

# Status & Future of USACE Invasive Species Policy

Authors:
Jon Lane, Jeremy Crossland,
& Tim Toplisek
USACE

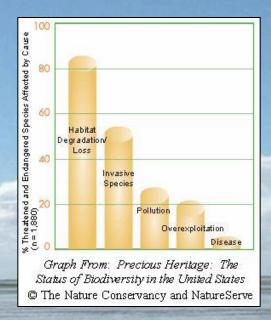
### Background

- USACE has managed invasive species since 1899
- Initial involvement was maintaining navigable waterways
- Terrestrial issues and management came about with the authorization of flood control projects and associated land management

### Impacts & Expenditures

#### **IMPACTS**

- International \$1,400,000,000,000
   in damages (2008 GISP/Cornell Univ.)
- National \$138,000,000,000 in damages (2006 -Cornell Univ.)
- T&E species 2<sup>nd</sup> leading cause of decline

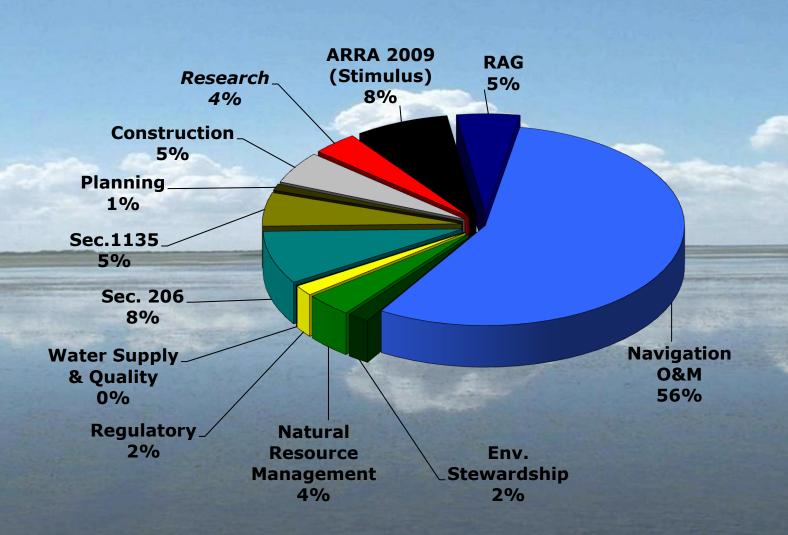


#### **EXPENDITURES**

- USDA over \$1 billion annually
- USACE spent about \$120 million on invasive species in FY09 – ERDC study



### **USACE Expenditures FY09**



### **Authorities**

- 1899 RAG Rivers and Harbors Act
- 1958 APC Rivers and Harbors Act as amended
- 1977 Executive Order 11987
- 1996 ER 1130-2-540 O & M Stewardship
- 1999 Executive Order 13112
- 2000 National Invasive Species Management Plan
- 2009 USACE Invasive Species Policy

### What is USACE Responsibility

#### **Executive Order 13112** (1999)

Federal Agencies shall...

- "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere..."
- prevent the introduction of invasive species;
- detect and respond rapidly to and control populations ...
- monitor invasive species populations...
- provide for restoration of native species and habitat conditions...
- conduct research on invasive species and develop technologies...
- promote public education on invasive species...



### What is USACE Responsibility

- USACE Invasive Species Policy (June 2009)
  - 'This policy memorandum is applicable to the entire spectrum of Civil Works programs and projects and meets the spirit of the National Invasive Species Management Plan'
  - 'Measures to either prevent or reduce establishment of invasive and non-native species will be a component of all Corps Operations and Maintenance (O&M) at project sites as well as a part of implementation of a Civil Works project'
  - 'Civil Works planning documents will address invasive species concerns in their analysis of project impacts'

#### **Current Situation**

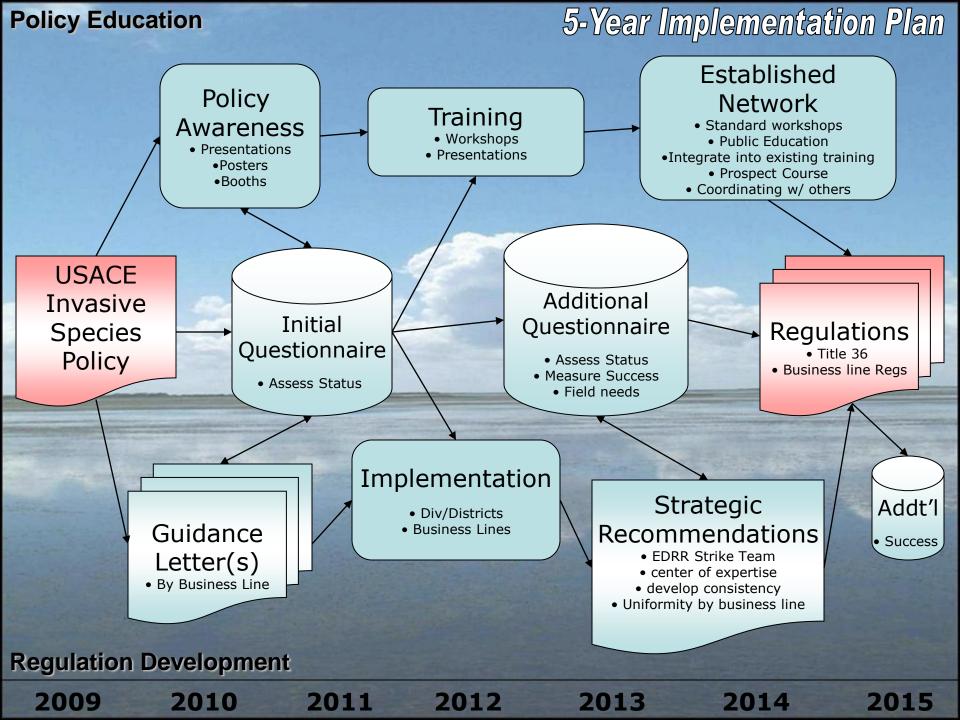
- Corps leadership recognized the invasive species problem
- 2006 Created the Invasive Species Leadership Team
- 2009 Developed Policy
  - Policy Implementation?
    - 5 year plan
    - No resources
- Invasive Species Management Center of Expertise -20??

### **Policy Goals**

- a. Leadership and Coordination: Work strategically, using all Corps scientific, management, and partnership resources in unison to manage invasive species.
- **b. Prevention:** Prevent introduction and establishment of invasive species to reduce their impact on the environment, economy, and health of the United States.
- c. Early Detection and Rapid Response: Develop and enhance the capacity to identify, report, and effectively respond to newly discovered localized invasive species.
- d. Control and Management: Contain and reduce the spread and populations of established invasive species to minimize their harmful impacts.

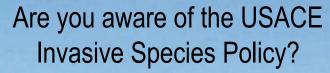
### **Policy Goals**

- e. Restoration: Restore native species and habitat conditions and rehabilitate high-value ecosystems and key ecological processes that have been impacted by invasive species to meet desired future conditions.
- f. Research: Conduct appropriate research and development activities to ensure management programs are effective and science based. Sound scientific information is critical in guiding management activities, determining the magnitude of invasive species problems, planning future research and management programs, and improving intervention efforts.
- g. Information Management: Implement management actions to track invasive species data.
- h. Education and Public Awareness: Education, communication, and interpretation programs can convey how the public can help prevent, identify, detect, and control invasive species and gather public input into program plans and promote partnerships in their implementation.



### **Questionnaire Results**

From SAD Ranger Conference 2010



Are you implementing the Policy?



#### **RECOMMENDATIONS**

- "Educate leadership about the problem. Fund it in the budget."
- "A driven effort at Operations Managers to form project delivery teams at the PROJECT level, funded by HQ."
- "Funding, manpower, training"

### Center of Expertise



- Provide technical expertise to projects needing assistance
- Standardize practices across districts and divisions
- Continue Policy Implementation

## 30 April 2010 – Proposal to Est. Center of Expertise



DEPARTMENT OF THE ARMY JACKBONVILLE DISTRICT CORPS OF ENGINEERS P. O. BOX 4070 JACKBONVILLE, FLORIDA 32232-0019

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CESAJ-OD

MEMORANDUM FOR Commander, South Atlantic Division (CESAD-PDS-O)

SUBJECT: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise

- 1. This memorandum proposes the establishment of an Invasive Species Management Mandatory Center of Expertise (ISM-MCX) and a physical location at the Jacksonville District. The majority of activities will occur "virtually" between the ISM-MCX membership and subject matter experts. Proposed responsibilities of the ISM-MCX include providing assistance in the planning and operational phases of invasive species management programs, civil works, and ecosystem restoration projects. The ISM-MCX will also provide training and workshops. These services may be reimbursable or centrally funded.
- 2. The need for the ISM-MCX exists within the Corps. Invasive plant and animal species are an increasing problem across the nation and impact all Corps missions. HQUISACE estimates that \$120M\$ in USACE funds are specifically year as a result of fitvasive species problems and this cost is growing at a rate of \$7.5M\$ each year.
- 3. The extent of these challenges was addressed with the establishment of the Invasive Species Leadership Team (ISLT) in 2005 to assist HQUSACE in the development of national policy and program ensuagement. The invasive species policy memorandum was signed by MG Temple in June 2009. Goals and objectives include increased partnering; prevention, early detection and rapid response capabilities; monitoring of Corps projects; budget initiatives; restoration goals; research and development programs; and education and public envarences. Formation of the ISM-MCX will ensure consistent implementation advance achievement of these objectives and goals. In addition, it will expedite the Corps moving from "Good to Great" and supporting objectives 2a and 2b of Goal 2 "Begineering Sustainable Water Resources" of the USACE Campaign Plan.
- 4. The proposed ISM-MCX will consist of four components: (a) a physical location at a host district; (b) the membership of the Invasive Species Leadership Team and allied subject matter experts; (c) participation by HQUSACE proposents, and (d) participation by HRDC technical representatives.
  - a) A physical location is required to host the MCX and serve as a destination site for requests, inquiries, and consultations; provide financial and budgetsry services; muck collaborative efforts; assemble and maintain up-to-date lists of contributors and subject matter experts (SMEs); and maintain education and outreach materials. The Jacksonville District offers to serve as the host as explained in paragraph 5 below.

CESAJ-OD

SUBJECT: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise

- b) The ISLT membership consists of one representative from each Division office and a representative from one of the District offices within each Division. Each number has been nominated by their Division in recognition of their high level of expertise and experience with existing and emerging problems with invasive plant and animal species. The SMPs not serving on the ISLT will be requested to serve as ad box members of the ISM-MCX.
- The Invasive Species Senior Policy Advisor at HQUSACE will serve as the ISM-MCX champion. Proponents from HQUSACE will also include representatives from the applicable Communities of Fractice.
- d) U.S. Army Engineer Research and Development Center Civil Works Environmental Engineering and Sciences Laboratory representatives will serve as the technical proponents for the research comments.
- 5. Jacksonville District offers to house the ISM-MCX as it can be established quickly and effectively if aligned with the Invasive Species Management (ISM) Branch and Aquatic Plant Control Operation Support Center (APCOSC). In 1980, HQUSACB established the APCOSC to serve as a missoal center of expectise clustged with supporting all Corps districts in addressing invasive aquatic vegetation issues. The ISM Branch has kept up with all the emerging invasive species issues and is providing expertise for several ongoing invasive species initiatives including the Comprehensive Everglades Restoration Plan in Jacksonville District; the Great Lakes and Missossippi River Interbasin Feasibility Study and the Asian Carp Dispersal Barrier Efficacy Study in Chicago District; the Lake Chantauqua Feasibility for Pittaburg District; and assessing and making recommendations regarding invasive plant problems for Buffalo District.
- If approved, an ISM-MTX PDT will be established to address resource requirements needed to establish and sustain the MCX. Point of contact is Mr. Jim W. Jeffords, Chief, Operations Division, Jacksonville District. 904-232-1123.

ALFRED A PANTANO, II Colonel Corps of Engineers Commenting

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## 23 May 2010 – Proposal to Est. ISM-CTX SAD



DEPARTMENT OF THE ARMY SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS ROOM 9M15, 60 FORSYTH ST, S.W. ATLANTA GA 30310-3931

CESAD-PDS-O

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MEMORANDUM FOR Commander, HQ USACE (Mike Ensch/CECW-CON)

SUBJECT: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise in Jacksonville District

- Reference memorandum, SAJ-OD, 30 April 2010, subject: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise, encl.
- 2. Invasive species, both terrestrial and aquatic, have been a growing challenge at many of our lakes and waterways across the nation, and impact all Corps' missions. While we have been vigilant and proactive in addressing this challenge, additional action is needed. The establishment of an Invasive Species Management Mandatory Center of Expertise (ISM-MCX) will allow a national approach that will support Objectives 2a and 2b of Goal 2, "Engineering Sustainable Water Resources," of the USACE Campaign Plan.
- 3. Jacksonville has been exploring this iden over the last few months in discussions with ERDC, other districts/MSCs, and HQ staff. Their proposed concept is to physically host an ISM-MCX in Jacksonville District, with virtual membership and experts from across USACE. Jacksonville District is a logical geographic host for this MCX for several reasons. Jacksonville currently serves as the USACE nationally designated "Aquatic Plant Control Operational Support Center" and has an established relationship with many districts across the nation as well as HQ USACE. In addition, Jacksonville has established an "Invasive Species Management Branch" led by Dr. Bill Zattau who served as the first co-chair of the national USACE Invasive Species Leadership Team.
- 4. We are seeking your review and conceptual support of Jacksonville's proposal prior to developing and forwarding an Approval Request Report in accordance with ER 1110-1-8158, Appendix A, Corps-Wide Centers of Expertise Program.

Major General, USA Commanding

 My point of contact for information regarding the subject is Mr. Jim Jeffords, Chief, Operations Division, Jacksonville District, who may be contacted at (904) 232-1123.

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ENCLOSURE -1

## 2 Sept 2010 – Proposal to Est. ISM-CTX HQ – Ensch (Operations)



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS 441 G STREET MW WASHINGTON, D.C. 20314-1000

SEP 2 2010

CECW-CO-N

MEMORANDUM FOR COMMANDER, SOUTH ATLANTIC DIVISION (CESAD-DE)

SUBJECT: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise in Jacksonville District

- Reference CESAD-PDS-O memorandum (Enclosure 1), dated 2 May 2010, subject as above, wherein you requested that HQUSACE review and conceptually support the proposal to establish an Invasive Species Mandatory Center of Expertise in Jacksonville District.
- 2. Over the past several months, HQUSACE-level briefings on the proposed Center have been made to the Director of Civil Works, business line managers, Engineering and Construction, Operations and Regulatory, Programs and Project Management, Planning and Policy, and Office of Counsel. The overall reaction to these briefings was positive and HQUSACE conceptually supports the subject proposal for the subject center.
- However, when developing the Approval Request Report, request you review and address the following comments:
- a. It is important to determine the appropriate type of Center to be established. Though you have proposed a Mandatory Center of Expertise (MCX), HQUSACE comments relative to the intent and focus of the proposed Center indicated it would be more prudent to establish a Technical Center of Expertise (TCX) rather than a MCX. Please provide the rationale for establishing an MCX versus a TCX.
- b. In addition to information required by ER 1110-1-8158, Corps-wide Center of Expertise Program, please also address the following by incorporating into the Approval Request Report: prioritization and justification of the proposed goals, objectives, and focus of the proposed Center, documentation demonstrating that the benefits of the Center exceed the costs; information concerning the projected annual cost of the Center; and how it will be funded.
- Be advised that ER 110-1-8158 is being updated. The most current draft is provided for your reference (Enclosure 2). Questions should be directed to Mr. Tim Toplisek, CECW-CO-N, at (202) 761-4259.

FOR THE COMMANDER

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Chief, Operations Directorate of Civil Works

## 30 Sept 2010 – Proposal to Est. ISM-CTX HQ – Dixon (Programs)



DEPARTMENT OF THE ARMY SOUTH ATLANTS DIVISION, COPPS OF ENGINEERS ROOM \$465, 60 FORSYTH ST., S.W. ATLANTA GA 3003-4601

CESAD-PDS-O

30 Sep 10

MEMORANDUM FOR Commander, Jacksonville District

SUBJECT: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise in Jacksonville District

- Reference memorandum, CBCW-CO-N, 2 September 2010, subject: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise, enclusure 1.
- 2. Your proposal to establish an Invasive Species Center of Expertise in the Jacksonville District has been conceptually approved by HQ USACE. While your initial proposal was to establish a Mandadory Center of Expertise (MCX), please note that HQ USACE suggests and we concur that a Technical Center of Expertise (TCX) is more appropriate at this time. Please submit your complete proposal and plan in accordance with ER 1110-1-8158, Appendix B which outlines the criteria for establishing a TCX. The ER (110-1-8158 is currently under revision and the most current that is provided at enclosure 2 for your consideration.
- 3. In addition to the HQ USACE TCX submittal, I would like your assistance in developing regional guidance to require the use of the Jacksonville District Invasive Species TCX throughout the South Atlantic Division. We will work with your staff to review and coordinate this guidance across the region before it is finalized.
- My point of contact for this action is Mr. Scott Strotman, CESAD-PDS-O, who can be reached at (404) 562-5135.

FOR THE COMMANDER:

2 Encls

LESTER S. DIXON, P.E.
Director of Programs

### 14 Feb 2011 – Cert Request for ISM-CTX SAJ



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P. O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

14 February 2010

CESAJ-OD

MEMORANDUM FOR Commander, South Atlantic Division

Subject: Certification Request for the Invasive Species Management Technical Center of Expertise

- Reference memorandum (Enclosure 1), CESAD-PDS-O, dated 30 September 2010, subject Proposal to Establish an Invasive Species Management Mandatory Center of Expertise in Jacksonville District.
- 2. The purpose of this memorandum is to document the activities that have taken place in support of creating an Invasive Species Management Center of Expertise and to respond to the questions presented in the memorandum referenced in paragraph 1 including the Certification Request for the Center of Expertise. The requirements for the Certification Request are found in Engineer Regulation (ER) 1110-1-8156, Engineering and Design, CORPS-WIDE CENTERS OF EXPERTISE PROGRAM.
- 3. On 26 May 2010, a memorandum (Enclosure 2), "Proposal to Establish an Invasive Species Management Mandatory Center of Expertise in Jacksonville District", was endorsed by MG Semonities and forwarded to HQUSACE formally proposing the creation of a Mandatory Center of Expertise (MCX). In subsequent discussions, it was decided that an Invasive Species Management Technical Center of Expertise (ISM-TCX) would be more appropriate to the needs of the Corps than an MCX. Therefore, instead of an MCX Approval Request Report required per the referenced ER, this Certification Request is submitted to the HQUSACE invasive species proponent (Mr. Toplisek, CECW-CO-N) for evaluation. An MCX designation would require certain activities or portions of activities to be reviewed and approved by HQUSACE along with a requirement to fund the review. The intention is not to burden the invasive species community with these requirements and costs, but to provide additional toole, capabilities, and expertise to the community.
- The following Certification Request protocol and criteria are prescribed in Appendix B of the referenced regulation.
- a. <u>Coordination</u>. Prior to establishing selection criteria, the proponent will coordinate with appropriate HQUSACE elements to ensure there is no overlap with the capabilities or responsibilities of existing elements. This was accomplished through a coordinated series of meetings and briefings as detailed in paragraph 2 of HQUSACE memorandum dated 2 September 2010 (Enclosure 3).

#### CESAJ-OD

Subject: Certification Request for the invasive Species Management Technical Center of Expertise

reducing the duplication of effort and increasing the speed and consistency of information transferred both internally between the levels of the agency and externally from the Corps to the National Invasive Species Council and other entities. The "one door" approach will eliminate lost labor time at the district and division level by addressing Congressional and HQ data calls and providing a reliable source for field staff to obtain invasive species management advice. Additional long-term savings are expected once regional Early Detection and Rapid Response teams are created.

- 7. The HQUSACE memorandum requested anticipated costs for establishing and maintaining the ISM-TCX. The projected initial costs include labor funding for one employee for 28 days (23,986) in FY11 at the host district to serve as the PDT lead and URILIZE the PMP to develop the ISM-TCX. Additional labor funding for the PDT lead and PDT membership (one member from ERDC; six from the ISLT, with oversight by HQUSACE POC) to finalize the PMP is estimated at \$48,500 for 10 days per person in FY11. Therefore, the combined labor total required is \$92,468 in FY11. All PDT meetings will be by teleconference or web-based to minimize costs. It may be possible to piggyback one face-to-face PDT meeting this year in conjunction with an ISLT meeting, and this would not incur travel costs. This amount of funding is unavailable at the district or division level and would be requested to be provided by HQUSACE. Once functional, operating costs and funding sources are projected to vary from year to year based on need, requests, and the availability of funds. All work performed for the direct benefit of a project, district, or MSC will be reimbursable. Funds provided by HQUSACE would be used to fund the PDT as described above and then used to establish and sustain the technical capability at the ISM-TCX physical location at Jacksonville District.
- 8. I want to thank you and your staff for your continued support and leadership in the downlopment of the Invasive Species Management Technical Center of Expertise. It will be a valuable asset to the South Atlantic Division, the Corps, and the Nation for years to come.
- Point of contact is Mr. Jim W. Jeffords, Chief, Operations Division, Jacksonville District. 904-232-1123

4 Encls

ALFRED A. PANTANO, JR. Colonel, Corps of Engineers Communiting

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### 30 March 2011 – Cert Request for ISM-CTX SAD



MENLY TO ATTENTION OF DEPARTMENT OF THE ARMY SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS ROOM (MIS, 60 FORSYTH ST., S.W. ATLANTA GA. 2020-8891

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CESAD-PDS-O

MEMORANDUM FOR Commander, HQ USACE (Mike Ensch/CECW-CON)

SUBJECT: Certification Request for the Invasive Species Management Technical Center of Expertise

#### 1. References:

- a. Memorandum, CESAJ-OD, 14 February 2011, subject as above, with enclosures.
- Memorandum, CECW-ON, 2 Sept 2010, subject: Proposal to Establish an Invasive Species Management Mandatory Center of Expertise in Jacksonville District, is included as one of the enclosures in reference a above.
- 2. I strongly endorse the Certification Request for the Invasive Species Management Technical Center of Expertise (ISM-TCX) in Jacksonville District, reference a, and subsequent establishment of the Center at the existing Aquatic Plant Control Operations and Support Center, Jacksonville District Operations Division Invasive Species Management Branch. I request support and concurrence for the establishment of this center.
- 3. Jacksonville has been exploring this idea over the past year in discussions with ERDC, other Districts/MSCs, and HQ staff. Their proposed concept is to physically host an ISM-TCX in Jacksonville District, with virtual membership and experts from across USACE. Jacksonville District is a logical geographic host for this TCX for several reasons. Jacksonville currently serves as the USACE nationally designated "Aquatic Plant Control Operational Support Center" and has an established relationship with many districts across the nation as well as HQ USACE. In addition, Jacksonville has established an "Invasive Species Management Branch" led by Dr. Bill Zattau who served as the first co-chair of the national USACE Invasive Species Leadership Team.
- 4. We are currently developing guidance to ensure efficient use of Jacksonville District's invasive species expertise throughout the South Atlantic Division. Through this regional initiative, we expect to increase the sharing of knowledge, expertise, and lessons learned, and reduce any duplication of efforts that may corrently exist. Future analysis will be used to demonstrate whether a valid need exists to change the designation from a technical center to a mandatory center.
- 5. The business model for the national ISM-TCX requires a small, initial investment of approximately \$92,500 to cover costs for the establishment of the ISM-TCX. This includes labor funding for one employee for 28 days (\$23,968) at the bost District (Jacksonville) to serve as the TCX lead. Additional labor funding for the virtual members is estimated at \$68,500. Therefore, the combined labor total required is \$92,468. Following this one-time initial investment, the

CESAD-PDS-O

SUBJECT: Certification Request for the Invasive Species Management Technical Center of Expertise

goal is to be self-supporting and all other direct support provided by the ISM-TCX would be project funded as a reimbursable activity. Invasive species constitutes a long-term challenge with no end in sight. In light of decreased funding for projects, initiatives such as this will help us leverage valuable dollars to achieve our missions.

 Thank you for your support and assistance with this initiative. My point of contact is Mr. Scott Strotman, CESAD-PDS-O, who can be reached at (404) 562-5436.

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## **ISM-CTX Next-Step** "Acceptance Letter"

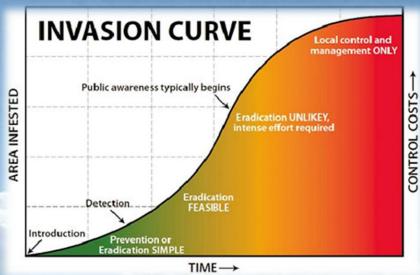
- Demonstrate the need for the TCX
- Review previous coordination through the chain and HQ
- Show that the ISM-CTX supports the ISLT
- Show that members of the ISLT represent Dist/Div from across the country
- Show that the ISLT members will also play a role on the TCX as consultants for various invasive species
- Reference that TCX will be housed in Jacksonville

### & then...

- Then our agency changed the regulation governing centers of expertise.
- Which means writing an Approval Request Report

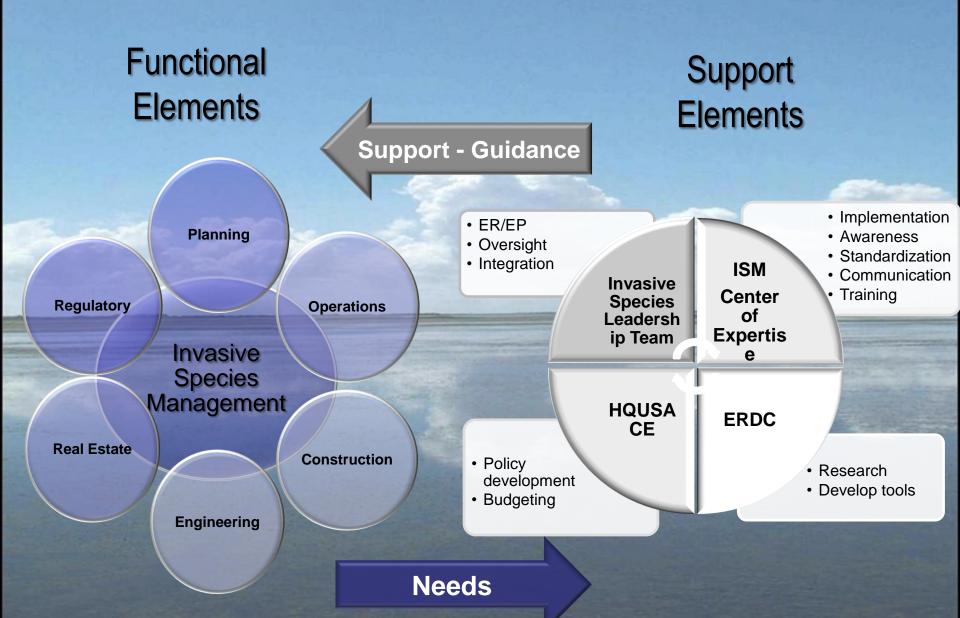


# Managing Invasive Species



- Prevention lowest cost, least impacts
  - Regulations
  - Education & Outreach
- EDRR Moderate cost, low impact
  - Inventory, monitoring and mapping
  - Strike team
- Control & Maintenance Very Costly, many impacts (economic & environmental)
  - Control program & money

### **Leadership & Coordination**



### **Cooperative Weed Management Areas**

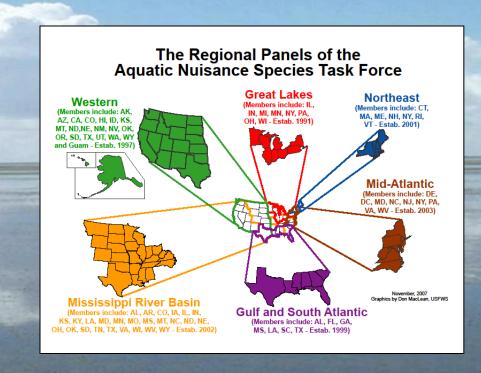
- Partnership of federal, state, & local governments, tribes, NGOs, & private landowners
- CWMA partners develop comprehensive invasive species management plans for a specific area
- Defined geographical region with involvement from all major stakeholders





# Aquatic Nuisance Species Regional Task Forces

- District/Division Level Coordination
- www.anstaskforce.gov
- Interagency teams that work together to resolve regional problems
- Instigate policy for regional issues



### Questions, Comments...

Thank you



Jeremy Crossland 904.232.1044

<u>jeremy.m.crossland@usace.army.mil</u>

To get a copy of the USACE Invasive Species Policy – Google "Invasive Species Policy" on the Gateway