

# Nature Coast Cooperative Invasive Species Management Area

## Five Year Strategic Plan

### (2013 through 2017)

#### MISSION STATEMENT

Implement a comprehensive, cooperative approach across boundaries to address the threats of invasive species to the lands and waters within the boundaries of the CISMA.

**Approach:** The most cost-effective way to address invasive species is to prevent them from reaching the CISMA in the first place. If, despite prevention efforts, invasive species reach the CISMA, early detection programs can help locate and eradicate those invasive species before they become widely established. If invasive species elude early detection and establish and spread in the CISMA or are part of a previous invasion, control and management programs to monitor and minimize their negative impacts to the economy and environment will be necessary, but these efforts can be very costly. The sooner we act the more effective and less costly our efforts will be (adapted from the Indiana Invasive Species Task Force 2008).

#### Acronyms

ASLA = American Society of Landscape Architects  
BMP = best management practices  
CISMA = cooperative invasive species management area  
CWMA = cooperative weed management area  
FDACS = Florida Department of Agricultural and Consumer Services  
FDOT = Florida Department of Transportation  
EDDMapS = Early Detection and Distribution Mapping System (<http://www.eddmaps.org/>)  
EDRR = early detection and rapid response  
FISP = Florida Invasive Species Partnership (<http://www.floridainvasives.org/>)  
FDOF = Florida Department of Forestry  
FFWCC = Florida Fish and Wildlife Conservation Commission  
FFWCC IPMS = Florida Fish and Wildlife Conservation Commission Invasive Plant Management Section  
FLEPPC = Florida Exotic Pest Plant Council  
FNAI = Florida Natural Areas Inventory  
FNGLA = Florida Nursery, Growers & Landscape Associations (<http://www.fngla.org/>)  
FNPS = Florida Native Plant Society (<http://www.fnps.org/>)  
IFAS = Institute of Food and Agricultural Sciences  
MOU = memorandum of understanding  
NIWAW = National Invasive Weeds Awareness Week  
ROW = right of way  
SOP = standard operating procedures  
USDA ARS = United States Department of Agriculture, Agricultural Research Service  
USGS NAS = United States Geological Services Non-indigenous aquatic species (<http://nas.er.usgs.gov/>)  
VCC = voluntary code of conduct (<http://www.centerforplantconservation.org/invasives/codesN.html>)  
WEEDDAR = Weed Data and Reporting (database program)  
WIMS = Weed Information Management System  
WRA = weed risk assessment (that is - the predictive tool) (<http://plants.ifas.ufl.edu/assessment/>)

Items in green have been completed

Items in purple have been done at least once and are ongoing

Items in red are overdue and need attention

**Goal 1: Create, strengthen and sustain a Cooperative Invasive Species Management Area (CISMA).** Form and sustain a strong partnership through CISMA.

*1.1. Develop basic organizational structure for CISMA.*

*1.1.1. 2013 use CWMA cookbooks and current CISMA examples to help form and sustain CISMA.*

*1.1.2. 2013 coordinate a meeting with enthusiastic regional partners to form a new CISMA.*

*1.1.3. 2013 establish geographic boundaries, a steering committee and a chair.*

*1.1.4. 2014 and as needed, create standing subcommittees and ad hoc committees to assist with project specific CISMA efforts.*

*1.2. Sustain and strengthen CISMA*

*1.2.1. Starting in 2013, schedule CISMA meetings at least twice per year.*

*1.2.2. Starting in 2013, annually recruit new, and maintain current membership in the CISMA.*

*1.2.3. Starting in 2014, and every 2 years (or as needed) review steering committee and subcommittees and revise as appropriate.*

*1.2.4. Starting in 2014, annually develop workplan with CISMA partners.*

*1.2.5. Starting in 2014, create short annual report.*

*1.2.6. During 2017 update strategic plan.*

*1.2.7. By 2015 seek liaison to CISMA from private industries. Develop a contact list of private industry cooperators*

*1.3. Submit cooperative funding proposals.*

*1.3.1. Starting in 2014, annually encourage public land conservation managers to submit FFWCC IPMS cost reimbursement program applications. Develop a presentation on grant opportunities for the group for Fall 2014.*

*1.3.2. In 2014 identify lead partner or organization to serve as the recipient and administrator for grants.*

*1.3.3. Starting in 2015, annually submit CISMA grants; consider utilizing less common approaches like landowner incentive programs, staff time as in-kind matches, and shared field staff. Present grant opportunities to group and vote on which to pursue.*

*1.3.4. By 2015 develop a list of funding programs with due dates for control, EDRR, education and other projects.*

*1.4. Generate legal documents to strengthen CISMA.*

*1.4.1. In 2015 sign a MOU or other document allowing public agency staff to work on other agency/NGO/private lands (if required to allow agencies to work on partner lands).*

*1.4.2. In 2015 create or use existing liability releases (for example - TNC or DOF) for partners to work on private lands.*

*1.4.3. By 2017 write or find and modify an existing CISMA partner MOU, or other document, or use future FISP CISMA MOU, to facilitate partner agency participation and support of CISMA goals and objectives.*

**Goal 2: Prevention** - Develop and/or implement techniques and practices to prevent establishment and spread of new invasions near the CISMA boundaries.

## **Plants**

- 2.1. *Develop and/or find and use an existing alert system to identify new terrestrial and aquatic non-native plant invasions near, or at the boundaries of, CISMA lands and waters.*
  - 2.1.1. *Starting in 2013, quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive plants adjacent to CISMA. If new plant species is found, include in EDRR prioritization.*
  - 2.1.2. *Starting in 2014, Operations will quarterly review EDDMapS and/or USGS NAS for new aquatic invasive plants adjacent to CISMA waters. If new plant species is found adjacent to CISMA, include in EDRR prioritization.*
- 2.2. *Reduce potential pathways of introduction for terrestrial and aquatic (marine and freshwater), invasive non-native plant species into the CISMA.*
  - 2.2.1. *In 2014 Outreach will develop and/or find and use existing guidelines for vehicle, boats, equipment, personal protective equipment and personnel disinfection program/protocol(s) to address the unintentional movement of terrestrial and aquatic invasive plants. Consider using FFWCC IPMS or other decontamination standards.*
  - 2.2.2. *In 2014 implement vehicle, boat, equipment and personnel disinfection program/protocol(s) for use by CISMA partners (researchers, fire crews, public works, FDOT, FDOF, and others).*
  - 2.2.3. *In 2015 encourage use of decontamination guidelines by all contractors (for example - invasive plant management contractors, wildfire services contractors, etc...).*
  - 2.2.4. *In 2016 encourage use of decontamination guidelines by landscapers, lawn companies and other outdoor service contractors. Develop a flyer to place at lawn/garden store, etc.*
  - 2.2.5. *In 2015 all CISMA partners will actively push for purchase of only weed-free mulch, pine-straw, hay, sod, etc...(that is - create the demand, mention at meetings there is no 'free' mulch)*
  - 2.2.6. *In 2016 CISMA partners will develop and/or use existing preventative guidelines for conducting ground disturbing activities (for example - timber harvest/transport, prescribed fire, fire suppression, off-road vehicle use, or contracted activities on partner lands).*
- 2.3. *Incorporate IFAS WRA into CISMA invasive plant ranking and planning process.*
  - 2.3.1. *Starting in 2013, annually review results of WRA for plant species to be watched. If new plant species is listed as invasive, include in EDRR prioritization.*
  - 2.3.2. *Starting in 2013, if a new non-native plant is found in the CISMA or surrounding geography, request IFAS run this incipient species through the WRA.*

## **Animals**

- 2.4. *Develop and/or find and use existing alert type system to identify new animal invasions near, or at the boundaries of, CISMA lands.*
  - 2.4.1. *Starting in 2013, quarterly review EDDMapS database and other sources of new species alerts (for example - USGS NAS database, shell collecting groups, bird boards, etc...) for new invasive animals adjacent to CISMA. If new animal species is found adjacent to CISMA, include in EDRR prioritization.*

## **Pest and Pathogens**

- 2.5. *Reduce potential pathways of introduction for invasive pest/pathogens species into the CISMA.*
  - 2.5.1. *In 2016 implement a vehicle, equipment and personnel disinfection program/protocol to address the unintentional movement of invasive pest/pathogens for use by CISMA partners (researchers, fire crews, public works, FDOT, FDOF, and others). (Note: This will likely already be addressed in plant objective above)*
- 2.6. *Develop or find and use an existing alert type system to identify new invasive pest/pathogen invasions near CISMA lands and waters.*
  - 2.6.1. *Starting in 2013, Operations will quarterly review EDDMapS database for new invasives adjacent to CISMA. If new pest or pathogen is found adjacent to CISMA, include in EDRR prioritization.*

**Goal 3: Early Detection and Rapid Response (EDRR)** - Develop and implement techniques and practices to promote early detection and rapid response of newly established invasive species within the Cisma boundaries.

## **Plants**

- 3.1. *Use existing alert type systems and partner communications to identify new plant invasions within Cisma lands and waters.*
  - 3.1.1. *Starting in 2013, annually have Cisma partners discuss new plant species that they have observed during the regularly scheduled meeting.*
  - 3.1.2. *Starting in 2013, quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive plants within Cisma. If new plant species is found in Cisma, include in EDRR prioritization.*
  - 3.1.3. *Starting in 2013, quarterly review EDDMapS and/or USGS NAS for new aquatic invasive plants within Cisma waters. If new plant species is found in Cisma, include in EDRR prioritization.*
  - 3.1.4. *By 2016 **Steering** will develop early detection guidelines for partners to insert in contract language for contractors and researchers requiring them to alert land managers when they observe unknown or EDRR plant species.*
- 3.2. *Prioritize EDRR plant species on Cisma lands and/or waters.*
  - 3.2.1. *In 2014 create a list of possible EDRR terrestrial and/or aquatic plant species from best available information from Cisma partners, adjacent Cismas, Cisma prevention alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS.*
  - 3.2.2. *In 2014 use a ranking system (USGS, others) to prioritize **top 5** EDRR plant species.*
  - 3.2.3. *Starting in 2015, annually or as needed, reassess EDRR plant list.*
- 3.3. *Eradicate high ranking EDRR plant species on Cisma lands and/or waters.*
  - 3.3.1. *Starting in 2016, annually conduct cooperative workdays to eradicate high priority EDRR and prevention plant species (newly in or adjacent to Cisma).*

## **Animals**

- 3.4. *Use existing alert type systems and partner communications to identify new animal invasions within Cisma lands and waters.*
  - 3.4.1. *Starting in 2014, annually have Cisma partners discuss new animal species that they have observed during the regularly scheduled meeting.*
  - 3.4.2. *Starting in 2014, **Operations** will quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive animals within Cisma. If new species is found in Cisma, include in EDRR prioritization.*
  - 3.4.3. *Starting in 2014 **Steering** will maintain and post on website a list of members that will respond to exotic animal identification or transfer requests.*
  - 3.4.4. *Starting in 2014, quarterly review EDDMapS and/or databases for new aquatic invasive animals within Cisma waters. If new species is found in Cisma, include in EDRR prioritization.*
  - 3.4.5. *By 2016 **Outreach** will develop early detection guidelines and post on website for partners to insert in contract language for contractors and researchers requiring them to alert land managers when they observe unknown or EDRR species.*
- 3.5. *Prioritize EDRR animal species on Cisma lands and/or waters.*
  - 3.5.1. *In 2016 create a list of possible EDRR species from best available information from Cisma partners, , wildlife hospitals, adjacent Cismas, Cisma prevention alert system, FISP, FNAI, IFAS and EDDMapS.*
  - 3.5.2. *In 2017 using a ranking system to prioritize **top 5** EDRR animal species.*
  - 3.5.3. *Starting in 2017, annually or as needed, reassess EDRR animal list.*

**Goal 4: Control (Prioritized Management)** - Develop and implement techniques and practices to control known infestations of priority invasive non-native species and maintain them at the lowest feasible level in the CISMA boundaries.

#### **Plants**

- 4.1. *Prioritize known CISMA invasive non-native plants (that is - plants that have spread beyond ability to eradicate) using a ranking system that considers the impact of imperiled species and/or habitats and if necessary, other criteria.*
  - 4.1.1. *In 2013 develop a list of known invasive plants within CISMA boundaries.*
  - 4.1.2. *In 2014 prioritize invasive plant control species using a ranking system (USGS, local expert opinion, other) and best available information from CISMA partners, FLEPPC, FISP, FNAI, IFAS and EDDMapS.*
  - 4.1.3. *Starting in 2015, annually assess and update prioritized list of invasive plant control species.*
- 4.2. *Implement coordinated CISMA management of the top 2 priority invasive plant control species to reduce infestations to maintenance level.*
  - 4.2.1. *Starting in 2015, emphasize top 2 priority invasive plant control species by focusing CISMA partner efforts.*
  - 4.2.2. *Starting in 2014, annually increase acres of priority invasive plant control species being treated and acres under maintenance level control on public conservation lands (for example - using FFWCC IPMS and other funds).*
  - 4.2.3. *Starting in 2015, annually increase acres of priority invasive plant control species being treated and acres under maintenance level control on private conservation lands (for example - non-profit conservation lands, conservation easement lands, etc.).*
  - 4.2.4. *Starting in 2014, Operations will biannually coordinate a cooperative workday focusing on priority invasive plant control species.*

#### **Animals**

- 4.3. *Prioritize known CISMA invasive animals (that is - animals that have spread beyond ability to eradicate) using a ranking system that considers the impact of imperiled species and/or habitats and if necessary, other criteria.*
  - 4.3.1. *In 2015 develop a list of known invasive animals on CISMA lands (for example - feral hogs).*
  - 4.3.2. *In 2016 prioritize invasive animal control species using a ranking system and best available information from CISMA partners, FFWCC, FNAI, EDDMapS and others.*
  - 4.3.3. *Starting in 2017, annually assess and update prioritized list of invasive animal control species.*
- 4.4. *Manage the high priority invasive animal control species in order to reduce damage and/or population size.*
  - 4.4.1. *Starting in 2016, emphasize the top 2 priority invasive animal control species by focusing CISMA partner efforts on these at all opportunities.*

**Goal 5: Monitoring, Mapping and Applied Research** - Promote locating and documenting occurrences, and supporting applied research, prevention, EDRR and control to inform Cisma decisions.

- 5.1. *Coordinate monitoring and mapping of invasive plants, animals, pests/pathogens (terrestrial, freshwater and marine).*
  - 5.1.1. *Beginning in 2013, quarterly record invasive species from field observations and mapping projects into Cisma EDDMapS and/or FNAI's invasive databases. Encourage use of EDDMapS for EDRR species and single occurrence entry and FNAI for large census/polygon data.*
  - 5.1.2. *In 2013, recruit and assign plant verifier(s) to oversee Cisma plant record entries into EDDMapS.*
  - 5.1.3. *By 2016 use EDDMapS database, FNAI's invasive maps, and information from land managers and private landowners to create Cisma prioritized invasive management maps of top ranked EDRR and control species.*
- 5.2. *Encourage research on invasive plants, animals, pests/pathogens (terrestrial, freshwater and marine).*
  - 5.2.1. *By 2015 submit a list of questions to research institutions that would be useful to your Cisma on invasive species biology, impacts, and/or management (e.g university and college biology departments, FLEPPC, FISP, chemical company representatives, or other research entities).*
  - 5.2.2. *In 2014 inform USDA ARS, IFAS/University of Florida, and/or others of Cisma members that are willing to participate in biological control trials (in other words, allow biological control trials to be conducted on lands that they manage).*



**Goal 6: Outreach, Training and Strategic Collaboration-** Implement outreach and training to support invasive species prevention, EDRR and control efforts in the Cisma boundaries.

- 6.1. *Implement invasive species outreach, training and strategic collaboration efforts with Cisma partners to increase Cisma community knowledge as well as statewide profile.*
  - 6.1.1. *In 2013 work with FISP to develop Cisma website.*
  - 6.1.2. *Starting in 2013, quarterly, or as needed, maintain and improve Cisma website.*
  - 6.1.3. *Starting in 2013, participate in statewide Cisma monthly calls and FLEPPC annual Cisma meeting (both coordinated by FISP).*
  - 6.1.4. *Starting in 2013, annually contact the media through press/photo releases and radio to highlight Cisma efforts on invasive species. Consider doing this during National Invasive Species Awareness Week (held annually in spring).*
  - 6.1.5. *By 2013 hold annual trainings for Cisma partners and targeted audiences on how to use the EDDMapS online database to report occurrences of invasive species (with priority placed on reporting EDRR and prevention species).*
  - 6.1.6. *Starting in 2014, maintain and improve Cisma knowledge by communicating with experts (for example - invite experts to present information at Cisma meetings).*
  - 6.1.7. *Starting in 2014, annually conduct at least one invasive terrestrial plant identification and treatment training focusing on priority prevention, EDRR and control species (if possible, coordinate with IFAS Extension Agent).*
  - 6.1.8. *By 2014 compile a communication network contact list in order to establish alert system for partners both within and adjacent to Cisma boundary (for example - adjacent Cismas). Assign a Cisma member to send emails to this network when new threat/emerging issue is identified. Also, encourage Cisma members to sign up for EDDMapS alerts (on EDDMapS website).*
  - 6.1.9. *Starting in 2014, annually conduct at least one invasive aquatic plant identification and treatment training focusing on priority prevention, EDRR and control species (if possible, coordinate with Florida Sea Grant).*
- 6.2. *Implement invasive species outreach and training efforts with academic/education infrastructure.*
  - 6.2.1. *In 2015 develop a list of extension offices and environmental education centers within Cisma boundaries and provide them with materials about invasive species prevention and control (for example - put together packet of information on Cisma, Cisma priorities and relevant fact sheets/educational information and assign members to distribute this information to offices/centers).*
  - 6.2.2. *In 2014 work with Cooperative Extension Master Gardener Program and local garden clubs to include programming that promotes the removal of invasive plants and encourages the use of non-invasive plants.*
  - 6.2.3. *By 2016 Outreach will develop list of schools, scout groups, community festivals, environmental festivals and others who could help with education about invasive species prevention, EDRR and control. Annually, conduct at least one group presentation and have at least one event display/booth.*
  - 6.2.4. *By 2017 develop and implement at least one priority education volunteer program for Cisma that simultaneously builds up volunteer programs and raises invasive species awareness (for example -, student work days, invasive survey recruitment/training programs, Pepper Busters creation, etc.)*
- 6.3. *Increase invasive species outreach efforts to private industries and organizations, utilities and rights-of-way agencies.*
  - 6.3.1. *In 2014 work with retailers to reduce the sale and release of invasive animals. Encourage retailers to display and distribute the “Don’t Release Unwanted Pets” poster and cards (statewide effort organized through UF-IFAS and Seagrant, find at <http://stjohns.ifas.ufl.edu/sea/DontRelease.html>).*
  - 6.3.2. *By 2016 create a communication network contact list for private industries and organizations, utilities and rights-of-way agencies (for example - railroads, utilities, ranges, nurseries, botanical gardens, pet stores, animal rehabilitation centers, landscapers, architects, foresters, county animal control, FDOT, and other ROW agencies).*
- 6.4. *Implement outreach and training efforts to private landowners and landowner associations.*
  - 6.4.1. *In 2014 encourage all Cisma partners to place “Do Not Move Firewood” poster at all public conservation lands, public and private campgrounds and other high-use recreational areas.*

- 6.5. *Increase outreach and awareness efforts to policy makers.*
- 6.5.1. *Starting in 2014, share Cisma Annual Reports with elected officials during National Invasive Species Awareness Week (held annually in spring).*
- 6.5.2. *Starting in 2014, annually get county(s) proclamations supporting Cisma goals and invasive species control. Coordinate press releases upon/after signing. Consider doing this during National Invasive Species Awareness Week (held annually in spring).*
- 6.5.3. *Starting in 2016, annually visit with newly elected local government officials to support invasive species funding, EDRR, prevention and other Cisma goals.*