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## CERP Guidance Memorandum 062.00

*South Florida Water Management District – Jacksonville District, U.S. Army Corps of Engineers*

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**CGM NUMBER-REVISION: 062.00**

**EFFECTIVE DATE:** *July 11, 2012*

**CATEGORY:** Invasive Species

**SUBJECT:** Invasive and Native Nuisance Species Management

### **DESCRIPTION**

This memorandum establishes the processes and procedures, and provides guidance to the staff of the U.S. Army Corps of Engineers (USACE), the South Florida Water Management District (SFWMD), and other members of Project Delivery Teams (PDTs) on how to consider and incorporate invasive and native nuisance species management into Comprehensive Everglades Restoration Plan (CERP) projects, in accordance with references provided in this section. The memorandum provides guidance for comprehensively assessing invasive and native nuisance species during the Planning, Design, Construction, and Operations, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R) phases. Items to consider, address, and assess during each phase are described in the memorandum.

The USACE and the SFWMD recognize that project restoration benefits may be adversely affected by invasive and native nuisance species, and there are potential project and program-level cost impacts associated with invasive and native nuisance species management. To minimize the potential high costs of managing invasive and native nuisance species, and to ensure project benefits are not impacted, the two agencies agreed invasive and native nuisance species need to be comprehensively addressed as a lifecycle project and program management concern. In May 2010, the Jacksonville District received policy guidance indicating that CERP projects should include evaluations of the need to include invasive and native nuisance species management. To implement the policy guidance, CERP implementation processes were evaluated to determine where management of invasive and native nuisance species should be considered and incorporated. References and guidance relevant to the development of this memorandum are provided below.

- *CECW-SAD Memorandum, Comprehensive Everglades Restoration Plan (CERP) – Requirements for Project Implementation Reports (PIRs) and other Implementation Documents, dated 27 May 2010*
- *CECW-ZA Memorandum, U.S. Army Corps of Engineers Invasive Species Policy, dated 02 June 2009*
- *Executive Order 13112, Invasive Species*

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### GUIDANCE

PIRs should include an assessment of the need for future management activities to control invasive or native nuisance species. The species, distribution, and potential impacts to the restoration effort will be described, along with plans and cost estimates for managing invasive and nuisance species to ensure that ecosystem restoration benefits will not be adversely impacted. PIRs should indicate whether these management activities are being proposed as an aspect of project construction or if they will be conducted as part of OMRR&R. Every effort should be made to minimize the cost of invasive and native nuisance species management during the OMRR&R phase. Projects encompassing lands which are already being managed for the restoration or maintenance of the natural habitat (e.g. existing mitigation sites) shall not include that management activity as a CERP project responsibility.

Any additional construction costs not previously included in an approved PIR will count against the project's Section 902 limit. As such, every effort should be made to identify the most cost effective approach to accomplish necessary invasive and native nuisance species management.

In accordance with policy guidance, CERP projects will assess the following items:

- Describe the invasive and native nuisance species, its distribution, and potential impacts to ecosystem restoration efforts.
- Describe invasive and native nuisance species management that is already being conducted as a requirement of another state/federal project or which is the responsibility of another entity.
- Include an assessment of the need for future management activities to control invasive and native nuisance species.
- If early assessments of existing conditions suggest invasive and native nuisance species management activities and costs may be a significant portion of project costs that may need to be considered during plan formulation, the project team should clearly identify the control measures and associated costs as a part of the project alternative formulation and evaluation.
- Describe detailed plans and cost estimates for managing invasive and native nuisance species to ensure that federal project ecosystem restoration benefits are not adversely impacted.
- Indicate whether nuisance and native nuisance management activities are proposed as an aspect of the construction and/or OMRR&R phases.
- Details of invasive and native nuisance species management activities during the construction phase should be included in the construction and/or service contract requirements.
- Details of invasive and native nuisance species management activities during the OMRR&R phase should be included in the OMRR&R manual.

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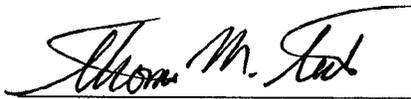
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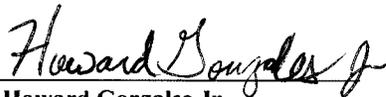
### APPLICATION

Effective the date of this memorandum, this CERP Guidance Memorandum will be used to incorporate invasive and native nuisance species management into all phases of CERP projects. Detailed guidance on items to consider, address, and assess during the (1) Planning, (2) Design, (3) Construction, and (4) Operations, Maintenance, Repair, Replacement, and Rehabilitation phases are provided in the appendix to this CERP Guidance Memorandum.

### APPROVALS



**Thomas M. Teets, AICP**  
Bureau Chief, Office of Everglades  
Policy and Coordination  
South Florida Water Management District



**Howard Gonzales Jr.**  
Chief, Ecosystem Branch  
Programs and Project Management Division  
Jacksonville District  
U.S. Army Corps of Engineers

DATE: 10 July 2012

DATE: 11 July 2012

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## APPENDIX A

### INCORPORATING INVASIVE AND NATIVE NUISANCE SPECIES MANAGEMENT INTO THE COMPREHENSIVE EVERGLADES RESTORATION PLAN

This document provides guidance to Project Delivery Teams (PDTs) on how to implement the policy guidance from CECW-SAD related to invasive and native nuisance species and the Comprehensive Everglades Restoration Plan (CERP). The policy guidance memo describes the need to address and comprehensively assess invasive and nuisance species during the (1) Planning, (2) Design, (3) Construction, and (4) Operations, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R) phases. Items to consider, address, and assess during each phase are described in this document.

For all project phases, ensure PDTs include a representative from the Operations Division, Invasive Species Management Branch (OD-A), and the Planning and Policy Division's invasive species liaison (currently located in PD-ES).

#### (1) PLANNING PHASE

This section describes the items that should be addressed during each phase (or their equivalents) of the planning process for CERP projects: (1A) Feasibility Scoping Meeting (FSM) Package, (1B) Alternative Formulation Briefing (AFB) Package, and (1C) Project Implementation Report (PIR) and Integrated Environmental Assessment/Environmental Impact Statement.

##### (1A) FSM Package (or equivalent)

Problems, Opportunities, Goals, Objectives

- Identify problems, opportunities, goals, and objectives related to invasive/nuisance species.

Existing Conditions

- Include a map(s) that depicts invasive/nuisance species and acreages (include specific species, rather than general classification of "invasive" or "nuisance").
- Describe invasive/nuisance plant and animal species, their distribution, and impacts to the environment.
- Discuss existing invasive/nuisance species (flora and fauna) management, if any.
  - Who is conducting the management?
  - What are the costs associated with the management?
  - Why is the entity conducting the management (i.e. good stewards, negative impacts to environment/habitat, mitigation, other mandate, etc.)?
  - What is the duration of the existing management?

Future without Conditions

- What would happen to the establishment/spread of invasive/nuisance species (flora and fauna) in the future condition?
- Assess conditions outside of the project footprint (adjacent properties, upstream, potential flow vectors, etc.). What impacts could occur due to invasive/nuisance species outside of

the project footprint? Could species on nearby properties/waterways spread to the project site and increase distribution?

#### Initial Array of Alternatives and Screening

- Assess whether invasive/nuisance species could be used as a screening criteria.
- Assess the potential for establishment of new invasive/nuisance species with the alternative in place.
- Describe potential impacts to the restoration effort due to presence/establishment of invasive/nuisance species.
- Assess the potential costs to manage invasive/nuisance species once the project is built and operating.

#### **(1B) AFB Package (or equivalent)**

##### Problems, Opportunities, Goals, Objectives

- Review the problems, opportunities, goals, and objectives identified in the FSM package related to invasive/nuisance species and update as necessary.

##### Existing Conditions

- Review to ensure the existing conditions have not changed since the FSM package. If existing conditions have changed, update accordingly. Have any new invasive/nuisance species been introduced in the project area? How do the species affect the native flora and fauna? Have previously identified invasive/nuisance species increased distribution?

##### Future without Conditions

- Review to ensure the future without project conditions have not changed since the FSM package. If conditions have changed, update accordingly.

##### Alternative Formulation and Evaluation

- Include invasive/nuisance species as an evaluation criterion, if appropriate.
- Describe the potential impacts to the restoration effort due to the presence and potential establishment of invasive/nuisance species. Assess within the project footprint, regionally, and wherever project benefits are anticipated.
- Evaluate each alternative to determine the potential to spread invasive/nuisance species onto the project and regionally.
- Assess the costs associated with each alternative to treat existing invasive/nuisance species.
- Assess the potential for new invasive/nuisance species establishment with the alternative in place.
- If other entities are already conducting invasive/nuisance species management in the project area, discuss if that management will continue once the project is implemented. If the entity does not continue the management, assess the impacts to the project's restoration efforts and potential impacts to construction and OMRR&R costs.
- Assess the need for future management activities to control invasive/nuisance species.
  - What are the impacts of the species?
  - Will the species prevent achieving project-level benefits?
  - Will the invasive/nuisance species management costs increase over time if the species are not continually managed?
  - What are the costs to manage invasive/nuisance species during the Construction and OMRR&R phases?

### Tentatively Selected Plan (TSP)

- Describe the potential impacts to the restoration effort due to the presence and potential establishment of invasive/nuisance species. Assess within the project footprint, regionally, and wherever project benefits are anticipated.
- Describe the need for invasive/nuisance species management during the Construction and OMRR&R phases and the associated costs.

### Appendices

- Develop a draft Invasive and Nuisance Species Management Plan.
  - This is a “living” document and should be updated regularly.
  - Include maps, acreages, baselines, future projections, species composition, etc.
  - Discuss potential impacts to the project area from nearby properties/waterways and invasive/nuisance species that may establish in the project site from those areas and costs associated with increased management
  - Include assumptions about the construction schedule, invasive/nuisance species growth rates, potential for distribution, species composition, management costs, etc.
  - Assess costs associated with varying schedules (i.e. as lands remain unmanaged, invasive/nuisance species spread, resulting in increased construction costs).
  - Develop cost estimates for invasive/nuisance species management. Ensure a disclaimer is added regarding all costs associated with invasive/nuisance species management plans since cost depends on growth and spatial expansion rates.
  - Assess the potential control and management measures and associated costs.
  - Identify management targets (such as “less than 1% coverage of XX species”).
  - Identify agency responsibilities.
  - Discuss how control and management measures would be completed. Identify work that would be completed via the construction contract and via a separate service contract, and when it would be completed.
  - Discuss what management measures should occur in the OMRR&R phase.

### **(1C) PIR and Integrated Environmental Assessment/Environmental Impact Statement**

The outline provided below is based on the PIR template for CERP. Actual format and content of reports may vary. The intent of this guidance is to ensure that invasive/nuisance species are addressed and appropriately documented.

#### Section 1 – Introduction

- Section 1 includes report authority, project purpose and scope, and prior studies, reports, and projects. Include any invasive/nuisance species information that may be pertinent.

#### Section 2 – Existing Conditions/Affected Environment

- Review to ensure the existing conditions have not changed since the AFB package. If existing conditions have changed, then update accordingly. Have any new invasive/nuisance species been introduced in the project area? How do the species affect the native flora and fauna? Have previously identified invasive/nuisance species increased distribution?

### Section 3 - Future without Project Conditions

- Review to ensure the future without project conditions have not changed since the AFB package. If conditions have changed, then update accordingly.

### Section 4 – Identification of Problems

- Review the problems, opportunities, goals, and objectives identified in the AFB package related to invasive/nuisance species and update as necessary.

### Section 5 – Formulation of Alternative Plans

- Include applicable information from the plan formulation/evaluation sections of the FSM and AFB packages.
- Include invasive/nuisance species as an evaluation criterion, if appropriate.
- Describe the potential impacts to the restoration effort due to the presence and potential establishment of invasive/nuisance species. Assess within the project footprint, regionally, and wherever project benefits are claimed.
- Evaluate each alternative to determine the potential to spread invasive/nuisance species onto the project and regionally.
- Assess the costs associated with each alternative to treat existing invasive/nuisance species.
- Assess the potential for new invasive/nuisance species establishment with the alternative in place.
- If other entities are already conducting invasive/nuisance species management in the project area, discuss if that management will continue or not once the project is implemented. If the entity does not continue the management, assess the impacts to the project's restoration efforts and potential impacts to construction and OMRR&R costs.
- Assess the need for future management activities to control invasive/nuisance species.
  - What are the impacts of the species?
  - Do the species prevent achieving project-level benefits?
  - Do the invasive/nuisance species management costs increase over time if the species are not continually managed?
  - What are the costs to manage invasive/nuisance species during Construction and OMRR&R phases?

### Section 6 – The Selected Plan

- Include applicable information from the tentatively selected plan section of the AFB package.
- Describe the potential impacts to the restoration effort due to the presence and potential establishment of invasive/nuisance species. Assess within the project footprint, regionally, and wherever project benefits are claimed.
- Describe the need for invasive/nuisance species management during the Construction and OMRR&R phases and the associated costs.

### Section 7 – Environmental Effects of the Selected Plan

- Evaluate invasive/nuisance species in each of the following areas of this section:
  - Flora and Fauna Communities
  - Unavoidable Adverse Environmental Effects
  - Relationship Between Short-Term Use and Long-Term Productivity
  - Compatibility with Federal, State and Local Objectives
  - Uncertain, Unique or Unknown Risks

### Section 8 – Plan Implementation

- Division of Implementation Responsibilities
  - Include federal and sponsor responsibilities for invasive/nuisance species management during project implementation.
- Cost Sharing
  - Construction – Discuss management of invasive/nuisance species prior to construction activities and throughout the construction phase.
  - OMRR&R – Discuss management of invasive/nuisance species throughout the OMRR&R phase.
- Compliance with Environmental Laws, Statutes, and Executive Orders
  - Ensure the project is in compliance with Federal and State rules and regulations related to invasive/nuisance species.
- Environmental Commitments
  - Include commitments to prevent the transfer and establishment of invasive/nuisance species and to manage invasive/nuisance species so that maximum project benefits are achieved and maintained.

### Section 9 – Summary of Coordination, Public Views, and Comments

- Be sure to address Executive Order 13112 (Invasive Species).
- Include information regarding coordination with agencies and the public.
- If a memorandum of agreement (MOA) or a memorandum of understanding (MOU) develops, include a summary. For example, if FFWCC/USFWS/other entity agrees to continue managing invasive/nuisance species in an area.

### Section 10 – Recommendations

- Treat invasive/nuisance species as soon as possible. Treating/managing invasive/nuisance species as quickly as possible will reduce the overall management cost.
- Ensure invasive/nuisance species management occurs during the OMRR&R phase.

### Annex – Invasive and Nuisance Species Management Plan

- This is a new annex in the PIR template.
- Review the Invasive and Nuisance Species Management Plan developed in the AFB package and update as necessary.
- Include details of any MOA/MOU that may have developed.

### Appendix B – Cost Estimates

- Identify costs to treat/manage during the Construction phase.
- Identify costs to treat/manage during the OMRR&R phase.

### **(2) DESIGN AND (3) CONSTRUCTION PHASES**

- Implement the Invasive and Nuisance Species Management Plan and update as needed.
- Design to prevent and minimize the establishment and expansion of invasive/nuisance species.
- Design to promote native species.
- Consider treating invasive/nuisance species prior to beginning construction activities.
- Use construction methods that minimize ground disturbance whenever possible.
- Manage invasive/nuisance species during the entire construction phase.
- Include language in the specifications to manage invasive/nuisance species during the construction phase.

- Specification # 01 57 20 Environmental Protection – Include “Prevention of Invasive and Nuisance Species Transfer” language. Ensure an ISM Branch Point of Contact is added. This language addresses the prevention of invasive/nuisance species transfer to and from the project site (i.e. ensure construction and personal protective equipment is clean of invasive species eggs, propagules, eggs, etc.).

Project Partnership Agreement (PPA) / Transfer Agreement

- Ensure the Invasive and Nuisance Species Management Plan is included with the PPA.
- Identify target levels for management of invasive/nuisance species.

**(4) OMRR&R PHASE**

- Management measures required during the OMRR&R phase are highly dependent on management measures taken during the Planning, Design, and Construction phases.
- Continue to implement and update the Invasive and Nuisance Species Management Plan.
- Manage invasive/nuisance species for the entire phase.
- Implement measures for “Early Detection and Rapid Response.” Removal or treatment of invasive and nuisance species as quickly as possible will help to maintain project benefits and reduce future OMRR&R costs.