RECOVER'S ROLE IN CERP IMPLEMENTATION

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Presentation Outline

1. RECOVER Interactions During Planning
2. Proposed RECOVER Interactions During Implementation
   a. Purpose
   b. Tasks in the RECOVER Five Year Plan
   c. RECOVER Interaction Points during Implementation
3. Timeline

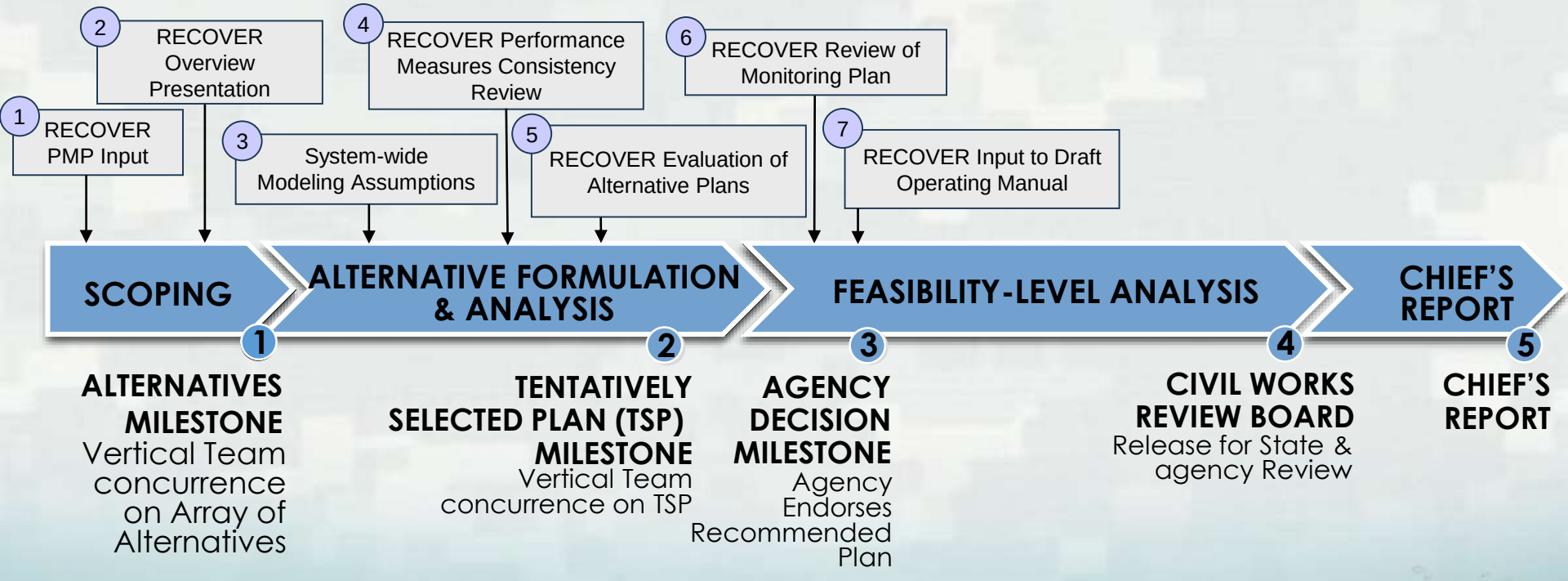
REstoration, COordination, and VERification (RECOVER)

- Provides the science behind the Comprehensive Everglades Restoration Plan (CERP)
- Determines if the goals and objectives of CERP are being met
- Identifies unanticipated results and potential remedies for consideration
- Coordinates the results of evaluations and assessments
- Communicates scientific information to support decision-making
- Three Major Components
  - Planning - integrating RECOVER with planning and operation of the system
  - Evaluation - forecasting project performance through predictive modeling and performance measures
  - Assessment - measuring performance of projects through research and monitoring

RECOVER Interactions During Planning

- **Guidance on how RECOVER interacts with the Project Delivery Team (PDT) during plan formulation**
- **Specific RECOVER interactions and deliverables included in the Project Implementation Report (PIR)**
  - Input to Project Management Plan (PMP)
  - Input into the system-wide modeling assumptions
  - Performance Measure Consistency Review
  - Evaluation of Alternative Plans
  - Review of Project Adaptive Management and Monitoring Plan
  - Input into the Draft Operating Manual
- **Ensures new science informs project planning**

RECOVER/PDT Interactions during Planning



RECOVER Interactions during CERP Implementation

- No guidance once a project is authorized and during implementation
- New science and monitoring data from RECOVER and others since projects were authorized
- Project-level monitoring plans relied heavily on the RECOVER MAP to cover a lot of the required project-level monitoring
- Changes to the MAP and other agency monitoring programs since projects were authorized
- Many of the assumptions of the project-level monitoring plans have changed

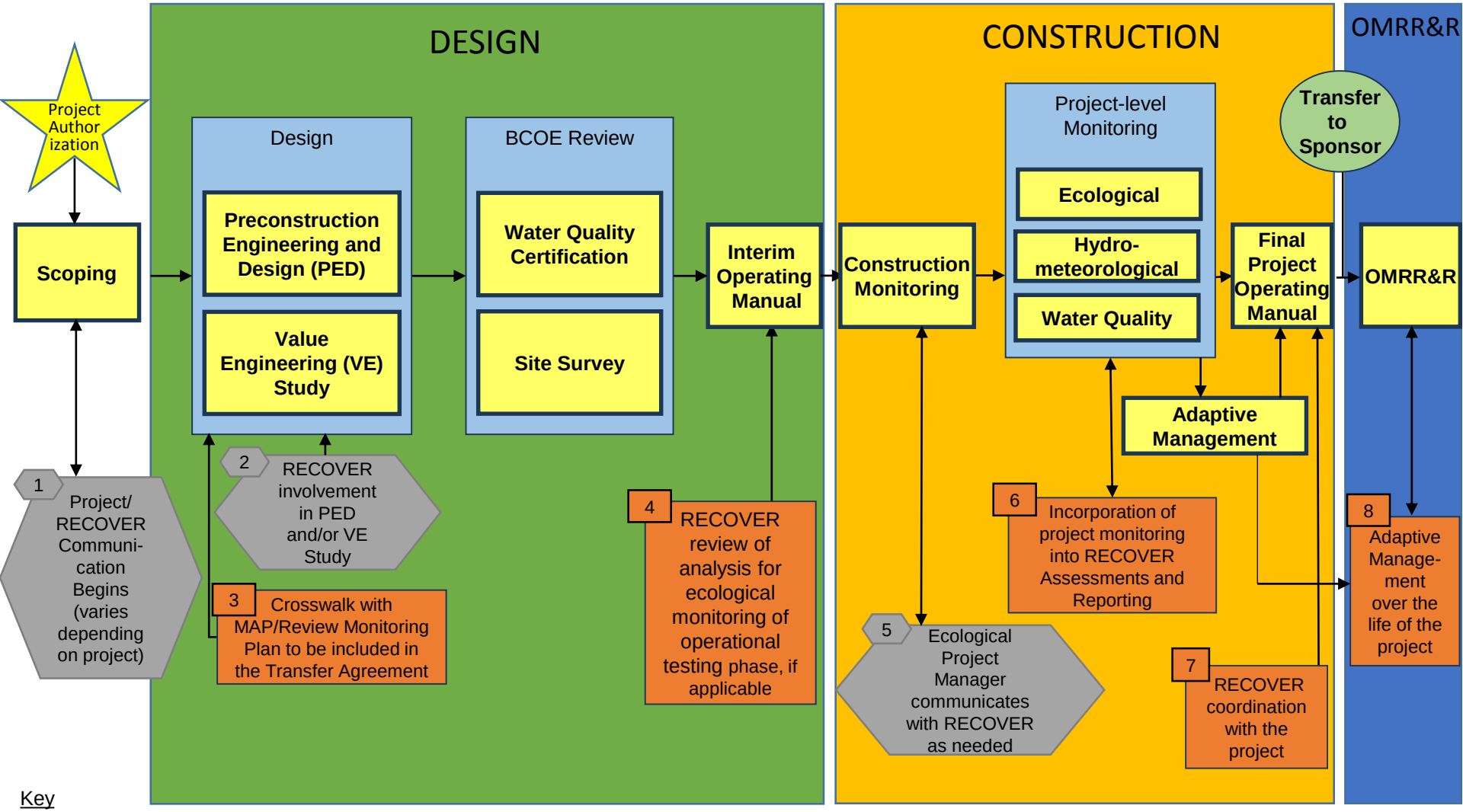
Purpose of RECOVER Interactions during Implementation

- Determine value added interactions between CERP project teams and RECOVER for the implementation phase
- Ensure new science is incorporated into project design, construction and operations
- Provide an adaptive management feedback loop
- Help project teams implement adaptive management strategies
- Ensure that project-level data is included in the RECOVER System Status Reports and that the pertinent system-wide data is provided to the project teams to be included in their reporting efforts
- Ensure the assumptions of the MAP monitoring in the project-level monitoring plans have not changed
- Ensure a system-wide overview that includes project information to inform long-term CERP planning in light of knowledge gained and potential future changes
- Ensure there is a process for project level adaptive management to feed into program level adaptive management

RECOVER Integration Tasks in the Five Year Plan

1. Determine the RECOVER point of contact (POC) for each project
2. RECOVER POC coordinates with the project team to determine project-specific interactions based on the current project schedule
3. Use the project-specific RECOVER interaction points to determine the RECOVER schedule for the next five years and to populate yearly work plans
4. Develop a CERP Guidance Memorandum draft of the RECOVER interaction in post-planning phases of projects
5. Implement and track the RECOVER interactions with projects

RECOVER's Role in CERP Project Implementation



Key

Required RECOVER Input

Optional RECOVER Input or Situational Awareness

DRAFT

Acronyms

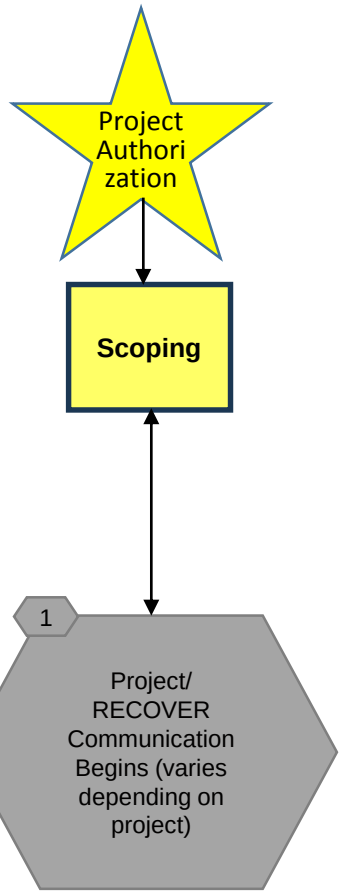
RECOVER – REstoration, COordination and VERification

MAP – Monitoring and Assessment Plan

BCOE - Biddability, Constructability, Operability, and Environmental Review

OMRR&R – Operation and Maintenance, Repair, Replacement and Rehabilitation

RECOVER's Role in CERP Project Implementation



Congressional Authorization is the trigger point for RECOVER to begin coordination with the project team

1 RECOVER POC begins communication with project managers

- Evaluate potential changes to project and changes necessary based on new science

Key

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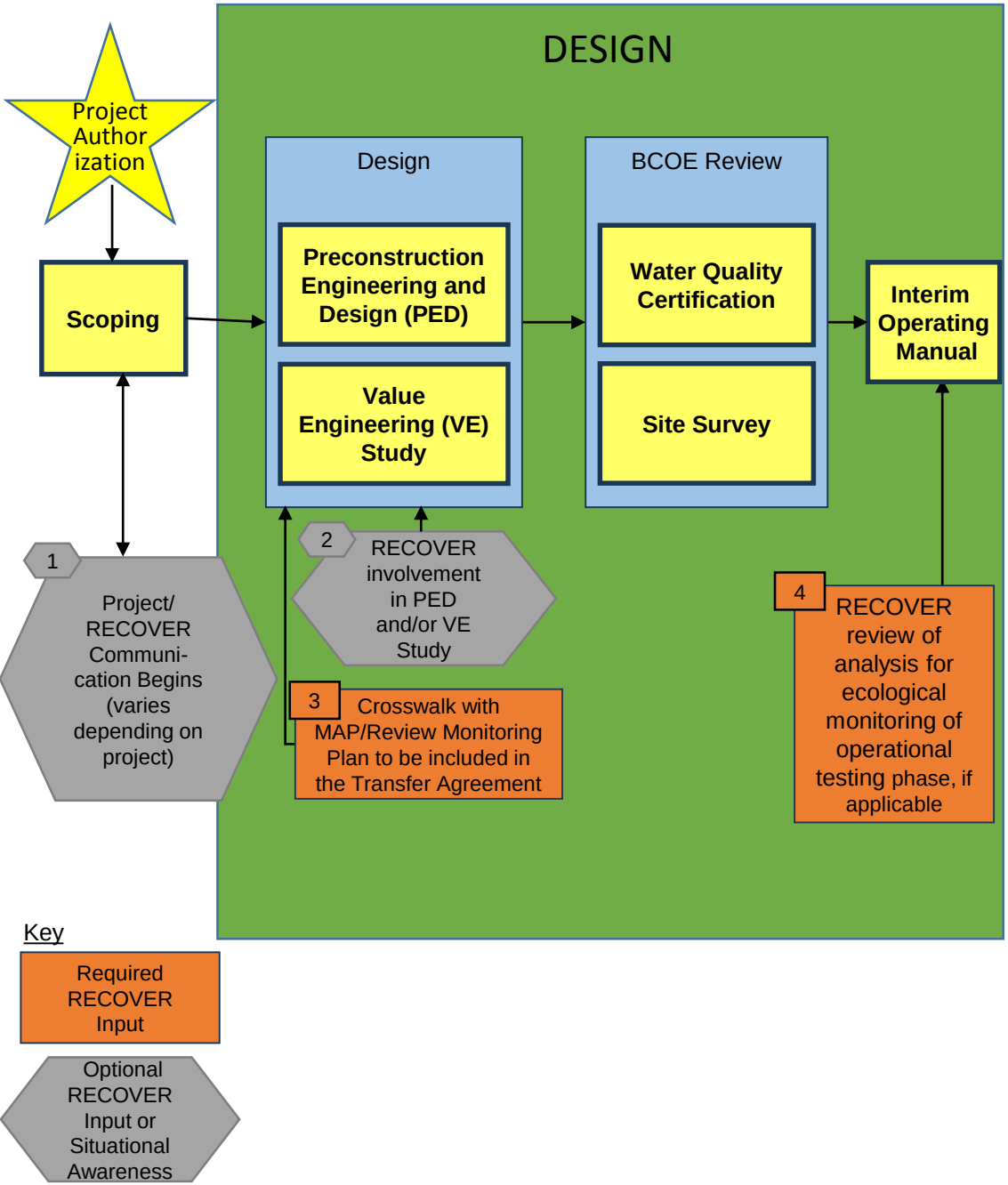
RECOVER's Role in CERP Project Implementation



Congressional Authorization is the trigger point RECOVER to begin coordination with the project team

1 RECOVER POC begins communication with project managers

2 RECOVER involvement in Preconstruction, Engineering and Design (PED) and/or the Value Engineering (VE) Study

- RECOVER will provide information on location of construction features and lessons learned from prior project implementation or MAP monitoring that may be applicable to design

3 Crosswalk of the Project-level monitoring plans with the MAP to ensure to ensure project monitoring needs are still covered and adaptive management plan can be implemented

- Coordinate and finalize monitoring plans

4 Interim Operating Manual - RECOVER review of analysis of ecological monitoring of operational testing phase, if applicable

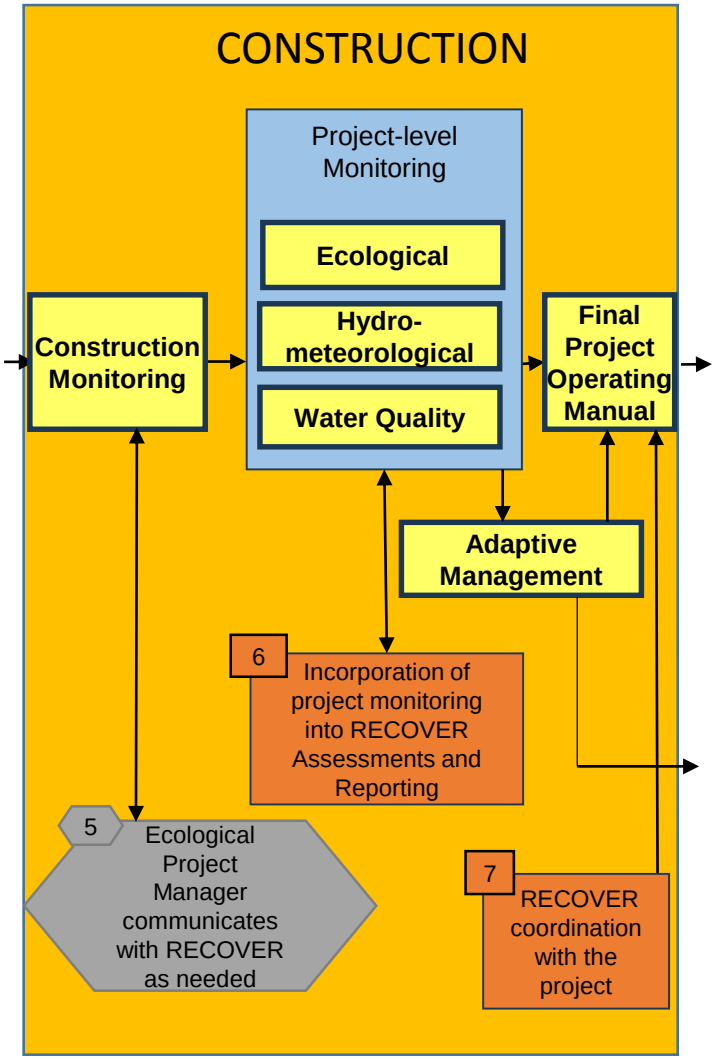
RECOVER's Role in CERP Project Implementation

5 Construction Monitoring –Project Manager communicates with RECOVER to ensure construction ecological/ecosystem performance issues are addressed

6 Project-level Monitoring – Incorporation of project monitoring into RECOVER assessments and reporting

- RECOVER input on Project Adaptive Management Plan Implementation
- Evaluate project performance to maximize restoration results through AM of operations and when/how to move forward with phases of project construction
- Close communication with the project biologist to be aware of anything unexpected or changes that could be addressed through AM
- RECOVER to coordinate with project when drafting the System Status Report (SSR) to incorporate project-level monitoring
- RECOVER to check in with the project two times a year to look at adaptive management actions
- Data Management and Reporting – Quality Assurance and Oversight Team (QAOT) to coordinate data management

7 Final Project Operating Manual – RECOVER coordination with the project and input with results of monitoring and assessments



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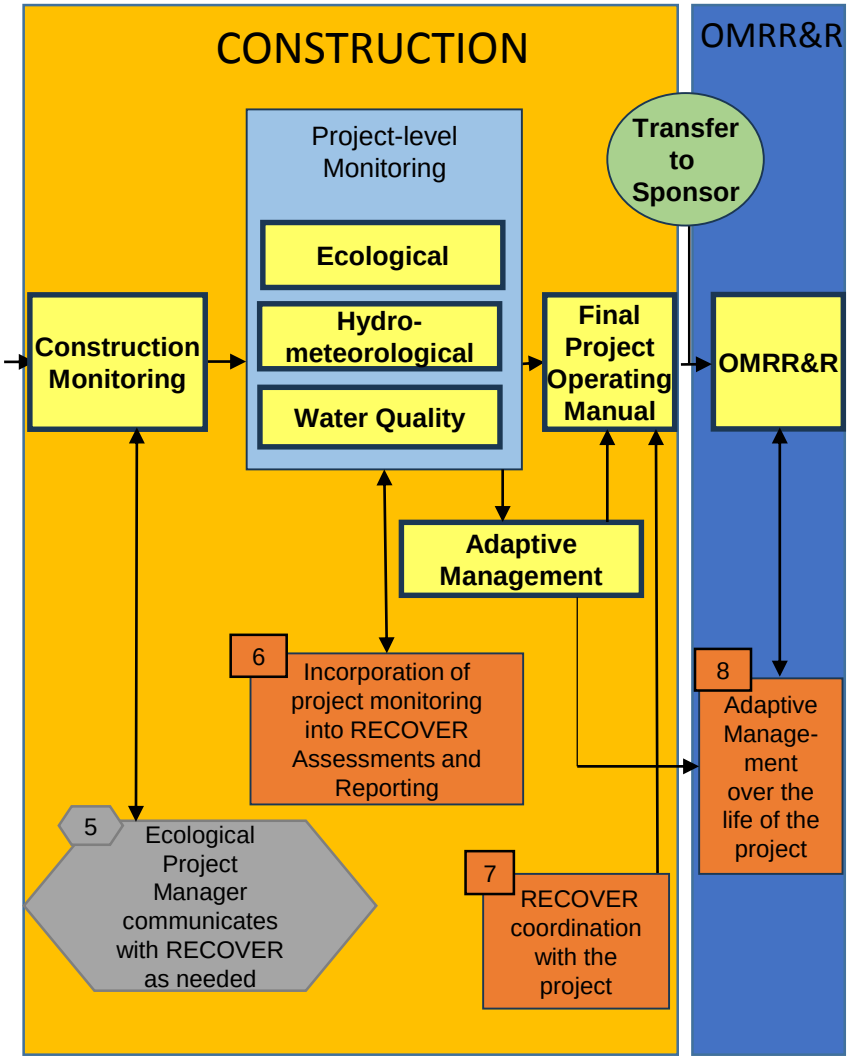
8 OMRR&R –Adaptive management of the system over the life of the project

- Need to determine the process for this



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CERP Projects with RECOVER Interactions

- **Projects in planning**
  - Loxahatchee Watershed River Restoration Project
  - Lake Okeechobee Watershed Project
  - Western Everglades Restoration Project
- **Projects in implementation**
  - Indian River Lagoon – South
  - Picayune Strand Restoration Project
  - Caloosahatchee River Western Basin Storage Reservoir Project (C-43)
  - Broward County Water Preserve Areas
  - Biscayne Bay Coastal Wetlands
  - C-111 Spreader Canal
  - Central Everglades Planning Project

Timeline for Five Year Plan Tasks

RECOVER's Role in CERP Implementation Tasks	FY2017	FY2018	FY2019	FY2020	FY2021
Task 1: Determine the RECOVER point of contact for each project	✓				
Task 2: Coordinate with project team to determine project-specific interactions					
Task 3: Schedule RECOVER Interactions for the next five years					
Task 4: Develop draft CERP Guidance Memorandum (CGM)					
Task 5: Implement and track RECOVER interactions with projects					

Questions?