

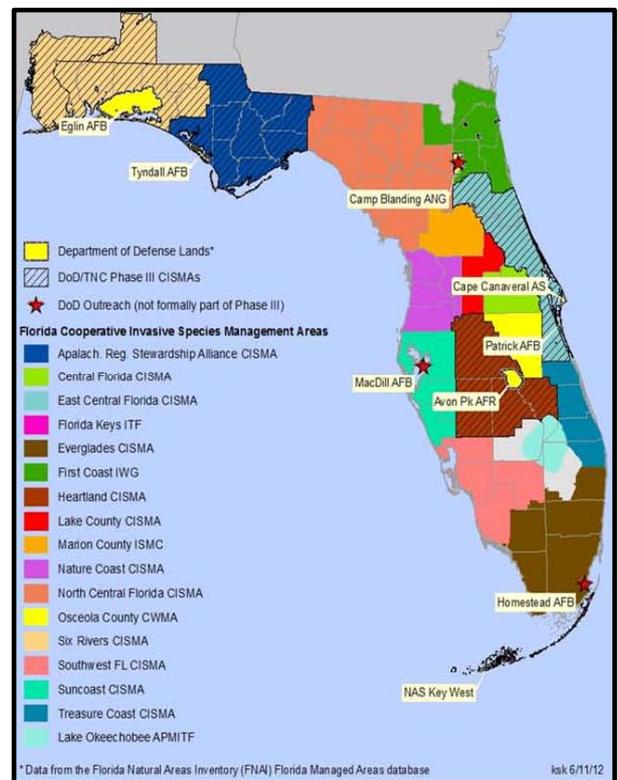


Sustainable Cooperative Invasive Species Management Areas (CISMAs) for Effective Management on Military Bases and Adjacent Lands across Florida (Legacy 11-437)

Abstract

This Department of Defense (DoD) Legacy Resource Management Program invasive non-native species project, began in 2009 and concluded in 2012. The Nature Conservancy (TNC), with Eglin Air Force Base (AFB) as the lead military installation, and with funding provided by the DoD Legacy Program, formed a partnership to collectively address the threat of invasive non-native species within Florida military installation boundaries, watersheds, and on adjacent lands. In three years, this project has evolved from creating, to expanding, to sustaining Cooperative Invasive Species Management Areas (CISMAs), proving this is an efficient and effective way to combat the threat of invasive non-native plant and animal species.

Partner installations actively participating in this project include: Eglin AFB, Tyndall AFB, Camp Blanding Army National Guard (ANG), Avon Park Air Force Range (AFR), Cape Canaveral Air Force Station (AFS)/Patrick AFB, and Naval Air Station (NAS) Key West. Additional installations benefitting from this project include: NAS Pensacola, NAS Whiting Field, Homestead AFB, MacDill AFB, and many outlying fields.



Invasive non-native species have been identified by all of the DoD installations as both ecological and economic threats to the natural communities and native species that they manage. CISMAs encourage development of local partnerships among federal, state, and local governmental agencies, tribes, individuals, and other interested groups to manage invasive non-native species in a defined geographic area addressing both public and private lands. The CISMA approach results in efforts that work across boundaries, pool limited resources and similar priorities, and create a unity of voice that will propel the issue of invasive non-native species to the forefront of the public's sight as well as improve efficiency and effectiveness in management.

This highly successful CISMA project now includes and/or supports all military installations in Florida, regional public and private partners, and the Florida Invasive Species Partnership (FISP). The CISMAs involved in this project, on and adjacent to DoD lands, as a result of DoD Legacy Program and other partner funding, are now more effectively monitoring and controlling invasive non-native species resulting in improved mission flexibility and imperiled species protection.

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Project Specifics

Description of geographic setting: This project ranged from the Western Panhandle of Florida, to Central Florida, to the Florida Keys, and partnered with all of the military installations in the state.

Principal investigators: Kristina Serbesoff-King, Invasive Species Program Manager, The Nature Conservancy

Partners: The partner agencies and organizations contributing funding and in-kind services for this project are extensive, making it impossible to include the list without unintentionally overlooking valuable regional public and private contributors. While some of the main partners were statewide, all of the CISMAs worked with local governments, agencies, private landowners, and volunteers as part of the overall strategy for effectiveness. To show the breadth of the involvement by others the following partners in the project were included, but were not limited to: U.S. Fish and Wildlife Service, U.S. Forest Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Forest Service, Florida Department of Transportation, Florida Water Management Districts, University of Florida, University of Georgia, Florida Exotic Pest Plant Council, and the Florida Invasive Species Partnership.

Branch: The CISMA Legacy projects expanded to involve all installations in Florida representing three Military Service branches, Air Force, Army, and Navy.

Project location: Eglin Air Force Base in Northwest Florida was the lead base for the CISMA Legacy project. In the first year, the project included four bases and in the second year expanded to six bases. By Phase III all military installations in Florida were benefitting from CISMAs.

Installation size: The military installations officially included in this project included Eglin AFB 464,000 acres, Tyndall AFB 29,000 acres, Camp Blanding ANG 73,000 acres, Cape Canaveral AFS/Patrick AFB 16,000 acres, Avon Park 106,000 acres, and NAS Key West 5,800 acres with a project total for installation involvement of almost 694,000 acres in Florida. This does not include other installations that have collaborated and benefitted such as NAS Pensacola, NAS Whiting Field, Homestead AFB, and MacDill AFB, and numerous outlying fields.

Installation primary mission: The mission of DoD is national defense. Since many installations are involved and all have different primary military missions in support of military training and/or readiness, the common purpose for this project was to build strong organizations that created a unified voice to work across boundaries, pool limited resources, manage, eradicate, and reduce spreading and re-infestation of invasive species on DoD, private and public lands, and rights-of-ways.

Project dates: The CISMA Legacy Project was awarded three years from July 1, 2009 – June 30, 2012.

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Purpose/Need

Invasive non-native species have been identified by all of the DoD installations in Florida as both ecological and economic threats to the natural communities and native species that they manage.

Preventing the occurrence of new invasive non-native species introductions is the most effective and efficient approach. Once an invasive species begins to establish in a location, early detection and rapid response (EDRR) efforts must occur to preclude development of large infestations. Achieving success with this approach requires communication and cooperation across boundaries and fence lines, as well as creating effective regional partnerships.

Approach

To address the threat of invasive non-native species, TNC proposed to work with DoD installations in Florida to create strong CISMAs that would serve to buffer DoD lands as well as be included under the statewide umbrella of the Florida Invasive Species Partnership (FISP) in order to tie them into a network and provide additional resources and continuity in approach.

This partnership approach is the foundation of the development of CISMAs. CISMAs effectively work on both private and public lands, buffering DoD installations from the invasive non-native species threats beyond their boundaries. The CISMAs involved in this project, on and adjacent to DoD lands, as a result of DoD Legacy Program and partner funding, are now more effectively monitoring and controlling invasive non-native species resulting in improved Mission flexibility and imperiled species protection.



The initial approach during Phase I was to engage existing TNC staff in collaboration with already established relationships with DoD and regional partners, to strengthen two CISMAs and use these to mentor and create two new CISMAs to buffer the military installations and adjacent lands involved. The CISMAs also worked under the statewide umbrella of FISP to tie into a network of CISMAs and provide additional resources and continuity in approach. Once established, the efficiency and effectiveness of this invasive species management approach were immediately evident. Therefore the next step, during Phase II was to expand the CISMAs by initiating new relationships with two additional installations in Florida where TNC had existing capacity established to lead the effort.

After the second year, the results of the extensive efforts were regarded by DoD and all of the partners to be a total success providing much leverage, strategic planning, and many on-the-ground projects.

In Phase III, after most of the installations in Florida had been included in the invasive non-native species control network, the effort was to transition the leadership of the CISMAs to the most logical regional partners, to continue to engage and expand the management efforts by all partners. All of the CISMAs have now been transferred to committed sustainable leadership, with flexibility built in for long-term endurance to withstand inevitable possible changes.



Results

Phase I of this CISMA project proposed and succeeded in:

- Strengthening two existing CISMAs supporting Camp Blanding ANG (First Coast CISMA) and NAS Key West (Keys CISMA) and using these as mentors for new CISMAs,
- Creating two new CISMAs supporting Eglin AFB (Six Rivers CISMA) and Avon Park AFR (Heartland CISMA),
- Working collaboratively with DoD and other regional partners to create Five-year Strategic Plans detailing invasive nonnative species priorities and actions for each of the four CISMAs, and
- Completing two invasive nonnative species control projects prioritized by DoD and to monitor the results.

Phase II proposed and succeeded in:

- Continuing to strengthen the four CISMAs from Phase I,
- Expanding one additional CISMA to include Tyndall AFB (Apalachicola CISMA),
- Creating one new CISMA near Cape Canaveral AFS/Patrick AFB (East Central Florida CISMA),
- Using the two Phase I control projects as demonstration projects,
- Completing five additional control projects,
- Creating Annual Work Plans,
- Designing a Five-year Strategic Plan Template for use by other CISMAs in Florida and nationally,
- Distributing the Strategic Plan Template to DoD and national partners,
- Conducting two bonus work days, and,
- Creating customized "weed decks" for invasive plant identification for the four original CISMAs from Phase I to be distributed to DoD and all partners.

Phase III proposed and succeeded in:

- Continuing to strengthen five CISMAs,
- Transitioning the lead role for each CISMA to the most logical regional partners,
- Completing five additional control projects,
- Leading plant identification work days to train CISMA partners,
- Continuing outreach and maintaining communications with transferred and new installations in Florida including First Coast CISMA/Camp Blanding ANG, Everglades CISMA/Homestead AFB, and Suncoast CISMA/MacDill AFB,
- Completing a bonus control project on the Hutton Unit, a conservation property adjacent to Navy Outlying Field (NOLF) Harold. in the Six Rivers CISMA, and,
- Creating one new customized "weed deck" for invasive plant identification for the East Central Florida CISMA. Weed Decks were distributed to DoD and all CISMA partners.

Benefit

The Florida CISMAs on and adjacent to DoD lands are effectively monitoring and controlling invasive non-native species within military installation boundaries, watersheds, and are improving mission flexibility and imperiled species protection.

The benefits of the Florida CISMA DoD Legacy Program Project are both measured and immeasurable, as an example of how highly effective projects and extensive regional partnerships assume “lives of their own” from the combined efforts of all of the partners and volunteers involved. While this DoD Legacy Program Project has been completed, the CISMAs will continue to thrive and improve for long-term management issues with invasive non-native species. This three-year DoD Legacy Program project provided the following benefits for DoD and all involved, as it:

- Directly engaged six military installations and three military services (Air Force, Army, and Navy) and provided invasive non-native species control and guidance for improved mission flexibility and imperiled species management,
- Supported three Areas of Emphasis for the DoD Legacy Natural Resource Program: 1) Invasive Species 2) Communication, Partnerships, and Public Awareness, and 3) Cooperative Conservation,
- Included lands where DoD was currently working and the local military installations had identified invasive non-native species as a threat,
- Assisted in reducing reinfestation to DoD lands to prevent wasted efforts and resources on high maintenance costs, as well as protect high quality natural areas,
- Leveraged funding, volunteer support, and provided resource sharing on treatments and trainings,
- Allowed for treatments across property boundaries and assisted neighboring private landowners in removing invasive non-native species,
- Assisted the local military installations with taking a landscape level approach to invasive non-native species management,
- Provided communication, prioritization, and planning tools for guidance and consistency while maintaining regional independence, and,
- Provided training on priority invasive non-native species, which assists with early detection and control efforts.

Recommendations/Lessons Learned

In summary, this project was a model example of how quickly, effectively, and both economically and environmentally feasibly a project concept can be implemented on-the-ground with networking, planning, and extensive contributions by public and private partners and volunteers.

The objective of this DoD Legacy Program Project was to establish strong, long-term invasive nonnative species partnerships, and once the CISMAs had expanded to cover the state, to transfer leadership to the most logical regional partner to ensure sustainability. This project will continue to evolve and change depending on current circumstances and staffing changes, but the CISMAs will be able to remain intact because of the networking and resource sharing components, and the majority of the efforts are divided rather than dependent on one or two agencies.

While this DoD Legacy Program project funding has concluded, all of the partners are committed to building upon the foundation that has been laid for future endeavors, and The Nature Conservancy will remain involved in all the CISMAs. In some cases, the leadership was transferred to one chair, in other cases there are co-chairs.

The ongoing costs associated with the CISMAs moving forward will, as always, be shared and leveraged by the partners according to priorities and available resources. Due to the nature and threat of invasive non-native species, this issue will require and likely provide sources of funding for a very long time. With the CISMA structures constantly improving, and by developing tools and methods to improve efficiency and reduce costs, the CISMAs will remain a model for successful invasive nonnative species management.

Communications

Over the last three years, the concept of CISMAs and the success of this project have been shared by the TNC Statewide coordinator with national audiences through the following venues:

- Presented posters (2009 and 2011) and an oral presentation (2011) detailing the CISMA project at Sustaining Military Readiness Conferences,
- Participated in the Strategic Management of Invasive Species in the Southeastern U.S. Workshop (2009), offered by Invasive Plant Control, Inc.,
- Presented during the Invasive Species Committee meeting at the North American Wildlife and Natural Resources (2012) on the (results from all three phases to DoD and the Association of Fish and Wildlife Agencies,
- Facilitated Annual CISMA meetings and workshops at the Florida Exotic Pest Plant Council (FLEPPC) Symposium (2010, 2011 and 2012), and,
- Represented FISP and Florida CISMAs in Washington, D.C through hosting national NISAW Webcasts (2011 and 2012) focusing on partnerships and grassroots approaches to addressing the threat of invasive non-native species.

Additional Information

During this project, a wealth of documents, websites, tools, guidelines, etc., were discovered as well as created and a Transition Plan was compiled to highlight many of these. This short document is intended to help others quickly find what is considered to be the first and best resources in order to create and/or sustain a CISMA. For full reports of each of the phases of this three year project as well as fact sheets, go to the DoD Environmental, Safety and Occupational Health Network and Information Exchange (DENIX) website <http://www.denix.osd.mil/> and type in "CISMA" in the search box. To follow these CISMAs in the future and to find additional resources, go to the Florida Invasive Species Partnership (FISP) website at: www.floridainvasives.org/.

