

Feasibility to Closeout, the Corps Planning Process September 27, 2016



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US Army Corps of Engineers
BUILDING STRONG®



UPPER MISSISSIPPI RIVER RESTORATION

ENVIRONMENTAL MANAGEMENT PROGRAM



Restoring and Monitoring
100,000 ACRES OF AQUATIC HABITAT OVER 25 YEARS



US Army Corps
of Engineers®

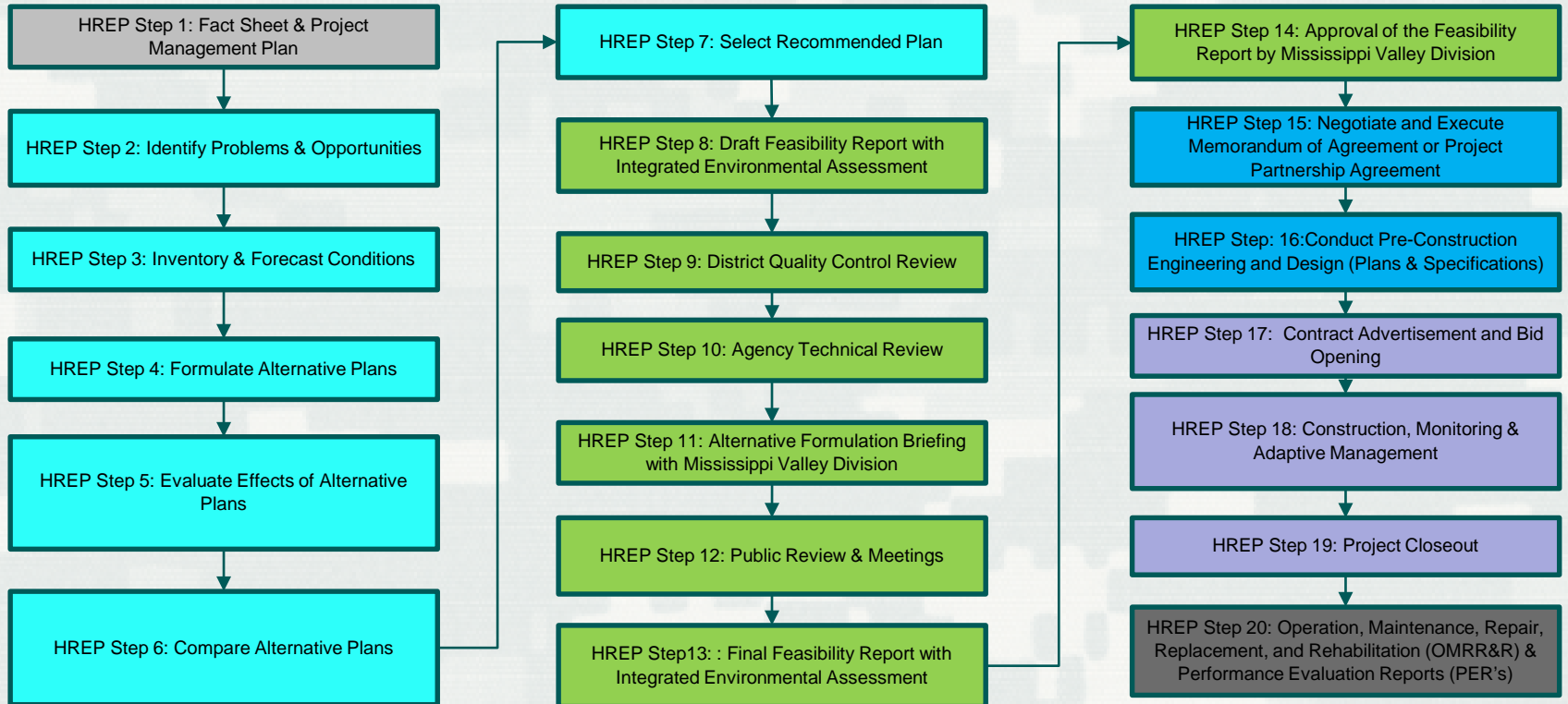


Overview

- HREP Planning Process
 - ▶ Project Initiation
 - ▶ Feasibility Phase
 - ▶ Feasibility Report Review and Approval
 - ▶ Pre-Construction Engineering and Design Phase (Plans & Specification)
 - ▶ Project Implementation and Construction
 - ▶ Operations & Maintenance (OMRR&R)
- *Sponsor Input and Decision Points*

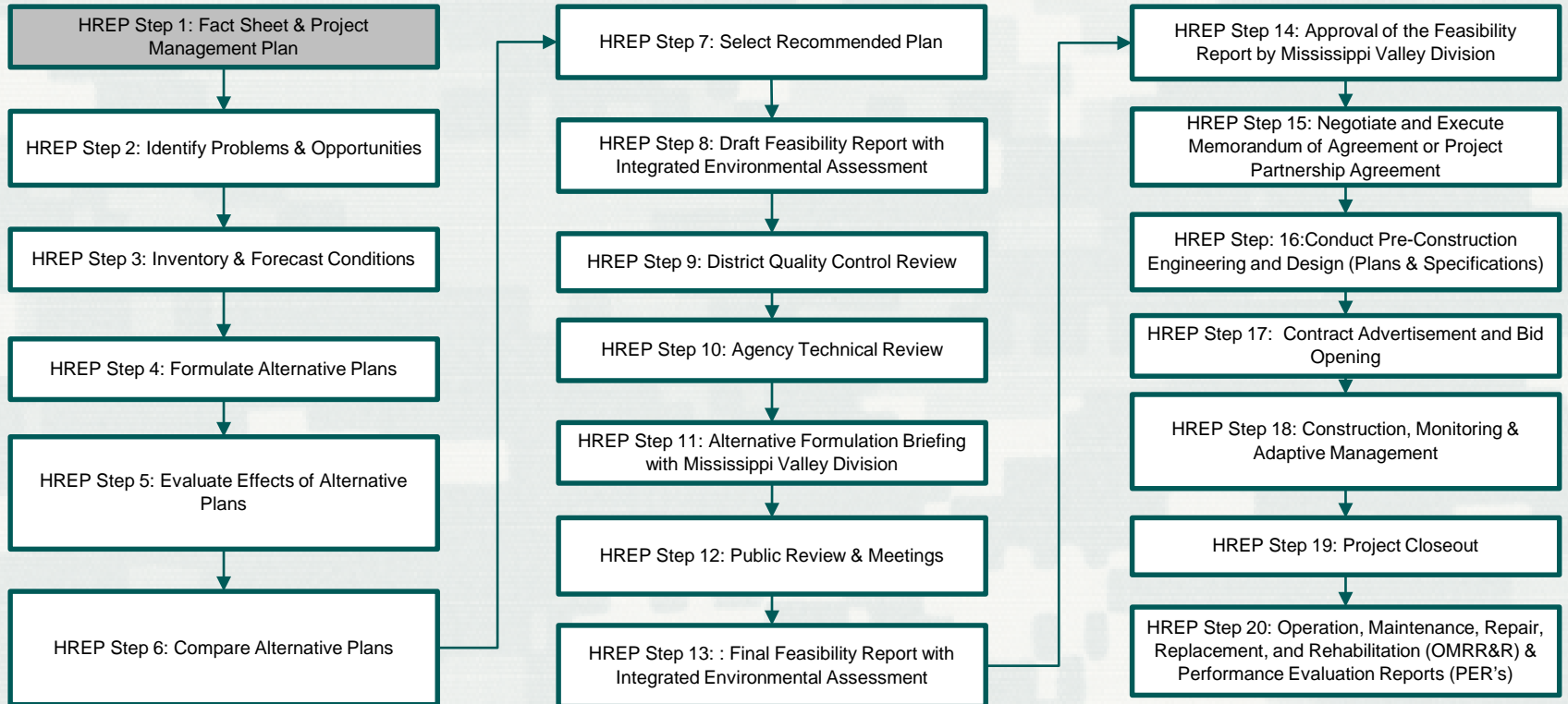


HREP Planning Process



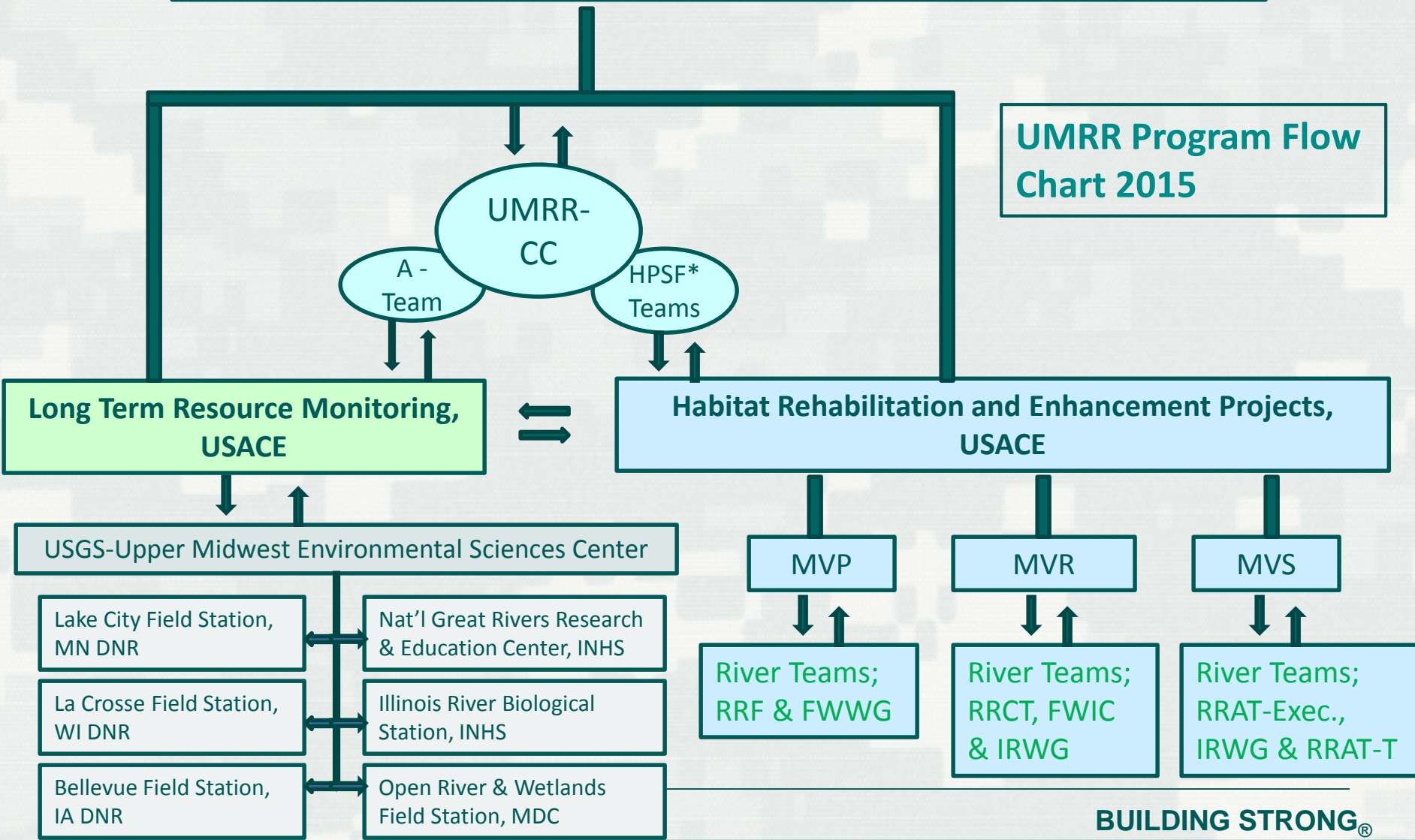
HREP Planning Process

Project Initiation



Upper Mississippi River Restoration Program
(UMRR), USACE

UMRR Program Flow
Chart 2015



* HPSF Teams = HREP Planning and Sequencing Framework Teams

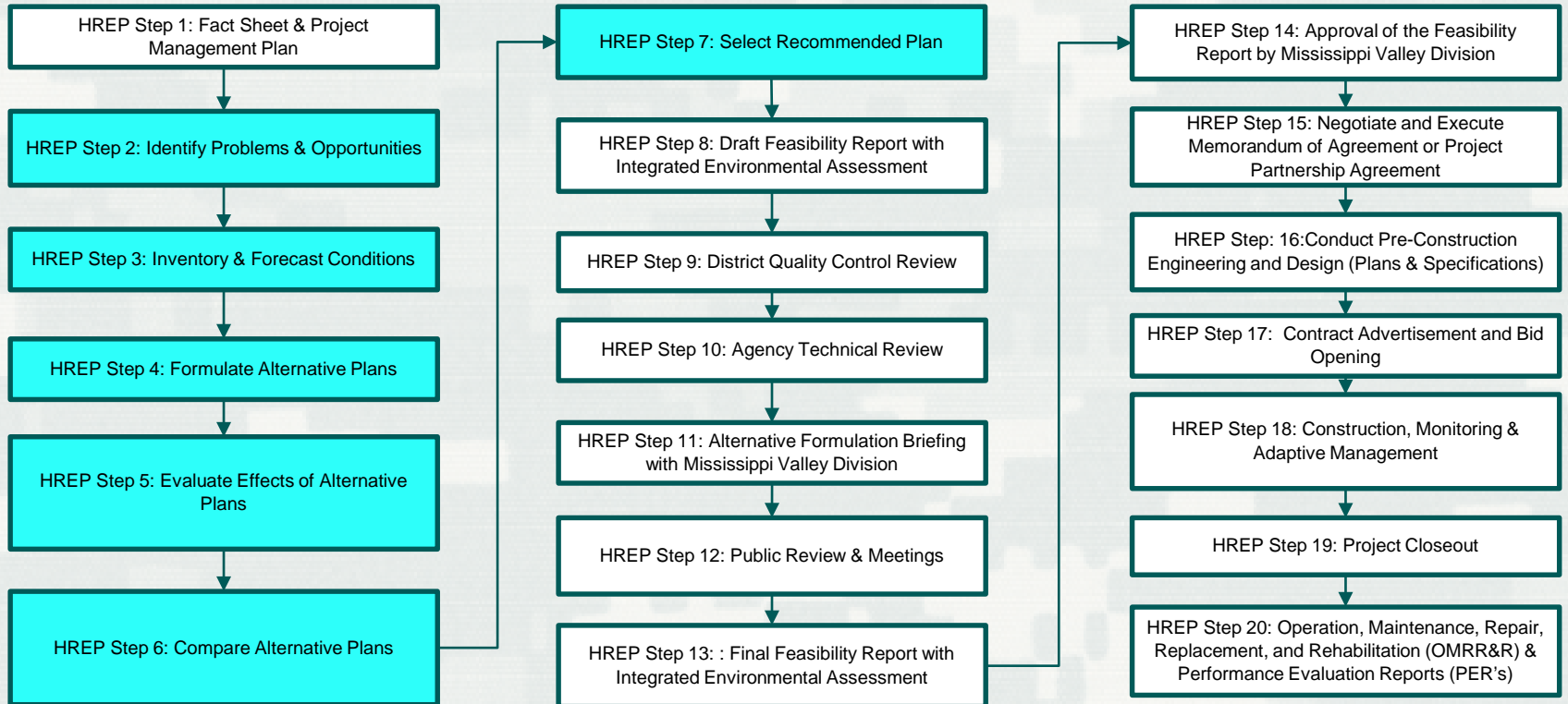
Project Initiation

- Project Management Plan
 - ▶ Agreement by all parties on how to conduct the feasibility study- the scope of work for the study and its review
 - Basis for managing tasks, costs and schedules
 - Should reflect coordination with sponsor, resource agencies, and stakeholders
 - ▶ Review Plan



HREP Planning Process

Feasibility Phase



Feasibility Phase

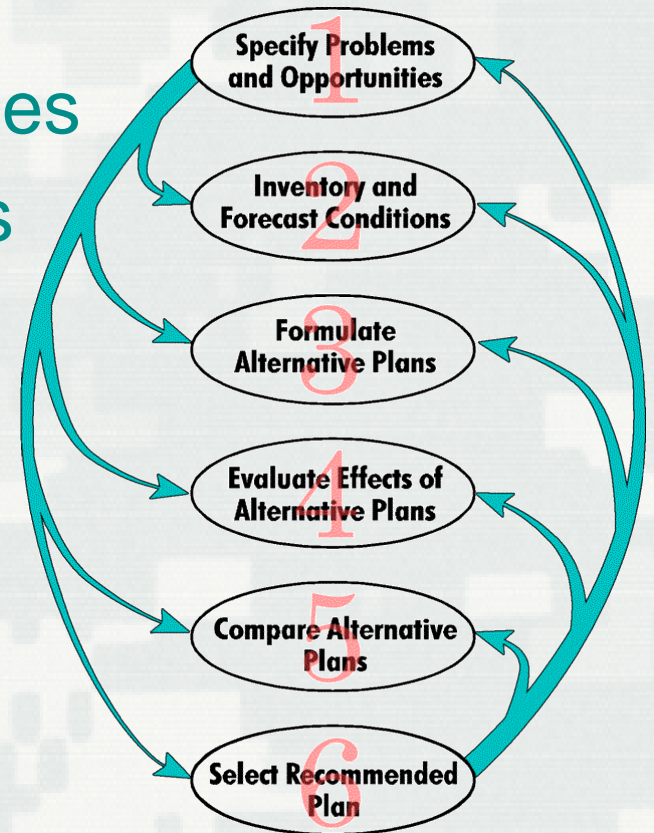
■ Feasibility Study & Report

- ▶ Formulate and evaluate an array of alternative plans and make a recommendation for action or inaction
- ▶ Document analyses and findings
- ▶ Accompanied by a National Environmental Policy Act (NEPA) document
- ▶ Describe the recommended plan
 - Feasibility Level of Detail – 35%
 - Environmental outputs
 - Environmental and social impacts
 - Costs
 - Residual risk



Corps Six-step Planning Process

- Identify problems and opportunities
- Inventory and forecast conditions
- Formulate alternative plans
- Evaluate alternative plans
- Compare alternative plans
- Select a plan



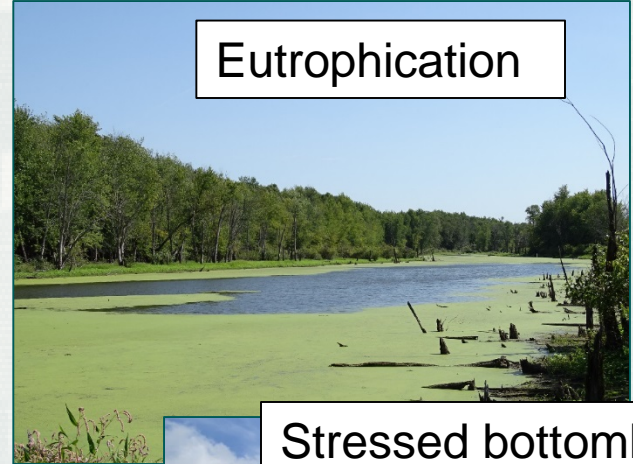
Keithsburg Division

Problems in the area include; limited water management capability, reduced habitat due to sedimentation, limited forest diversity, blue-green algae blooms, abundance of duckweed, etc.

"Culvert"



Eutrophication



Stressed bottomland hardwood



Abandoned, outdated pump station



Landslide at spillway



Keithsburg Division

■ Feasibility phase underway

► Plan Formulation Meeting/NEPA Scoping

► Future Without Project (Period of Analysis)

► Formulate Goals/Objectives

► Baseline Monitoring

► Preliminary Engineering

► Identify Potential Project Features

► Evaluate Feasible Project Features

► Environmental Benefits Analysis

► Cultural Resources

► Environmental Impact

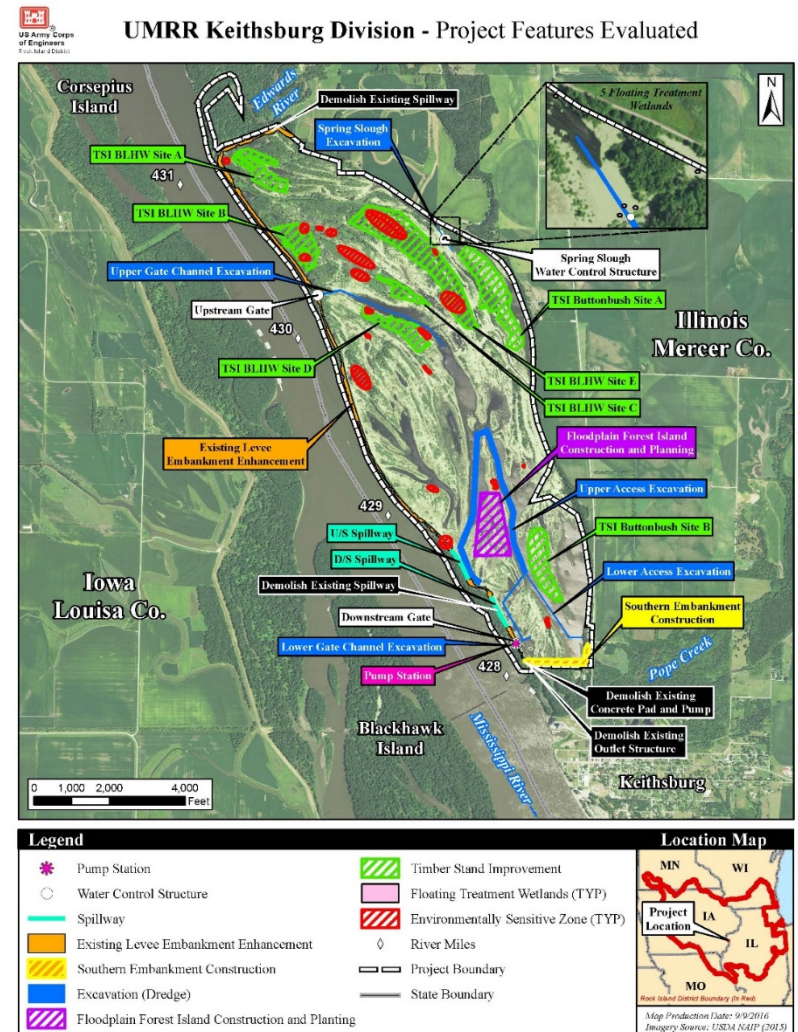
► Cost Estimating

► Real Estate Requirements

► CE/ICA Analysis

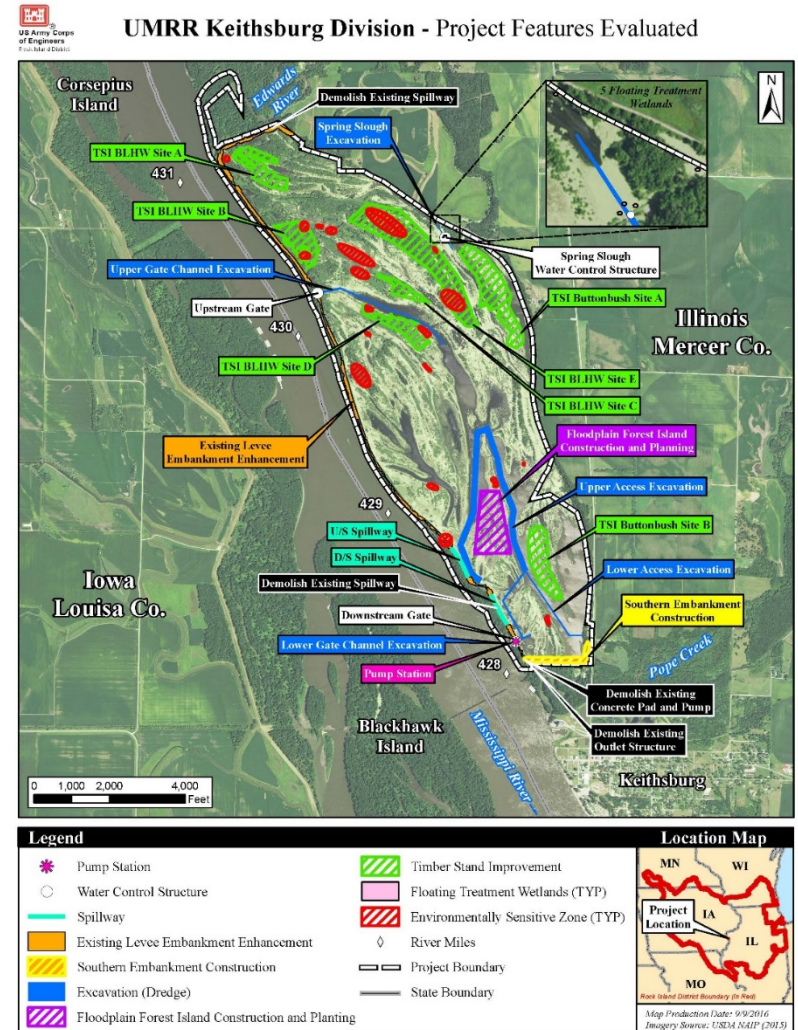
► Tentatively Selected Plan

► Sponsor Support Letter



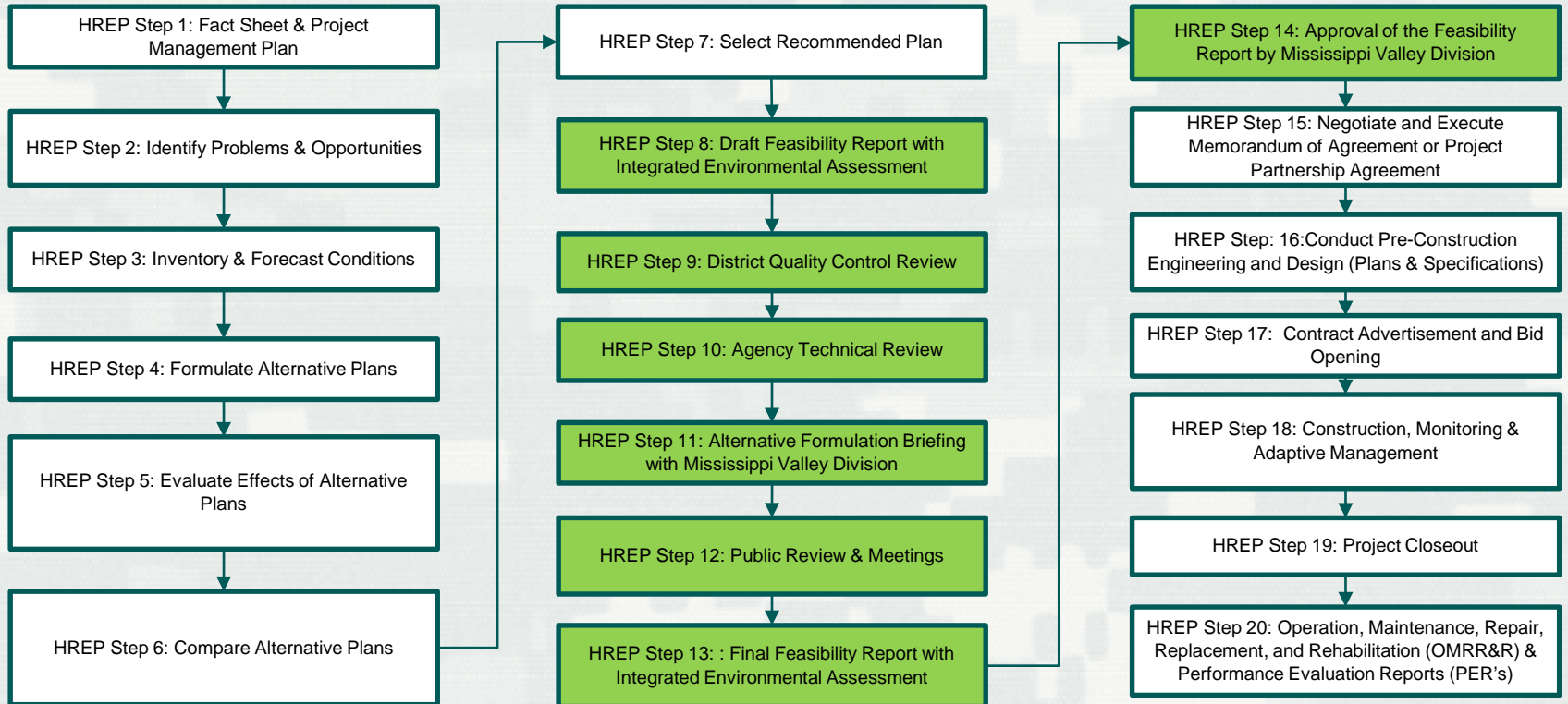
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- Feasibility phase underway
 - ▶ Risk and Uncertainty
 - ▶ Monitoring & Adaptive Management
 - ▶ Section 401/404 Evaluation
 - ▶ Draft Coordination Act Report
 - ▶ Environmental Assessment
 - ▶ Value Engineering
 - ▶ Final Cost Estimate



HREP Planning Process

Feasibility Report Review and Approval



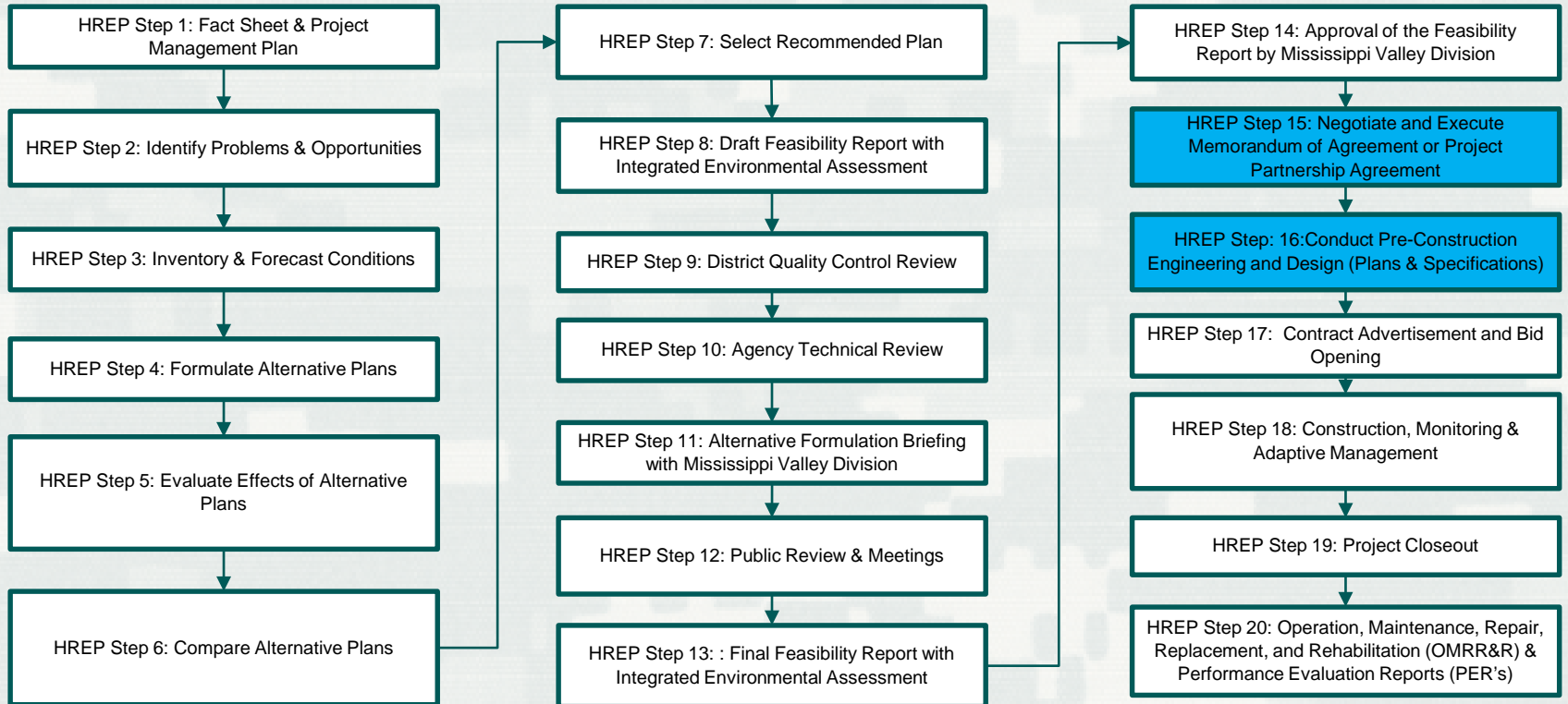
Feasibility Report Review and Approval

- Draft Feasibility Report
- District Quality Control Review
- Agency Technical Review
- Alternative Formulation Briefing (MVD)
- Public Review & Meetings
- Final Feasibility Report
- Report Approval by Mississippi Valley Division
- Signed FONSI



HREP Planning Process

Pre-Construction Engineering and Design (Plans & Specifications)



Pre-Construction Engineering and Design Phase

- Memorandum of Agreement
- Project Partnership Agreement
 - ▶ Legally binding document (contract)
 - ▶ Executed between USACE and Non-Federal Sponsor(s)
 - ▶ Establishes terms of funding and construction of the project
 - ▶ Establishes terms of Operation, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R) of the project



Pre-Construction Engineering and Design Phase

- Plans & Specifications
 - ▶ Complete the detailed engineering & technical studies and design needed to efficiently deliver the project recommended in the decision document.
 - ▶ Preparation of plans and specifications of first significant Federal construction contract.



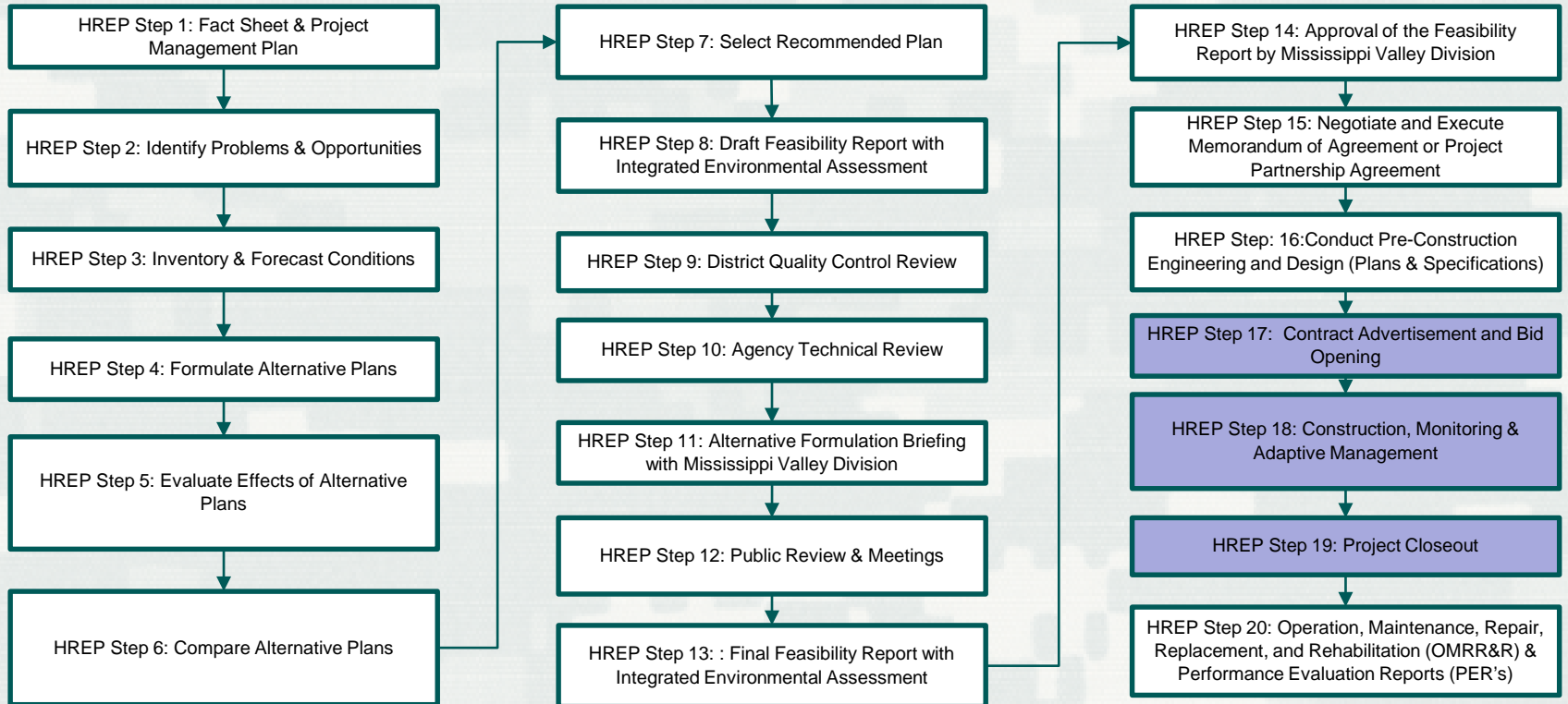
Pre-Construction Engineering and Design Phase

- Baseline Monitoring
- Draft Plans & Specifications
- Agency Technical Review
- BCOE
- Final Plans & Specifications and Cost
- Phase Ends With MOA or PPA Execution



HREP Planning Process

Project Implementation and Construction



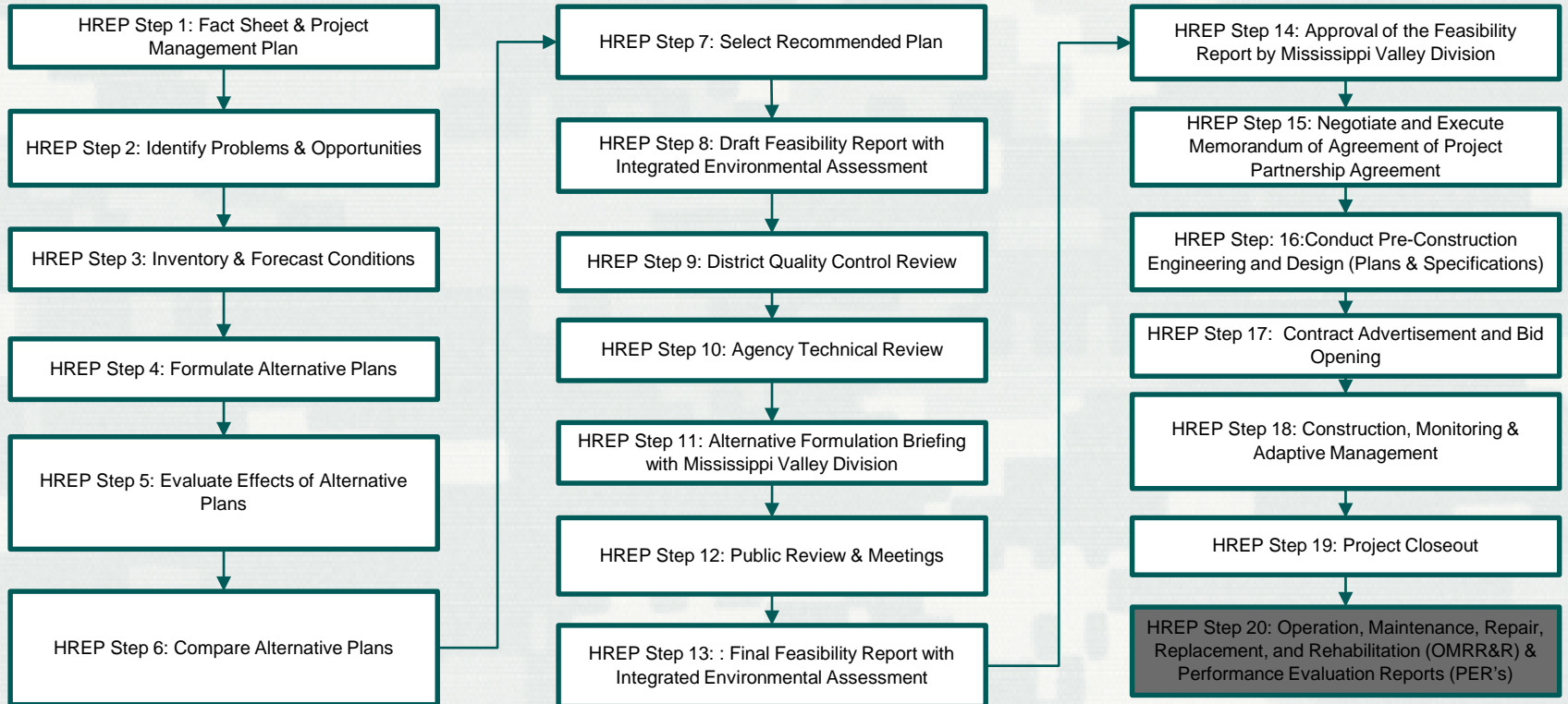
Project Implementation and Construction

- Advertisement
 - Lands, Easements, Rights of Way and Relocations (LERRD) Acquisition
 - Monitoring During Construction
 - Contract Award
 - Notice to Proceed
 - Construction
 - Project Physically Complete/Final Inspection
 - O&M Manual
 - Monitoring & Adaptive Management (Cost share 10-years)
 - Financial Closeout
- } Each Stage



HREP Planning Process

Operations & Maintenance (OMRR&R)



Operations & Maintenance

- OMRR&R

- ▶ Operations & Maintenance – ongoing and periodic activities to support project function
- ▶ Repair – occasional activities to fix issues associated with wear and tear on project components
- ▶ Replacement & Rehabilitation – infrequent activities required when major project components reach the end of their life-cycle

- Performance Evaluation Reports

- ▶ Provide yearly inspection reports to the Corps



Discussion

