

Department of Defense Legacy Resource Management Program

09-437

Creating Cooperative Invasive Species Management Areas (CISMAs) to Effectively Reduce Re-infestation on Four (4) Military Bases and Surrounding Lands in Florida

First Coast IWG/Camp Blanding Army National Guard Documents created for this Project

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- First Coast Invasive Working Group Five Year Strategic Plan (revised version to note subcommittees and emphasize timeline)

Creating the First Coast Invasive Working Group (FCIWG) - Summary

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. The First Coast Invasive Working Group's (FCIWG) was established in December 2006 to work across federal, state, local, and private lands for invasive species management. The formation was the result of a TNC presentation given in late 2006 that highlighted the threat that invasive species posed to northeast Florida's biodiversity. More than twenty regional land and water resource managers present agreed that the threat warranted forming a CISMA and the managers have continued on as members during the three year tenure of this CISMA.

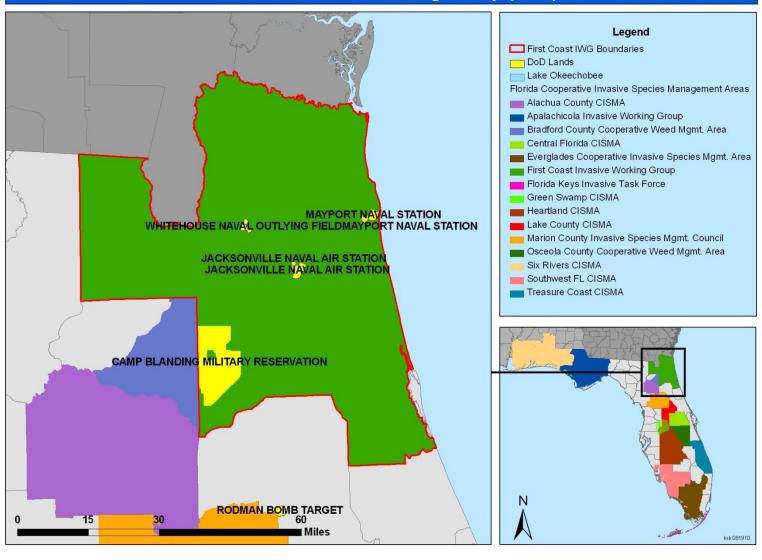
During this project, TNC worked with the members of the FCIWG to complete a 5 year strategic plan as well as form a steering committee representative of the federal, state, local and private members engaged in the CISMA. In addition, the FCIWG compiled an invasive plant manual for use by all members. The manual includes identification and control information for 29 species comprised of the Top 10 early detection/rapid response species from last year's FCIWG invasive plant survey, as well as 19 others listed as the highest priority species for the CISMA by the Florida Natural Areas Inventory.

Introduction to the FCIWG Strategic Plan

This Strategic Plan, which is a deliverable of Phase I of this DoD Legacy Program project, along with its goals and objectives was designed to guide the interactions of all agencies and landowners within the CISMA boundaries. None of the strategies included are specific to any one agency or particular piece of property. Specific actions involving specific properties or agencies/organizations will appear in the details of the annual workplan.

Phase II of this project, which has been awarded, is designed to keep the process moving forward and continue building the structure of the CISMA. During this phase, the CISMA will create an annual report (year 2010) in order to document accomplishments and discuss efforts. The CISMA will also create an annual workplan for the next calendar year (year 2011) based on the strategic plan. The annual workplan will be more detailed about specific actions to be accomplished, specifying locations and partners as well as a timeline for completion.

First Coast Invasive Working Group (IWG)



The First Coast Invasive Working Group (FCIWG) Five Year Strategic Plan January 1, 2010 through December 30, 2014

FCIWG MISSION STATEMENT

To implement a comprehensive, cooperative approach across boundaries to address the threats of invasive species to the lands and waters within the boundaries of the FCIWG 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).

About This Plan: The following groups wrote plans that were used to create the template for the FCIWG's Strategic Plan: Keys Invasive Species Working Group, Gulf Coast Plan Ecosystem Partnership, Treasure Coast CISMA, Apalachicola Invasive Species Working Group, North Carolina Sandhills Weed Management Area, and the Indiana Invasive Species Task Force 2008.

The plan has six major goals (Organizational, Prevention, EDRR, Control, Monitoring, and Outreach) and corresponding action items for each goal. Each goal's corresponding action items are further categorized under plants, animals (both terrestrial and aquatic species), and pest and pathogens. Dates for action items being launched or completed are underlined to provide subcommittees with a timeframe for prioritization.

Acronyms

ASLA = American Society of Landscape Architects

BMP = best management practices

CISMA = cooperative invasive species management area

CWMA = cooperative weed management area

EDRR= Early detection and rapid response

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/)

FCIWG= First Coast Invasive Working Group

FDOF = Florida Department of Forestry

FIATT= Florida Invasive Animal Task Team

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

NISAW = National Invasive Species Awareness Week

ROW = right of way

SOP = standard operating procedures

TNC= The Nature Conservancy

USDA ARS = United States Department of Agriculture, Agricultural Research Service

USFWS = United States Fish and Wildlife 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 (i.e. the predictive tool) (http://plants.ifas.ufl.edu/assessment/)

Goal 1: Create, strengthen and sustain the FCIWG.

Objective: Form and sustain a strong partnership through CISMA.

- 1. Develop basic organizational structure for CISMA (items 1 a-d completed for FCIWG 2007-2009)
 - a) Use CWMA cookbooks and current CISMA examples to help form and sustain CISMA.
 - b) Coordinate a meeting with enthusiastic regional partners to form a new CISMA.
 - c) Establish geographic boundaries, a steering committee and a chair.
 - d) As needed, create standing subcommittees and ad hoc committees to assist with project specific CISMA efforts.

2. Sustain and strengthen CISMA

- a) Schedule CISMA meetings at least twice per year or quarterly.
- b) Ongoing, annually recruit new, and maintain current membership in the CISMA.
- c) <u>Starting in 2009, and every 2 years (or as needed)</u> review steering committee and subcommittees and revise as appropriate.
- d) Starting in 2009, develop strategic five year workplan with CISMA partners.
- e) Starting in 2010, create short annual report.
- f) During 2010 update strategic plan.
- g) By 2010 seek liaison to CISMA from two private industries.
- h) By 2013 hire a part time staff person to coordinate CISMA activities.

3. Submit cooperative funding proposals.

- a) <u>Starting in 2009, annually</u> encourage public land conservation managers to submit FFWCC IPMS grant applications.
- b) In 2011 identify lead partner or organization to serve as the recipient and administrator for grants.
- c) <u>Starting in 2010, annually</u> submit CISMA grants; consider utilizing less common approaches like landowner incentive programs, staff time as in-kind matches, and shared field staff.
- d) In 2010 review FISP funding matrix and create short list of funding programs for FCIWG to submit with due dates for control, EDRR, education and other projects. Include information for each funding opportunity that states what the mechanism to funnel funds to FCIWG could be (i.e. lead agency that could accept the funds and 'manage' the grant.

4. Generate legal documents to strengthen CISMA.

- a) <u>In 2011</u> 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).
- b) In 2010 create or use existing liability releases (e.g. TNC or DOF) for partners to work on private lands.
- c) <u>By 2013</u> write or adopt a 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

Objective: Develop and/or implement techniques and practices to prevent establishment and spread of new invasions near the CISMA boundaries.

- a) Develop or adopt an alert type system to identify new plant invasions near, or at the boundaries of, CISMA lands.
 - i. <u>Starting in 2010</u>, establish the FCIWG EddMaps Verifying Committee to quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive plants adjacent to CISMA.

- 1. If new plant species is found adjacent to CISMA, include in EDRR prioritization.
- ii. <u>Starting in 2010</u>, quarterly review EDDMapS and/or USGS NAS for new aquatic invasive plants adjacent to CISMA waters.
 - 1. If new plant species is found adjacent to CISMA, include in EDRR prioritization.
- b) Reduce potential pathways of introduction for terrestrial, invasive non-native plant species into the CISMA.
 - i. Develop and adopt guidelines for vehicle, equipment, personal protective equipment and personnel disinfection program/protocol to address the unintentional movement of terrestrial invasive plants.
 - 1. <u>In 2010</u> CISMA members establish and utilize FFWCC IPMS or other decontamination standards.
 - 2. <u>In 2010</u> implement a vehicle, equipment and personnel disinfection program/protocol for CISMA partners to adopt (researchers, fire crews, public works, FDOT, FDOF, and others).
 - 3. <u>In 2010</u>, create or adopt decontamination guidelines for all contractors (e.g. invasive plant management contractors, wildlife services contractors, etc.) and encourage CISMA partners to implement when selecting contractors.
 - 4. <u>By 2012</u> create or adopt decontamination guidelines for landscapers, lawn companies and other outdoor service contractors, and encourage CISMA partners to implement.
 - ii. <u>Beginning in 2009</u> all CISMA partners will request weed-free mulch, pine-straw, hay, sod, etc.to encourage the production of and availability of aforementioned products.
 - iii. <u>By 2013</u> all CISMA partners develop or adopt preventative guidelines for conducting ground disturbing activities (e.g. timber harvest/transport, prescribed fire, fire suppression, off-road vehicle use, or contracted activities on partner lands).
- c) Reduce potential pathways of introduction for aquatic (marine and freshwater) invasive plant species into the CISMA.
 - i. Adopt standards for boats, vehicle, equipment, personal protective equipment and personnel disinfection program/protocol (i.e. USFWS "Stop Aquatic Hitchhikers" protocol) to address the unintentional movement of aquatic invasive plants.
 - In 2010, encourage the implementation of the Hitchhikers program that deals with boat, vehicle, equipment and personnel disinfection program/protocol for CISMA partners and their contractors to adopt.
- d) Incorporate IFAS WRA into CISMA invasive plant ranking and planning process.
 - i. Starting in 2010, annually review results of WRA for plant species to be watched.
 - 1. If new plant species is listed as invasive, include in EDRR prioritization.
 - ii. <u>Starting in 2010</u>, if a new non-native plant is found in the CISMA or surrounding geography, request IFAS run this incipient species through the WRA.
 - iii. <u>In 2010</u> engage local botanical gardens or similar to use the WRA or other predictive tool to assess the invasive threat of new and existing accession plants.
 - 1. If new/existing accession is listed as invasive, encourage gardens to stop planting and remove from collections and include in EDRR prioritization (if it has escaped).
 - iv. By 2012 explore the feasibility of banning the highest threat new invasive plant species through state and local ordinances. (Corresponds with running species through WRA/action item ii above).

a) Develop or adopt an alert type system to identify new animal invasions near, or at the boundaries of, CISMA lands

- i. <u>Starting in 2010, quarterly</u> review EDDMapS database and other sources of new species alerts (e.g. USGS NAS database, shell collecting groups, bird boards, etc...) for new invasive animals adjacent to CISMA.
- ii. If new animal species is found adjacent to CISMA, include in EDRR prioritization.
- iii. <u>In 2010</u>, create a list of exotic invasive animals, in cooperation with FIATT within CISMA work area.
- b) Reduce potential pathways of introduction for invasive animal species into the CISMA.
 - i. Starting in 2010, assist and participate in FFWCC Pet Amnesty Days, as appropriate.
 - ii. <u>Starting in 2010</u>, after creation of invasive animal list, explore avenues of reducing pathways for potentially new highest threat new invasive animal species through state/local ordinances (e.g. bans, caging requirements, gender restrictions, etc.).

3. Pest and Pathogens

a) Starting in 2009, remain current with new and ongoing threats and stay current on methods of spread.

Goal 3: Early Detection and Rapid Response (EDRR)

Objective: Develop and implement techniques and practices to promote early detection and rapid response of newly established invasive species within the CISMA boundaries.

1. Plants

- a) Develop and/or adopt alert type systems to identify new plant invasions within CISMA lands and waters.
 - i. Starting in 2010, annually have CISMA partners discuss new species that they have observed.
 - ii. No later than 2011, semiannually review EDDMapS database and/or other alert system databases for new terrestrial invasive plants within CISMA.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iii. No later than 2011, semiannually review EDDMapS and/or USGS NAS for new aquatic invasive plants within CISMA waters.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iv. <u>By 2013</u> 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 species.
- b) Prioritize EDRR species on CISMA lands and/or waters.
 - In 2010 create a list of possible EDRR species from best available information/science from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS.
 - ii. Starting in 2012, annually or as needed, reassess EDRR list.
- c) Eradicate EDRR species on CISMA lands and/or waters.
 - i. <u>Starting in 2010, annually</u> conduct cooperative workdays to eradicate EDRR and prevention species (newly in or adjacent to CISMA).
 - ii. <u>In 2011</u> encourage/assist with the hiring of contractors to eradicate EDRR species.
 - iii. <u>In 2012</u> create a Rapid Response Team(s) and if necessary, response protocol, to eradicate EDRR species. (e.g., support continued funding of the Northeast Florida Resource Management Team/i.e. NE FL Strike Team that could act as rapid response team for EDRR work in FCIWG Boundary)

2. Animals

- a) Develop and/or adopt alert type systems to identify new animal invasions within CISMA lands and waters.
 - i. Starting in 2010, annually have CISMA partners discuss new species that they have observed.
 - ii. <u>Starting in 2010, semiannually</u> review EDDMapS database and/or other alert system databases for new terrestrial invasive animals within CISMA.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iii. <u>Starting in 2010, semiannually</u> review EDDMapS and/or databases for new aquatic invasive animals within CISMA waters.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iv. <u>By 2012</u> 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 species.
- b) Prioritize EDRR species on CISMA lands and/or waters.
 - i. <u>In 2010</u> create a list of possible EDRR species from best available information from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FISP, FNAI, IFAS and EDDMapS.
 - ii. Starting in 2011, annually or as needed, reassess EDRR animal list.
- c) Eradicate EDRR species on CISMA lands and/or waters.
 - i. <u>In 2013</u> investigate the potential response of the FCIWG to newly introduced species. If necessary, create a Rapid Response Team(s)/ response protocol, to eradicate EDRR species using staff, contractors, hunters, and others.

3. Pest/pathogens

a) Same as Goal 4: Control; 3. Pest/pathogens: Remain current with new and ongoing threats and stay current on methods of spread.

Goal 4: Control (Prioritized Management)

Objective: Develop and implement techniques and practices to control known infestations of priority invasive species and maintain them at the lowest feasible level in the CISMA boundaries.

- a) Prioritize known CISMA invasive plants using a ranking system that considers the impact of imperiled conservation targets and if necessary, other criteria like economics.
 - i. <u>In 2010</u> complete list of known invasive plants within CISMA boundaries (i.e. FCIWG Weed List)
 - ii. <u>In 2010</u> prioritize species on list using a ranking system (USGS, other) and best available information from CISMA partners, FLEPPC, FISP, FNAI, IFAS and EDDMapS and distribute to FCIWG partners.
 - iii. Starting in 2011, annually assess and update prioritized list of invasive plants and control techniques.
- b) Manage the plants on the FCIWG Weed list to reduce infestations to maintenance level control.
 - i. <u>Starting in 2011</u>, emphasize priority control species on the FCIWG list by focusing CISMA partner efforts on these at all opportunities.
 - ii. Increase the size of invasive managed areas on public and private conservation lands within the FCIWG boundary.
 - 1. <u>Starting in 2011, annually</u> increase public conservation lands treated and maintained with FFWCC IPMS and other funds.
 - 2. <u>Starting in 2012, annually strive to</u> increase private conservation lands treated and maintained.

- 3. <u>Starting in 2010, biannually</u> conduct partner workdays to survey targeted locations for new invasions focusing on high priority EDRR and prevention species (newly in or adjacent to CISMA).
- 4. <u>Starting in 2012, annually</u> increase treatment of prioritized, invasive plants on public non-conservation lands (e.g. ROWs, spoil mounds, recreational parks).
- c) Cease sale, planting or other modes of spread of species we are controlling (illegal and legal).
 - i. <u>By 2012</u> submit petitions to FDACS for listing of high priority EDRR and control invasive plants as noxious weeds.
 - ii. <u>By 2011</u> identify and engage sellers to voluntarily stop selling known invaders. (See incentive programs for sellers in the outreach section of this plan.)

- a) Prioritize known CISMA invasive animals using a ranking system that considers the impact of imperiled conservation targets and if necessary, other criteria like economics.
 - i. <u>In 2012</u> develop a list of known invasive animals on CISMA lands (e.g. feral hogs, iguanas, Cuban tree frogs, etc).
 - ii. <u>In 2013</u> prioritize species on list using a ranking system and best available information from CISMA partners, FFWCC, FNAI, EDDMapS and others.
 - iii. <u>Starting in 2014, annually</u> assess and update prioritized list of invasive animals and control techniques, distribute to FCIWG and the public.
- b) Manage the priority control animals in order to reduce damage and/or population size.
 - i. <u>Starting in 2013</u>, emphasize the top 2-3 priority control species by focusing CISMA partner efforts on these at all opportunities.
 - ii. Increase the size of invasive managed areas on public and private conservation lands.
 - 1. Starting in 2013, annually increase public conservation lands treated and maintained.
 - 2. Starting in 2013, annually increase private conservation lands treated and maintained.
 - iii. Starting in 2014, annually increase prioritized, invasive treated public non-conservation lands.
 - iv. <u>Starting in 2014, annually</u> increase the size of invasive free buffer areas around conservation lands (this includes private lands).
- c) Support efforts to cease the sale, importation or other modes of spread of species that we are controlling (illegal and legal).
 - i. <u>Starting in 2014, annually</u> submit requests to FFWCC to include updated prioritized control species to restrictive lists (i.e. Reptiles of Concern List, conditional species, prohibitive species, etc.).

3. Pest/Pathogens

- a) Prioritize, communicate and coordinate management activities designed to protect native species (plants and animals) and/or economically important species that are being impacted by invasive pest/pathogens.
 - i. Research and prioritize known and potential invasive pest /pathogen species.
 - ii. Investigate tested and potential control methods and apply as feasible and reasonable:
 - 1. Biological
 - 2. Chemical
 - 3. Mechanical

and determine if this is a critical and feasible action/role for land managers to have, or if more appropriate for researchers only.

iii. Research and apply methods other than invasive control recommended by USDA/DACS and other researchers to protect native populations (e.g. collect seed, treat with chemicals, etc.).

Goal 5: Monitoring, Mapping and Applied Research

Objective: Promote locating and documenting occurrences, and supporting applied research, of prevention, EDRR and control species to inform CISMA decisions.

- 1. Monitoring and mapping of plants, animals, pests/pathogens (terrestrial, freshwater and marine.)
 - a) <u>Beginning in 2010</u>, quarterly record invasive species from field observations and mapping projects into CISMA EDDMapS and/or FNAI's invasive databases.
 - i. Encourage CISMA partners to use EDDMapS for EDRR species and single occurrence entry.
 - ii. Encourage CISMA partners to use FNAI for large census/polygon and distribution data.
 - b) Create a verification standing committee to oversee CISMA record entries into EDDMapS.
 - i. <u>In 2010</u>, annually recruit and assign plant verifiers.
 - c) <u>Starting in 2010, annually</u> conduct partner workdays to survey targeted locations for new invasions focusing on high priority EDRR and prevention species (newly in or adjacent to CISMA).
 - d) <u>By 2012, annually</u> use monitoring results to provide information and possible assistance to land managers to treat the new/EDRR species. Compile partner webpage links (re # acres treated), and add to FCIWG webpage to raise awareness of acres of lands treated by agency annually.
 - e) <u>By 2013</u> provide information to partners regarding suite of invasive species tracking/ reporting software programs available (e.g. WEEDDAR, WIMS, etc).
 - f) By 2013 encourage CISMA partners to assist with important information gathering to document the impact of high priority control species. Specifically, CISMA partners should support the IFAS Assessment's data needs by completing the IFAS Questionnaire which furthers the CISMA's evaluation of both EDRR species (i.e. prioritizing control efforts), and also in evaluating whether species should be listed depending on their impacts to natural areas and Florida's biodiversity.
- 2. Research of plants, animals, pests/pathogens (terrestrial, freshwater and marine).
 - a) <u>In 2010</u> inform USDA ARS, IFAS/University of Florida, and/or others of CISMA lands and managers that are willing to participate in biocontrol trials.
 - b) <u>By 2012</u> submit a list of questions about invasive species biology, impacts, and/or management to university and college biology departments, FLEPPC, FISP, chemical company representatives, or other research entities.

Goal 6: Outreach, Training and Strategic Collaboration

Objective: Support outreach and training to support prevention, EDRR and control efforts in the CISMA boundaries.

- 1. Implement outreach, training and strategic collaboration efforts within <u>CISMA partners/membership</u> to increase CISMA community knowledge as well as statewide profile.
 - a) Implement outreach and training efforts to CISMA partners and land managers
 - i. In 2009 work with FISP to develop CISMA website.
 - ii. Quarterly, or as needed, maintain and improve CISMA website (hosted by FISP).
 - 1. Participate in statewide CISMA <u>monthly</u> calls and FLEPPC <u>annual</u> CISMA meeting (coordinated by FISP).
 - iii. By 2010 maintain and improve CISMA knowledge by communicating with experts.
 - iv. Complete the FCIWG list of invasive species reference that includes priority species (all taxa) and BMPs.
 - 1. Plants: <u>Starting in 2009</u>, <u>annually</u> conduct identification and treatment trainings with IFAS Extension Agent (on topics such as one herbicide certification/use, one invasive identification and treatment, one invasive grass identification, one invasives to be watched/EDRR, and a how to use a GPS & record invasive plant i.d. locations).
 - v. <u>By 2013</u> create or adopt materials for a fact sheet / poster to increase knowledge of current laws relating to invasive species and distribute to CISMA partners.
 - b) Implement outreach, training and strategic collaboration efforts to support CISMA prevention and EDRR efforts.
 - i. <u>By 2010</u> hold <u>annual</u> trainings to use EDDMapS, EDRR, database, including decontamination BMP's, for CISMA partners and targeted audiences.

- ii. <u>By 2013</u> develop stronger working and communication relationship with surrounding areas and surrounding CISMAs; share EDDMapS training and encourage tracking.
- 2. Implement outreach and training efforts with academic/education infrastructure in CISMA communities.
 - a) In 2011 develop a list of environmental education centers and distribute educational materials about prevention and control.
 - b) Plant: <u>In 2010</u> work with Cooperative Extension Master Gardener Program and local garden clubs to promote the removal of invasive plants and use of native plants.
 - c) Aquatics: <u>Starting in 2010</u>, work with Florida Sea Grant and other coastal partners to support the Hitchhiker Program in CISMA and help distribute outreach materials to large local marinas and at large fishing tournaments.
 - d) By 2012 develop list of schools, scout groups, community festivals, environmental festivals and others who could help with education about prevention, EDRR and control, and develop strategic relationships with key environmental orgs to further push.
 - e) <u>By 2012</u> choose short list of priority education volunteer programs for CISMA to implement that simultaneously build up invasive volunteer programs and raise awareness (e.g., student work days, invasive survey recruitment and training programs or other citizen science projects focused on invasives monitoring & control, Pepper Busters teams, etc.)
- 3. Increase outreach efforts to <u>private industries and atypical public agencies</u> (railroads, utilities, ranges, nurseries, botanical gardens, pet stores, animal rehabilitation centers, landscapers, architects, foresters, county animal control, FDOT, and other ROW agencies).
 - a) By 2013 create a communication network contact list for private industries.
 - b) By 2013 create a communication network contact list for atypical public agencies.
 - c) <u>Animals: By 2010</u> work with retailers to adopt, support and implement the "Don't Release Unwanted Pets" poster and card statewide efforts.
 - d) <u>By 2014</u> create working relationship w FL ASLA to promote CISMA goals (e.g. support/encourage a sustainable landscape architect certification course)
 - e) By 2014 develop specialized training materials and workshops for atypical audiences.
 - f) By 2010 create a code of conduct pledge from one relevant industry or agency with goal of getting one new voluntary code of conduct signed per year.
 - g) <u>Plants: By 2011</u> work with retailers to voluntarily agree to reduce the sale of invasive plants (e.g. adopt/help launch the GreenThumb Nursery Program.)
 - h) <u>By 2011</u> ask local prominent botanical garden or ASLA Chapter to take a lead role in educating the public and the nursery industry about preventing the introduction and spread of invasive species (i.e. request garden to provide information to visitors about the invasiveness of certain plants, and not to recommend plants that the Garden is removing from the collections based on the issue of invasiveness.)
 - i) <u>By 2011</u> encourage interpretive signage at visible botanical gardens explaining threat of invasives and alternatives to their use in the landscape (could include demonstration garden)
 - j) By 2012 utilize strategic communication vehicles for BMPs and AlterNatives messages such as Extension Service newsletter, FL ASLA and FNGLA Chapter electronic updates, large growers' newsletters, local environmental groups' newsletters, etc...
 - k) By 2012 publicize signees of code of conducts lists (e.g. post on website, news articles).
- 4. Implement outreach and training efforts to specific individuals, <u>private landowners</u>, and landowner associations.
 - a) <u>In 2010</u> encourage all CISMA partners to place "Do Not Move Firewood" poster at all public conservation lands and high-use recreational areas.
 - b) By 2010 begin to develop working relationships with key landowners or landowner associations.
 - c) By 2010 begin to identify specific private landowners for education.
 - d) <u>By 2012</u> begin to develop landowner 'outreach' packets to send priority landowners (include species information, training courses, etc...).
 - e) By 2010 begin to implement a training effort for specific private landowners and landowner associations.
 - f) By 2011 begin to acquire and distribute existing materials, about native, or non-invasive plants, as an alternative to invasives for erosion control, wildlife forage, landscaping, etc.
 - g) By 2011 begin annual conservation champion award to landowner.

- h) <u>Starting in 2012, annually</u> contact the media through press/photo releases and radio to highlight private lands initiative and available resources.
- i) By 2010 begin distributing FISP landowner matrix information to increase knowledge of funding opportunities, current laws and distribute to individuals with goal of enrolling landowners in funding programs (this is on FISP website).
- j) <u>By 2012</u> begin to develop voluntary agreement for landowners that support CISMA EDRR, control and prevention efforts (for plants this is on VCC, could be an addendum to other landowner agreements).
- 5. Increase outreach and awareness efforts to policy makers.
 - a) Coordinate press releases or public awareness activities.
 - i. Starting in 2011, annually publicize and get proclamations regarding any CISMA projects.
 - ii. Share Annual Weed/Animal Reports with elected officials during NISAW (<u>annually</u> in January or February).
 - b) <u>Starting in 2011, annually</u> visit with newly elected local government officials to support funding, EDRR, prevention and other CISMA goals.
 - c) <u>By 2011</u>, begin working with county Planning & Zoning Departments to encourage environmentally friendly landscape ordinances.
 - c) <u>By 2013</u> identify and engage who the appropriate local regulatory and enforcement agencies would be for any local ordinances, comprehensive plans, landscape rules relating to invasive species.

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FCIWG MISSION STATEMENT

To implement a comprehensive, cooperative approach across boundaries to address the threats of invasive species to the lands and waters within the boundaries of the FCIWG 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).

About This Plan: The following groups wrote plans that were used to create the template for the FCIWG's Strategic Plan: Keys Invasive Species Working Group, Gulf Coast Plan Ecosystem Partnership, Treasure Coast CISMA, Apalachicola Invasive Species Working Group, North Carolina Sandhills Weed Management Area, and the Indiana Invasive Species Task Force 2008.

The plan has six major goals (Organizational, Prevention, EDRR, Control, Monitoring, and Outreach) and corresponding action items for each goal. Each goal's corresponding action items are further categorized under plants, animals (both terrestrial and aquatic species), and pest and pathogens. Dates for action items being launched or completed are underlined to provide subcommittees with a timeframe for prioritization.

Acronyms

ASLA = American Society of Landscape Architects

BMP = best management practices

CISMA = cooperative invasive species management area

CWMA = cooperative weed management area

EDRR= Early detection and rapid response

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/)

FCIWG= First Coast Invasive Working Group

FDOF = Florida Department of Forestry

FIATT= Florida Invasive Animal Task Team

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

 $MOU = memorandum \ of \ understanding$

NISAW = National Invasive Species Awareness Week

ROW = right of way

SOP = standard operating procedures

TNC= The Nature Conservancy

USDA ARS = United States Department of Agriculture, Agricultural Research Service

USFWS = United States Fish and Wildlife 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 (i.e. the predictive tool) (http://plants.ifas.ufl.edu/assessment/)

Goal 1: Create, strengthen and sustain the FCIWG.

Objective: Form and sustain a strong partnership through CISMA.

- 5. Develop basic organizational structure for CISMA (items 1 a-d completed for FCIWG 2007-2009)
 - e) Use CWMA cookbooks and current CISMA examples to help form and sustain CISMA.
 - f) Coordinate a meeting with enthusiastic regional partners to form a new CISMA.
 - g) Establish geographic boundaries, a steering committee and a chair.
 - h) As needed, create standing subcommittees and ad hoc committees to assist with project specific CISMA efforts.

6. Sustain and strengthen CISMA

- a) Schedule CISMA meetings at least twice per year or quarterly.
- b) Ongoing, annually recruit new, and maintain current membership in the CISMA.
- c) <u>Starting in 2009, and every 2 years (or as needed)</u> review steering committee and subcommittees and revise as appropriate.
- d) Starting in 2009, develop strategic five year workplan with CISMA partners.
- e) Starting in 2010, create short annual report.
- f) During 2010 update strategic plan.
- g) By 2010 seek liaison to CISMA from two private industries.
- h) By 2013 hire a part time staff person to coordinate CISMA activities.

7. Submit cooperative funding proposals.

- e) <u>Starting in 2009, annually</u> encourage public land conservation managers to submit FFWCC IPMS grant applications.
- f) In 2011 identify lead partner or organization to serve as the recipient and administrator for grants.
- g) <u>Starting in 2010, annually</u> submit CISMA grants; consider utilizing less common approaches like landowner incentive programs, staff time as in-kind matches, and shared field staff.
- h) In 2010 review FISP funding matrix and create short list of funding programs for FCIWG to submit with due dates for control, EDRR, education and other projects. Include information for each funding opportunity that states what the mechanism to funnel funds to FCIWG could be (i.e. lead agency that could accept the funds and 'manage' the grant.

8. Generate legal documents to strengthen CISMA.

- e) <u>In 2011</u> 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).
- f) In 2010 create or use existing liability releases (e.g. TNC or DOF) for partners to work on private lands.
- g) <u>By 2013</u> write or adopt a CISMA partner MOU, or other document, or use future FISP CISMA MOU, to facilitate partner agency participation and support of CISMA goals and objectives.

Sub-committee color codes:



Goal 2: Prevention

Objective: Develop and/or implement techniques and practices to prevent establishment and spread of new invasions near the CISMA boundaries.

- b) Develop or adopt an alert type system to identify new plant invasions near, or at the boundaries of, CISMA lands.
 - ii. Starting in 2010, establish the FCIWG EddMaps Verifying Committee to quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive plants adjacent to CISMA.
 - 1. If new plant species is found adjacent to CISMA, include in EDRR prioritization.
 - iv. Starting in 2010, quarterly review EDDMapS and/or USGS NAS for new aquatic invasive plants adjacent to CISMA waters.
 - 2. If new plant species is found adjacent to CISMA, include in EDRR prioritization.
- Reduce potential pathways of introduction for terrestrial, invasive non-native plant species into the CISMA.
 - i. Develop and adopt guidelines for vehicle, equipment, personal protective equipment and personnel disinfection program/protocol to address the unintentional movement of terrestrial invasive plants.
 - 5. In 2010 CISMA members establish and utilize FFWCC IPMS or other decontamination standards.
 - 6. In 2010 implement a vehicle, equipment and personnel disinfection program/protocol for CISMA partners to adopt (researchers, fire crews, public works, FDOT, FDOF, and others).
 - 7. In 2010, create or adopt decontamination guidelines for all contractors (e.g. invasive plant management contractors, wildlife services contractors, etc) and encourage CISMA partners to implement when selecting contractors.
 - 8. By 2012 create or adopt decontamination guidelines for landscapers, lawn companies and other outdoor service contractors, and encourage CISMA partners to implement.
 - ii. Beginning in 2009 all CISMA partners will request weed-free mulch, pine-straw, hay, sod, etc..to encourage the production of and availability of aforementioned products.
 - iii. By 2013 all CISMA partners develop or adopt preventative guidelines for conducting ground disturbing activities (e.g. timber harvest/transport, prescribed fire, fire suppression, off-road vehicle use, or contracted activities on partner lands).
- c) Reduce potential pathways of introduction for aquatic (marine and freshwater) invasive plant species into the CISMA.
 - i. Adopt standards for boats, vehicle, equipment, personal protective equipment and personnel disinfection program/protocol (i.e. USFWS "Stop Aquatic Hitchhikers" protocol) to address the unintentional movement of aquatic invasive plants.
 - 2. In 2010, encourage the implementation of the Hitchhikers program that deals with boat, vehicle, equipment and personnel disinfection program/protocol for CISMA partners and their contractors to adopt.
- h) Incorporate IFAS WRA into CISMA invasive plant ranking and planning process.
 - v. Starting in 2010, annually review results of WRA for plant species to be watched.
 - 1. If new plant species is listed as invasive, include in EDRR prioritization.
 - vi. Starting in 2010, if a new non-native plant is found in the CISMA or surrounding geography, request IFAS run this incipient species through the WRA.
 - vii. In 2010 engage local botanical gardens or similar to use the WRA or other predictive tool to assess the invasive threat of new and existing accession plants.
 - 1. If new/existing accession is listed as invasive, encourage gardens to stop planting and remove from collections and include in EDRR prioritization (if it has escaped).
 - viii. By 2012 explore the feasibility of banning the highest threat new invasive plant species through state and local ordinances. (Corresponds with running species through WRA/action item ii above).

- c) Develop or adopt an alert type system to identify new animal invasions near, or at the boundaries of, CISMA lands
 - iv. <u>Starting in 2010</u>, quarterly review EDDMapS database and other sources of new species alerts (e.g. USGS NAS database, shell collecting groups, bird boards, etc...) for new invasive animals adjacent to CISMA.
 - v. If new animal species is found adjacent to CISMA, include in EDRR prioritization.
 - vi. In 2010, create a list of exotic invasive animals, in cooperation with FIATT within CISMA work area.
- d) Reduce potential pathways of introduction for invasive animal species into the CISMA.
 - i. Starting in 2010, assist and participate in FFWCC Pet Amnesty Days, as appropriate.
 - ii. Starting in 2010, after creation of invasive animal list, explore avenues of reducing pathways for potentially new highest threat new invasive animal species through state/local ordinances (e.g. bans, caging requirements, gender restrictions, etc...).

3. Pest and Pathogens

a) Starting in 2009, remain current with new and ongoing threats and stay current on methods of spread.

Goal 3: Early Detection and Rapid Response (EDRR)

Objective: Develop and implement techniques and practices to promote early detection and rapid response of newly established invasive species within the CISMA boundaries.

- a) Develop and/or adopt alert type systems to identify new plant invasions within CISMA lands and waters.
 - i. Starting in 2010, annually have CISMA partners discuss new species that they have observed.
 - ii. No later than 2011, semiannually review EDDMapS database and/or other alert system databases for new terrestrial invasive plants within CISMA.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - v. No later than 2011, semiannually review EDDMapS and/or USGS NAS for new aquatic invasive plants within CISMA waters.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iv. <u>By 2013</u> 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 species.
- b) Prioritize EDRR species on CISMA lands and/or waters.
 - iii. In 2010 create a list of possible EDRR species from best available information/science from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS.
 - iv. Starting in 2012, annually or as needed, reassess EDRR list.
- c) Eradicate EDRR species on CISMA lands and/or waters.
 - iv. Starting in 2010, annually conduct cooperative workdays to eradicate EDRR and prevention species (newly in or adjacent to CISMA).
 - v. In 2011 encourage/assist with the hiring of contractors to eradicate EDRR species.
 - vi. In 2012 create a Rapid Response Team(s) and if necessary, response protocol, to eradicate EDRR species. (e.g., support continued funding of the Northeast Florida Resource Management

Team/i.e. NE FL Strike Team that could act as rapid response team for EDRR work in FCIWG Boundary)

5. Animals

- b) Develop and/or adopt alert type systems to identify new animal invasions within CISMA lands and waters.
 - i. Starting in 2010, annually have CISMA partners discuss new species that they have observed.
 - ii. <u>Starting in 2010, semiannually</u> review EDDMapS database and/or other alert system databases for new terrestrial invasive animals within CISMA.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iii. <u>Starting in 2010, semiannually</u> review EDDMapS and/or databases for new aquatic invasive animals within CISMA waters.
 - 1. If new species is found in CISMA, include in EDRR prioritization.
 - iv. <u>By 2012</u> 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 species.
- b) Prioritize EDRR species on CISMA lands and/or waters.
 - iii. <u>In 2010</u> create a list of possible EDRR species from best available information from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FISP, FNAI, IFAS and EDDMapS.
 - iv. Starting in 2011, annually or as needed, reassess EDRR animal list.
- c) Eradicate EDRR species on CISMA lands and/or waters.
 - ii. In 2013 investigate the potential response of the FCIWG to newly introduced species. If necessary, create a Rapid Response Team(s)/ response protocol, to eradicate EDRR species using staff, contractors, hunters, and others.

6. Pest/pathogens

g) Same as Goal 4: Control; 3. Pest/pathogens: Remain current with new and ongoing threats and stay current on methods of spread.

Goal 4: Control (Prioritized Management)

Objective: Develop and implement techniques and practices to control known infestations of priority invasive species and maintain them at the lowest feasible level in the CISMA boundaries.

- d) Prioritize known CISMA invasive plants using a ranking system that considers the impact of imperiled conservation targets and if necessary, other criteria like economics.
 - iv. <u>In 2010</u> complete list of known invasive plants within CISMA boundaries (i.e. FCIWG Weed List)
 - v. In 2010 prioritize species on list using a ranking system (USGS, other) and best available information from CISMA partners, FLEPPC, FISP, FNAI, IFAS and EDDMapS and distribute to FCIWG partners.
 - vi. Starting in 2011, annually assess and update prioritized list of invasive plants and control techniques.
- e) Manage the plants on the FCIWG Weed list to reduce infestations to maintenance level control.
 - iii. <u>Starting in 2011</u>, emphasize priority control species on the FCIWG list by focusing CISMA partner efforts on these at all opportunities.
 - iv. Increase the size of invasive managed areas on public and private conservation lands within the FCIWG boundary.

- 5. Starting in 2011, annually increase public conservation lands treated and maintained with FFWCC IPMS and other funds.
- 6. Starting in 2012, annually strive to increase private conservation lands treated and maintained.
- 7. Starting in 2010, biannually conduct partner workdays to survey targeted locations for new invasions focusing on high priority EDRR and prevention species (newly in or adjacent to CISMA).
- 8. Starting in 2012, annually increase treatment of prioritized, invasive plants on public non-conservation lands (e.g. ROWs, spoil mounds, recreational parks).
- f) Cease sale, planting or other modes of spread of species we are controlling (illegal and legal).
 - iii. By 2012 submit petitions to FDACS for listing of high priority EDRR and control invasive plants as noxious weeds.
 - iv. By 2011 identify and engage sellers to voluntarily stop selling known invaders. (See incentive programs for sellers in the outreach section of this plan.)

- d) Prioritize known CISMA invasive animals using a ranking system that considers the impact of imperiled conservation targets and if necessary, other criteria like economics.
 - iv. In 2012 develop a list of known invasive animals on CISMA lands (e.g. feral hogs, iguanas, Cuban tree frogs, etc).
 - v. In 2013 prioritize species on list using a ranking system and best available information from CISMA partners, FFWCC, FNAI, EDDMapS and others.
 - vi. Starting in 2014, annually assess and update prioritized list of invasive animals and control techniques, distribute to FCIWG and the public.
- e) Manage the priority control animals in order to reduce damage and/or population size.
 - i. <u>Starting in 2013</u>, emphasize the top 2-3 priority control species by focusing CISMA partner efforts on these at all opportunities.
 - ii. Increase the size of invasive managed areas on public and private conservation lands.
 - 3. Starting in 2013, annually increase public conservation lands treated and maintained.
 - 4. Starting in 2013, annually increase private conservation lands treated and maintained.
 - iii. Starting in 2014, annually increase prioritized, invasive treated public non-conservation lands.
 - iv. Starting in 2014, annually increase the size of invasive free buffer areas around conservation lands (this includes private lands).
- f) Support efforts to cease the sale, importation or other modes of spread of species that we are controlling (illegal and legal).
 - i. Starting in 2014, annually submit requests to FFWCC to include updated prioritized control species to restrictive lists (i.e. Reptiles of Concern List, conditional species, prohibitive species, etc...).

3. Pest/Pathogens

- b) Prioritize, communicate and coordinate management activities designed to protect native species (plants and animals) and/or economically important species that are being impacted by invasive pest/pathogens.
 - i. Research and prioritize known and potential invasive pest /pathogen species.
 - ii. Investigate tested and potential control methods and apply as feasible and reasonable:
 - 1. Biological
 - 2. Chemical
 - 3. Mechanical

and determine if this is a critical and feasible action/role for land managers to have, or if more appropriate for researchers only.

iii. Research and apply methods other than invasive control recommended by USDA/DACS and other researchers to protect native populations (e.g. collect seed, treat with chemicals, etc.).

Goal 5: Monitoring, Mapping and Applied Research

Objective: Promote locating and documenting occurrences, and supporting applied research, of prevention, EDRR and control species to inform CISMA decisions.

- 2. Monitoring and mapping of plants, animals, pests/pathogens (terrestrial, freshwater and marine.)
 - b) <u>Beginning in 2010</u>, quarterly record invasive species from field observations and mapping projects into CISMA EDDMapS and/or FNAI's invasive databases.
 - i. Encourage CISMA partners to use EDDMapS for EDRR species and single occurrence entry.
 - ii. Encourage CISMA partners to use FNAI for large census/polygon and distribution data.
 - h) Create a verification standing committee to oversee CISMA record entries into EDDMapS.
 - i. In 2010, annually recruit and assign plant verifiers.
 - i) Starting in 2010, annually conduct partner workdays to survey targeted locations for new invasions focusing on high priority EDRR and prevention species (newly in or adjacent to CISMA).
 - j) <u>By 2012</u>, annually use monitoring results to provide information and possible assistance to land managers to treat the new/EDRR species. Compile partner webpage links (re # acres treated), and add to FCIWG webpage to raise awareness of acres of lands treated by agency annually.
 - k) By 2013 provide information to partners regarding suite of invasive species tracking/reporting software programs available (e.g. WEEDDAR, WIMS, etc).
 - By 2013 encourage CISMA partners to assist with important information gathering to document the
 impact of high priority control species. Specifically, CISMA partners should support the IFAS
 Assessment's data needs by completing the IFAS Questionnaire which furthers the CISMA's evaluation
 of both EDRR species (i.e. prioritizing control efforts), and also in evaluating whether species should be
 listed depending on their impacts to natural areas and Florida's biodiversity.
- 2. Research of plants, animals, pests/pathogens (terrestrial, freshwater and marine).
 - a) In 2010 inform USDA ARS, IFAS/University of Florida, and/or others of CISMA lands and managers that are willing to participate in biocontrol trials.
 - b) By 2012 submit a list of questions about invasive species biology, impacts, and/or management to university and college biology departments, FLEPPC, FISP, chemical company representatives, or other research entities.

Goal 6: Outreach, Training and Strategic Collaboration

Objective: Support outreach and training to support prevention, EDRR and control efforts in the CISMA boundaries.

- **Training subcommittee may need to coordinate with Private Lands for portions of training projects.
- 6. Implement outreach, training and strategic collaboration efforts within <u>CISMA partners/membership</u> to increase CISMA community knowledge as well as statewide profile.
 - c) Implement outreach and training efforts to CISMA partners and land managers
 - vi. In 2009 work with FISP to develop CISMA website.
 - vii. Quarterly, or as needed, maintain and improve CISMA website (hosted by FISP).
 - 1. Participate in statewide CISMA <u>monthly</u> calls and FLEPPC <u>annual</u> CISMA meeting (coordinated by FISP).
 - viii. By 2010 maintain and improve CISMA knowledge by communicating with experts.
 - ix. Complete the FCIWG list of invasive species reference that includes priority species (all taxa) and BMPs.
 - 1. Plants: Starting in 2009, annually conduct identification and treatment trainings with IFAS Extension Agent (on topics such as one herbicide certification/use, one invasive identification and treatment, one invasive grass identification, one invasives to be watched/EDRR, and a how to use a GPS & record invasive plant i.d. locations).
 - x. By 2013 create or adopt materials for a fact sheet / poster to increase knowledge of current laws relating to invasive species and distribute to CISMA partners.

- d) Implement outreach, training and strategic collaboration efforts to support CISMA prevention and EDRR efforts.
 - iii. <u>By 2010</u> hold <u>annual</u> trainings to use EDDMapS, EDRR, database, including decontamination BMP's, for CISMA partners and targeted audiences.
 - iv. By 2013 develop stronger working and communication relationship with surrounding areas and surrounding CISMAs; share EDDMapS training and encourage tracking.
- 7. Implement outreach and training efforts with academic/education infrastructure in CISMA communities.
 - f) In 2011 develop a list of environmental education centers and distribute educational materials about prevention and control.
 - g) Plant: In 2010 work with Cooperative Extension Master Gardener Program and local garden clubs to promote the removal of invasive plants and use of native plants.
 - h) Aquatics: Starting in 2010, work with Florida Sea Grant and other coastal partners to support the Hitchhiker Program in CISMA and help distribute outreach materials to large local marinas and at large fishing tournaments.
 - i) By 2012 develop list of schools, scout groups, community festivals, environmental festivals and others who could help with education about prevention, EDRR and control, and develop strategic relationships with key environmental orgs to further push.
 - j) By 2012 choose short list of priority education volunteer programs for CISMA to implement that simultaneously build up invasive volunteer programs and raise awareness (e.g., student work days, invasive survey recruitment and training programs or other citizen science projects focused on invasives monitoring & control, Pepper Busters teams, etc.)
- 8. Increase outreach efforts to <u>private industries and atypical public agencies</u> (railroads, utilities, ranges, nurseries, botanical gardens, pet stores, animal rehabilitation centers, landscapers, architects, foresters, county animal control, FDOT, and other ROW agencies).
 - 1) By 2013 create a communication network contact list for private industries.
 - m) By 2013 create a communication network contact list for atypical public agencies.
 - n) Animals: By 2010 work with retailers to adopt, support and implement the "Don't Release Unwanted Pets" poster and card statewide efforts.
 - o) By 2014 create working relationship w FL ASLA to promote CISMA goals (e.g. support/encourage a sustainable landscape architect certification course)
 - p) By 2014 develop specialized training materials and workshops for atypical audiences.
 - q) By 2010 create a code of conduct pledge from one relevant industry or agency with goal of getting one new voluntary code of conduct signed per year.
 - r) Plants: By 2011 work with retailers to voluntarily agree to reduce the sale of invasive plants (e.g. adopt/help launch the GreenThumb Nursery Program.)
 - s) By 2011 ask local prominent botanical garden or ASLA Chapter to take a lead role in educating the public and the nursery industry about preventing the introduction and spread of invasive species (i.e. request garden to provide information to visitors about the invasiveness of certain plants, and not to recommend plants that the Garden is removing from the collections based on the issue of invasiveness.)
 - t) By 2011 encourage interpretive signage at visible botanical gardens explaining threat of invasives and alternatives to their use in the landscape (could include demonstration garden)
 - u) By 2012 utilize strategic communication vehicles for BMPs and AlterNatives messages such as Extension Service newsletter, FL ASLA and FNGLA Chapter electronic updates, large growers' newsletters, local environmental groups' newsletters, etc...
 - v) By 2012 publicize signees of code of conducts lists (e.g. post on website, news articles).
- 9. Implement outreach and training efforts to specific individuals, private landowners, and landowner associations.
 - k) In 2010 encourage all CISMA partners to place "Do Not Move Firewood" poster at all public conservation lands and high-use recreational areas.
 - 1) By 2010 begin to develop working relationships with key landowners or landowner associations.
 - m) By 2010 begin to identify specific private landowners for education.

- n) By 2012 begin to develop landowner 'outreach' packets to send priority landowners (include species information, training courses, etc...).
- o) By 2010 begin to implement a training effort for specific private landowners and landowner associations.
- p) By 2011 begin to acquire and distribute existing materials, about native, or non-invasive plants, as an alternative to invasives for erosion control, wildlife forage, landscaping, etc...
- q) By 2011 begin annual conservation champion award to landowner.
- r) <u>Starting in 2012, annually</u> contact the media through press/photo releases and radio to highlight private lands initiative and available resources.
- s) By 2010 begin distributing FISP landowner matrix information to increase knowledge of funding opportunities, current laws and distribute to individuals with goal of enrolling landowners in funding programs (this is on FISP website).
- t) By 2012 begin to develop voluntary agreement for landowners that support CISMA EDRR, control and prevention efforts (for plants this is on VCC, could be an addendum to other landowner agreements).
- 10. Increase outreach and awareness efforts to policy makers.
 - c) Coordinate press releases or public awareness activities.
 - iii. Starting in 2011, annually publicize and get proclamations regarding any CISMA projects.
 - iv. Share Annual Weed/Animal Reports with elected officials during NISAW (<u>annually</u> in January or February).
 - d) <u>Starting in 2011</u>, annually visit with newly elected local government officials to support funding, EDRR, prevention and other CISMA goals.
 - c) **By 2011**, begin working with county Planning & Zoning Departments to encourage environmentally friendly landscape ordinances.
 - c) By 2013 identify and engage who the appropriate local regulatory and enforcement agencies would be for any local ordinances, comprehensive plans, landscape rules relating to invasive species.