives of other organizations opportunities for collaboration will be identified and the desire to work collaboratively will be achieved. In many cases, federal agencies which engage in conservation efforts are proud of their work and wish to share it with others. A DOD representative noted that the agency is very proud of the conservation work that they do and that natural resources staff are “interested in the good things that they are doing.”<sup>58</sup> Developing these relationships also required a commitment of time and resources as staff must be given the flexibility to meet with and learn from counterparts in federal agencies. However, formal methods can also be used to develop these relationships. Programs such as the SWAP & INRMP Workshops provide an official method of bringing individual actors together and such conferences should be encouraged. In addition, the use of liaisons with federal agencies can provide a key contact point in developing relationships.

Another requirement for effective wildlife conservation is early activity on the part of states and other organizations. While collaboration can occur effectively in an ad hoc manner, both states and federal agencies often engage in long-term planning which sets agendas and future actions. Collaboration at early stages in planning can be an effective way to ensure that

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<sup>56</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

<sup>57</sup> Rhode Island Department of Environmental Management Division of Fish and Wildlife, telephone interview with Joel Visser, September 27, 2007, Ann Arbor, MI.

<sup>58</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.



opportunities for collaboration will occur. For example, strong state participation in the INRMP planning process will ensure that state wildlife management goals will be incorporated into each military installation's internal conservation planning. Similarly, early involvement in planning for energy facilities or transportation projects will help to ensure that each group's interests will be incorporated into the projects that are planned. While compatible objectives can often be achieved, they may also be foreclosed once initial planning decisions are made. Through early engagement such as this opportunities for collaboration to create positive benefits can accrue, but opportunities to collaborate to mitigate degradation can also occur. Thus the states and other organizations can use early activity in both offensive and defensive manners.

It is also important to recognize that not all federal programs necessarily allow for collaboration in implementation and states can be more active in guiding the planning decisions of federal agencies. For example, INRMPs are primarily utilized for conservation on bases, and are less likely to fund or engage in projects off of their bases. As noted above, participation in planning can be effective here, but existing state resources can also be utilized. For example, the DOD believes that CWCSs can be utilized as a resource in setting goals for conservation on military installations by providing a broader conservation context.<sup>59</sup> In these situations, it is essential that the plans and resources produced by the states are sufficiently user-friendly so that they can be easily accessed and incorporated. Features such as clear prioritization of threats and conservation actions comprise an essential part of making these plans user friendly. Even if the states have no involvement in implementing federal programs such as INRMPs, their conservation objectives can be achieved if state goals and priorities, as identified in these resources, are incorporated into the projects undertaken by federal agencies. Again, this is an opportunity to provide a key resource to federal agencies, but also to leverage their conservation activities to achieve state wildlife conservation goals.

Successful collaboration also requires effective communication and efficient transfer of information. As noted above, differences in standard operating procedures and organizational structure, along with incompatible data, can impede collaborative attempts. In order to promote collaboration, these barriers should be removed to the extent possible. Standardization of information is the most promising area for improvements in this area. By working together in planning stages, data and other information collected by different organizations can be assembled in a way that is useful and comparable between organizations. Collection of redundant data or excessive manipulation to put data into useable formats is inefficient and parties will be better served to standard as much information as possible. Again, this process will require significant investment in planning and relationship building between parties before such standardization projects can occur. In some cases, especially with standard operating procedures and organizational structure, standardization may not be possible. In these situations, the need for long-term relationships and institutional knowledge are required to ensure that counterpart organizations can be efficiently navigated. By focusing on the establishment of long-term relationships in a formal rather than ad hoc manner will help to ensure that the institutional knowledge regarding these different organizations will be maintained.

While the issues above have been focused on direct collaboration between federal agencies and another party, a number of federal programs provide opportunities to bring in third parties and provide an opportunity for state agencies to leverage these organizations to implement state wildlife management goals. Some federal programs specifically target local government or NGOs and may provide a mechanism to reach these organizations when direct

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<sup>59</sup> DOD Representative, Telephone Interview with Joel Visser, March 13, 2008.

contact has not occurred. For example, the Joint Land Use Study Program in the DOD is focused largely on local governments and provides funding to them. To the extent that state agencies can work with the DOD in setting conservation objectives, these collaborative programs between the DOD and local governments can still be leveraged to achieve state wildlife conservation goals. The close relationship between the DOD and NGOs under the Compatible Land Use Buffers offers a similar opportunity. Again, successful collaboration between federal and state agencies at the planning stage can widen the scope of collaboration and leverage the conservation activities of third parties by incorporating state priorities into their actions

The purpose of this paper was to demonstrate the opportunities that exist for federal collaboration in state wildlife management. While traditional partners will likely remain a central part of state/federal interaction, the existence of programs and projects in other agencies can also be utilized for conservation. While there are many examples of direct conservation actions being undertaken by federal agencies, many other programs are compatible with wildlife management goals, even if they are based on other objectives. Leveraging these programs will provide additional conservation resources for states and organizations that are perpetually faced with resource limitations. Effective collaboration will not be easy and will require dedicated action on the part of state agencies and other interested organizations. Establishing relationships and learning the standard operating procedures and nuances of federal organizational structures are essential precursors to collaboration. Only after this initial investment can compatible objectives and opportunities for collaboration be identified. While this requires a substantial investment on the part of collaborating agencies, the potential benefits are also significant and will likely be worth the investment.