US Army Corps of Engineers®

Note: this is a Draft PWS document that contains only the basic part of the PWS. It does not contain the Technical Exhibits that describe the performance-based outcomes and measurements, the workload data and other technical details. The HPO team is still working on those and they will be included in the next draft released for review.

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USACE NavLocks System

High Performing Organization

Performance Work Statement

21 November 2007

(Incorporated MG Riley's comments/revisions)

TABLE OF CONTENTS

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PREFACE

This document describes the performance requirements for the US Army Corps of Engineers' (USACE) Navigation Locks and Dams (NavLocks) System, i.e., what are the activities that must be performed to manage, operate, and maintain the system. The Performance Work Statement is written as a performance-based document focusing on the desired outcome as opposed to a prescriptive document specifying every step of the activity required to achieve the outcome.

The Performance Work Statement also addresses the system as a whole instead of each individual lock and dam. However, this does not infer in any way as to how the Navigation Locks and Dam System High-Performing Organization (HPO) will be structured, e.g., locally, regionally, or nationally

After the Performance Work Statement has been reviewed and comments resolved, the NavLocks System team will develop alternatives for the structure of the organization and will provide a recommendation for review by Division Commanders and HQUSACE...

USACE is committed to:

- Effective and efficient mission accomplishment,
- Responding to the needs of our customers in the inland navigation industry,
- Maximizing the use of the skills and abilities of our existing navigation workforce, and,
- Honoring commitments to local bargaining unit members through existing collective bargaining agreements.

The intent of this PWS is to specify performance-based outcomes for the NavLocks System that are aligned with and contribute to the overall USACE goals of efficiency, safety, effectiveness, reliability and environmental sustainability.

C.1. INTRODUCTION

USACE facilitates the safe, reliable, and economically efficient movement of vessels in the Nation’s navigable harbors, rivers, waterways, and canals by operating and maintaining the NavLocks System series of locks and dams in these waterways. This NavLocks System includes operation and maintenance (O&M) of locks and dams, the construction and maintenance of navigation channels, and the regulation of water levels on inland rivers and waterways. The system of navigation waterways developed and maintained by USACE is an integral and critical part of the Nation’s intermodal (rail, highway, airway, and waterway) transportation system. Over 60 % of domestic waterborne tonnage travels on the inland navigation system. The major commodities are petroleum, coal and sand, gravel and stone. The locks accommodate 80% of all domestic barge traffic. (Data source: USACE Waterborne Commerce statistics Center). The inland and coastal waterway transportation system carries one-sixth of the Nation’s volume of industrial materials, commodities, and products. Coastal ports and the Great Lakes provide deep and shallow draft capabilities important to the Nation’s foreign trade. Nearly 25 percent of our Nation’s economic activity depends on foreign trade handled by our ports. The navigable harbors, rivers, waterways, and canals support the mobilization and sustainability of America’s military, and are critical to national defense.

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This Performance Work Statement (PWS) includes those functions, services, and tasks associated with managing, operating, and maintaining the critical parts of the NavLocks System that are the responsibility of the USACE. The navigation mission is a subset of a much larger USACE watershed management function. Thus, decisions made with the NavLocks System effects other mission areas in the watershed functions and must be made holistically. Therefore, operation and maintenance (O&M) of the NavLocks System must work in conjunction with other water management functions (flood damage reduction, hydropower, environmental, etc.) to avoid unintended consequences or adverse impacts on the execution of each function.

C.1.1. BACKGROUND INFORMATION

The USACE maintains more than 12,000 miles (19,200 kilometers) of inland waterways, and owns or operates 257 locks at 212 sites on inland waterways. These waterways – a system of rivers, lakes, canals, and coastal bays improved for commercial and recreational transportation – carry about one-sixth of the nation's intercity freight, at a cost per ton-mile of about half the cost of rail, or one-tenth the cost of trucks.

Waterways can move large volumes of bulk commodities over long distances. The cargo capacity of a typical barge is equivalent to that of 15 large railroad cars, or 58 semi-trucks. A representative 15-barge tow on a main stem waterway moves the same cargo as 870 trucks stretching 35 miles on the interstate highway system. That same 15-barge tow would require two 100-car unit trains extending nearly three miles in length.

The 12,000 miles of inland and intra-coastal waterways operate as a system, as do highways, and much of the commerce moves on multiple segments. They serve as connecting arteries, much as neighborhood streets help people reach interstate highways. These waterways are operated by the USACE as multi-purpose, multi-objective projects. They not only serve commercial navigation, but, in many cases, also provide hydropower, flood damage reduction, municipal water supply, and recreation.

C.1.2. USACE Civil Works Navigation Mission and Organization

USACE executes its command and control through eight major subordinate commands (MSCs), also defined as USACE divisions. Most of its workload is performed by the districts that have a civil works mission, military programs mission, or a combination of both.

The watershed geography of the nation's river systems dictates the boundaries and organization of the divisions and districts. As shown in Figure 1, the civil works operation is managed within major watershed areas and those areas also define the civil works division boundaries.

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C.1.2.1. USACE Headquarters

USACE Headquarters consists of an Executive Office and 17 Staff Principals. The Headquarters, located in Washington, DC, creates policy and plans future direction of subordinate USACE organizations.

C.1.2.2. Divisions and Districts

USACE is organized geographically into 9 divisions and 45 subordinate districts in the United States, Asia, and Europe. The districts oversee project offices throughout the world. Not all of these divisions and districts have a navigation mission. Divisions and districts are defined by watershed boundaries for their civil works missions (Fig. 1).

C.1.2.3. USACE Laboratories

The Engineer Research and Development Center (ERDC) is the USACE research and development command. ERDC consists of seven unique laboratories. ERDC performs research in all functions of the navigation business line.

C.1.2.4. Other USACE Organizations

Several other major organizations within USACE directly support the NavLocks System mission:

● Huntsville, U.S. Army Engineering and Support Center, provides engineering and technical services, program and project management, construction management, and innovative contracting initiatives for programs that are national or broad in scope or are not normally provided by other USACE elements. The NavLocks System employees receive some training from this Center.

● Finance Center supports the finance and accounting functions throughout USACE, and will provide payroll services for the NavLocks System organization(s).

● Humphreys Engineer Center provides administrative and operational support for HQUSACE and USACE field offices. Institute for Water Resources, located within the HEC, supports the Civil Works Directorate and other USACE offices by developing and applying new planning evaluation methods, policies, and data in anticipation of changing water resources management conditions.

● Marine Design Center provides total project management, including planning, engineering, and shipbuilding contract management in support of USACE, Army, and national water resource projects in peacetime and augments the military construction capacity in time of national emergency or mobilization.

Figure 1. USACE divisions, showing civil works “watershed” boundaries. Note to team add districts to the map

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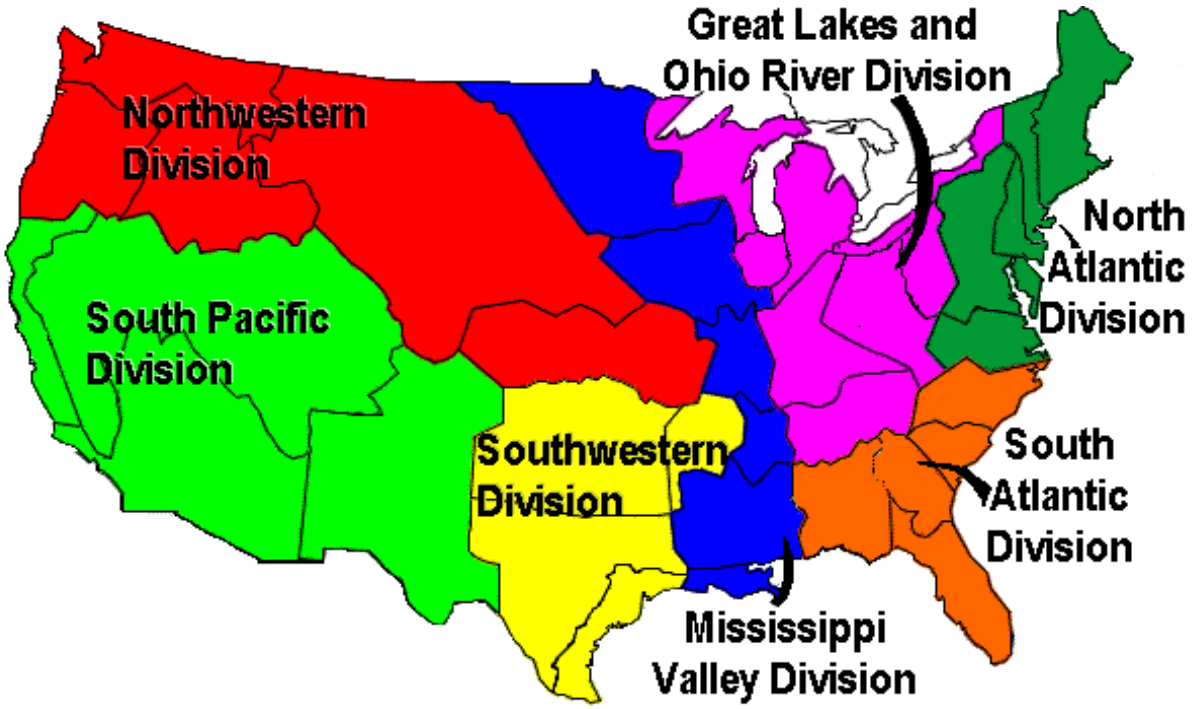
Great Lakes and
Ohio River Division
Northwestern
Division
North
Atlantic
Division
South Pacific
Division
Southwestern
Division
South
Atlantic
Division
Mississippi
Valley Division

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Figure 2 represents the rivers, waterways, and assets involved with the NavLocks System. Note - this is not a complete representation of the locks included in the scope of this PWS. See TE-XX for a list of locks that are included in scope.

Figure 2 will be added later.

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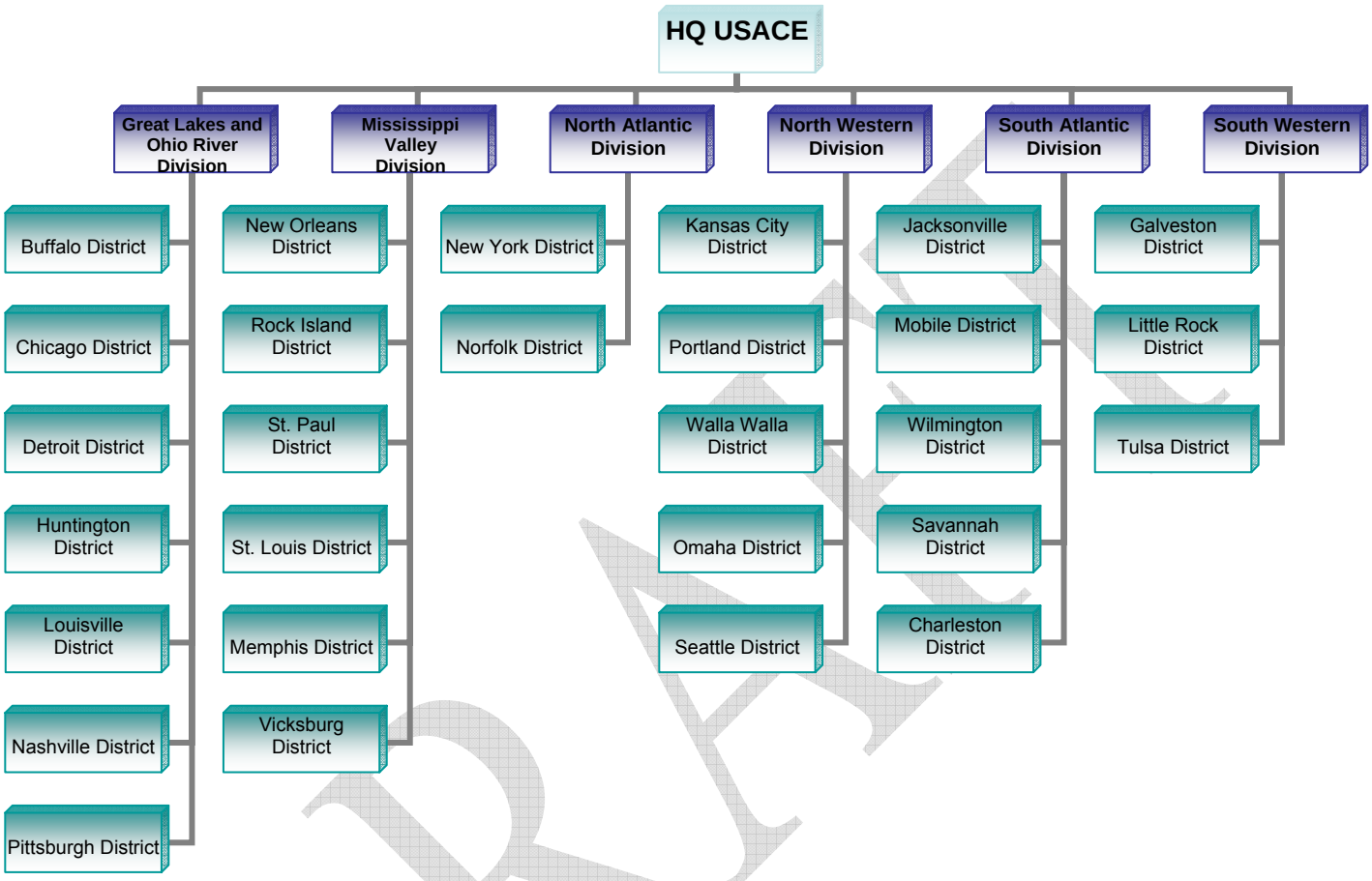
Not all Divisions and Districts have NavLocks System mission responsibility. Figure 3 is a notional representation of organizational elements involved with the NavLocks System.

Figure 3. USACE Civil Works Navigation Organization Chart



C.1.3.OVERALL RESPONSIBILITIES

USACE is committed to long-term collaboration with our customers to balance consistent service performance with the risk and benefit of continuous innovation and process improvement. Organization(s) resulting from this HPO initiative will be responsible for managing, operating, and maintaining the NavLocks System. This responsibility extends to budget preparation and submission, and all necessary planning, control, and management to sustain a customer-focused, cost-effective, and efficient NavLocks System. This will be accomplished with a business approach that recognizes the whole of the NavLocks System and introduces best business practices into the USACE navigation culture and everyday operations. This responsibility will be all encompassing and will include USACE resources, contracts, and Inter/Intra Service Support Agreements (ISSAs), Memorandums of Agreement (MOAs), Memorandums of Understanding (MOUs), and Letters of Instruction (LOIs) listed in TE -1.

To maximize the efficiency, effectiveness, and sustainability of the NavLocks System identified in TE-2XX the NavLocks System will operate according to these tenets:

- **Operate the locks and dams as a system by making decisions that optimize the system functionality**
- **Operate to ensure sustainability of the environment**
- **Optimize and standardize lock and dam operations with similar conditions to best in class procedures**
- **Optimize and standardize the lock and dam maintenance with similar conditions to best in class procedures**
- **Optimize the channel conditions to support the system functionality**

The PWS is focused on performance-based outcomes that are based on these tenets.

C.1.4. ENVIRONMENTAL OPERATING PRINCIPLES

The USACE has reaffirmed its commitment to the environment by formalizing a set of "Environmental Operating Principles" applicable to all its decision-making and programs.

The principles are consistent with the National Environmental Policy Act, the Army Strategy for the Environment with its emphasis on sustainability and the triple bottom line of mission, environment and community, other environmental statutes, and the Water Resources Development Acts that govern USACE activities. The principles also dovetail with the USACE's 12 Actions for Change and specifically with Action Six, Focus on Sustainability[1].

C.1.5. SECURITY REQUIREMENTS

NavLocks System employees and contractors must meet the security requirements to work in Government facilities.

C.1.6. MINIMUM PERSONNEL QUALIFICATIONS

Provide experienced and qualified personnel with all the skills necessary to perform the work identified in the PWS. Not all skills are required at all locations. NavLocks System personnel must have valid licenses and certifications when required to perform the work.

C.1.7. QUALITY CONTROL

Establish a Quality Control Plan that describes how services and equipment will meet the performance standards.

C.1.8. QUALITY ASSURANCE

The Government will monitor performance and timeliness as specified in the Performance Requirements Summary (PRS), TE-3.

[1] Need to add foot note for the "12 Actions for Change" principles

C.1.9. NORMAL OPERATING HOURS

The hours of operation for locks and dams are set in accordance with the project's authorizing legislation, user demand, climatic conditions, and/or budget conditions. Given these variables within the NavLocks System, current hours of operation for individual locks are shown in TE-4.

C.1.10. EMERGENCY OPERATIONS

Emergency responses involve support of local, state, tribal, federal, and international efforts. Activities may entail extended work shifts of 12–16 hours a day. Environmental conditions at work locations may range from excessive heat and humidity to extreme cold and rain. Mobilization and deployment requirements may be required during emergency response activities.

C.2. DEFINITIONS AND ACRONYMS

C.2.1. DEFINITIONS

Definitions are listed in Appendix A.

C.2.2. ACRONYMS

Acronyms are listed in Appendix B.

C.3. GOVERNMENT-FURNISHED PROPERTY (GFP)

All property required (as budgeted) to support the NavLocks System operation is government furnished. USACE has identified the government furnished property through the Real Estate Management Information System (REMIS) and hand receipts or property books. Direct and reposition government furnished property as required to maintain system availability.

C.4. SERVICE PROVIDER (NAVLOCKS)-FURNISHED PROPERTY

Furnish property not otherwise provided as government furnished to support the navigation mission. Prepare and submit a budget request for additional property as required through the USACE budget process.

C.5. NavLocks System Scope

Organization(s) resulting from this HPO initiative will provide all of the resources to perform the command and control of the NavLocks System including managing, planning, controlling,

operating, maintenance engineering designs, and maintaining the NavLocks System to meet the performance standards stated in this PWS. The system is composed of multiple river systems including river lock structures, dam structures, and channels that must work as a system to optimize the waterways for commercial transportation. Responsible for the management, scheduling, and control of the maintenance fleets.

Paragraphs C.5.1 through C.5.11 describe the major components involved with the navigation system. The exclusion of a specific component does not relieve or minimize the responsibility to meet the performance requirements for the NavLocks System. The major components are not listed in a specific performance order or with one component carrying more weight in achieving the desired performance levels.

C.5.1. OPERATE LOCK

Operate locks in accordance with appropriations, annual authorization, Army Regulations and Engineering Regulations, and policy and technical guidance. Lockages will be performed on demand or on schedule in accordance with priorities defined in TE-5. Queued vessels will transit the locks in accordance with established procedures and standards.

To ensure effective lock operation and system availability, the following activities are required:

C.5.1.1 Monitor river for approaching traffic (upstream/downstream)

Monitor traffic both upstream and downstream directions and communicate with customers to optimize the sequencing of lock operations.

C.5.1.2. Respond to Lock Stoppage Conditions

Take appropriate corrective action to restore the lock to operational status when the lock stoppage requires a lock repair (see C.5.3.). Lock stoppages include but are not limited to weather, accident, damage, and electrical, mechanical, or structure failure.

C.5.1.3. Record Data

Enter lockage usage data and information into information systems, such as LPMS and OMNI. The systems are used per ER1130-2-520 (Chapter 6).

C.5.1.4. Operate Bridges

Operate bridges identified in TE-6 to allow safe vessel transit, using the bridge standard operating procedures.

C.5.1.5 Perform emergency preparation and recovery

Prepare for and recover from flood events and other emergencies and maintain a plan to prepare for and respond to flood events. This may require evacuation of personnel and equipment, materials, and supplies to safeguard life and equipment.

C.5.1.6. Respond to Emergency Situations

Respond to lock safety emergencies resulting from inclement weather, national disasters, and other unexpected events and coordinate with other agencies as necessary.

C.5.2. OPERATE DAM

Effective dam operations are needed to meet NavLocks System availability and flood control expectations in accordance with appropriations, authorization, Army and Engineering Regulations, and policy and technical guidance. Dam operations include all activities associated with the operation of a navigation dam structure and associated facilities and equipment. These dams release water through the operation of spillway gates and other outlet works, flood control, and maintenance of a navigation pool.

To ensure effective dam operation and support system availability, the following activities are required:

C.5.2.1. Maintain Pool Level

Maintain the pool level at the level defined in the Water Control Manual and Water control plan (and adjustments to the manual).

C.5.2.2. Communicate with NavLocks System users and public regarding pool levels and flow conditions

Respond to inquiries from users and the public regarding pool level and flow conditions, particularly during high and low water conditions or events.

C.5.2.3. Public Emergency

Assist local users during emergencies in accordance with past practices and policies.

C.5.3. MAINTAIN & REPAIR LOCK

A maintenance and repair program is required to minimize unscheduled outages and unavailability. To ensure system availability, the following activities are required:

C.5.3.1 Perform Lock Maintenance

Create and perform scheduled preventive maintenance (daily, weekly, monthly, periodic, and routine) according to the preventive maintenance schedule. Track scheduled maintenance an approve Computerized Maintenance Management System (CMMS).

C.5.3.2 Perform Lock Repair

Perform lock repair to minimize the impact on system availability. Lock repairs include scheduled and unscheduled work to repair or replace a lock or equipment asset or an associated component that has failed, broken, or worn out that affects system readiness, availability, or use.

C.5.3.3 Perform Emergency Lock Maintenance & Repair

Perform emergency lock maintenance and repair to minimize the impact on system availability. This includes unscheduled repairs needing immediate attention in order to maintain a functional lock (unscheduled stoppage).

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C.5.3.4 Document all Maintenance

Capture and store accurate maintenance records for all maintenance activities and enter this data into an approved Computerized Maintenance Management System (CMMS). This includes condition assessments and asset management information.

C.5.4 MAINTAIN & REPAIR DAM

Perform routine as well as non-routine maintenance and repair of dams and associated structures such as spillways, embankments, outlet works, levees, pumping stations, and other structures. Perform activities including project management and oversight associated with the maintenance and repair of a navigation dam structure and its associated facilities and equipment to achieve NavLocks System availability.

To ensure system availability, the following activities are required:

C.5.4.1 Perform Dam Maintenance

Create and perform scheduled preventive maintenance (daily, weekly, monthly, periodic, and routine) according to the PM schedule.

Track NavLocks System scheduled maintenance in the Facilities and Equipment Maintenance System (FEMS) or similar program.

C.5.4.2 Perform Dam Repair

Perform dam repairs to minimize the impact on system availability. Dam repairs can be scheduled and unscheduled work to repair or replace a dam or equipment asset or an associated component that has failed, broken, or worn out that affects system readiness, availability, or use.

C.5.4.3 Perform Emergency Dam Maintenance & Repair

Perform emergency dam maintenance and repair to minimize the impact on system availability. This includes unscheduled repairs needing immediate attention in order to maintain the pool levels.

C.5.4.4 Document all Maintenance

Capture and store accurate maintenance records for all maintenance activities and enter this data into an approved Computerized Maintenance Management System (CMMS). This includes condition assessments and asset management information.

C.5.5 PERFORM MAJOR MAINTENANCE OF LOCKS AND DAMS

Perform major maintenance of locks and dams including management and administrative activities related to major scheduled maintenance, repair, and emergency repair to ensure system availability. This may involve personnel at the lock and dam site, central maintenance facility and/or mobile maintenance fleet. It may involve personnel from other lock and dam sites within or outside the parent District, Division, and HQUSACE.

To ensure system availability, the following activities are required:

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C.5.5.1 Conduct Scheduled Major Maintenance & Repairs

Perform all activities required for major maintenance and repairs including planning, scheduling, communicating with users, closing the lock chamber, conducting the maintenance/repairs, and re-opening the chamber. Major maintenance and repairs shall be performed in a manner to minimize the impact on system availability.

C.5.5.2 Conduct Emergency (unscheduled) Repairs

Perform emergency repairs as needed to meet the performance requirements described in TE-3. Both local and non-local resources may be required to complete this work.

C.5.5.3 Maintenance Dredging at Lock and Dam Sites

Perform dredging to remove silt and debris built up around facility structure and components that limit system availability or jeopardize structural stability.

C.5.6. ADDITIONAL NAVIGATION LOCKS AND DAMS ACTIVITIES

Prepare annual NavLocks System budget; respond to USACE data calls; manage Government Furnished Property and NavLocks System assets; purchasing within credit card limits; ensure security; and conduct public relations.

To ensure system availability, the following activities are required:

C.5.6.1 Prepare Annual Lock & Dam Operations & Maintenance Budget

Prepare, coordinate, and submit annual O&M budget according to annual budget guidance issued by USACE and incorporate consideration of asset management.

Execute the approved budget and adjust or realign budget to meet changing needs when authorized.

Develop the overhead budgets to support rate determinations and training. This will involve coordination with other activities.

C.5.6.2 Data Calls

Manage and respond to data calls in accordance with local and higher authority record keeping policy, guidance, and procedures. Data and information will be captured and maintained in manual and automated information systems.

C.5.6.3 Manage Assets

Manage and oversee assets identified in property book hand receipts assigned to NavLocks System personnel.

C.5.6.4 Acquire Supplies, Materials, Parts, Equipment and Minor Maintenance within Credit Card Purchasing Limits

Acquire supplies, materials, parts, equipment, and minor maintenance required to perform the work required under this PWS.

C.5.6.5 Perform Lock, Dam, & Facility Security

Provide the physical security and safety for the lock and dam sites according to the Site Security Safety Plan. Physical security may include the use of: guards when authorized, perimeter fences, gates (possibly with electronic entry controls), security plans, surveillance cameras, and/or security screening for those entering the lock and dam site. This work is done in accordance with USACE policy.

C.5.6.6 Conduct Public Relations Activities as Required

Conduct site tours for the public, and respond to general inquires.

C.5.6.7 Administration of Services Contracts

Perform Contracting Officer Representative activities (if required) within the limits of delegation letters, and support COR activities when required to meet performance standards described in TE-3.

C.5.6.8 Capital investment

Manage the capital investment program to insure capital investments are identified, prioritized, supported, and requested. The PRIP program may be used for some capital investments.

C.5.6.9 Safety program

Follow the USACE safety manual, regulations and policies.

C.5.7 TECHNICAL SUPPORT

C.5.7.1 Engineering Support

Coordinate with USACE engineering organization elements to determine the most efficient and effective structure and procedures to procure technical services. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System in TE-3.

To ensure effective engineering support, the following activities are required:

C.5.7.1.1 Water Control Data Collection and Analysis

Coordinate with USACE engineering elements for water control data collection and analysis to include settings for tainter and roller gates on dams associated with navigation projects, forecasting of river levels, general gate settings (for example, keep pool within specified limits - gate settings determined by lock operators) or specific gate settings provided by District Office personnel.

C.5.7.1.2 Water Quality

Coordinate with USACE engineering elements for water quality activities of navigation pools as required by State Water Quality certifications. Water quality for dredging is described in TBD.

C.5.7.1.3 Lock and Dam Safety for Navigation

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Coordinate with USACE engineering elements to support lock and dam safety activities associated navigation structures. These procedures include periodic inspections, instrumentation for structural adequacy, hydraulic steel structure inspections, and bridge inspections.

To ensure effective lock and dam safety support, the following activities are required:

C.5.7.1.3.1 Periodic Inspections

Coordinate with USACE engineering elements to support a periodic inspection program that acquires and funds periodic assessments and inspections of hydraulic, geotechnical, mechanical, structural, electrical, and security features.

C.5.7.1.3.2 Instrumentation for Structure Adequacy

Coordinate with USACE engineering elements to support instrumentation readings (piezometer readings, movement indicators, settlement measurements, stress measurements, void beneath the structure measurements, scour surveys, and other instruments) to evaluate the structural integrity of navigation locks and dams.

C.5.7.1.3.3 Hydraulic Steel Structure Inspections (HSS)

Coordinate with USACE engineering elements to support the evaluation of steel structures which are fracture critical (failure of a structural member could result in the failure of the structure) – bulkheads, tainter gates, lift gates, miter gates, etc.

C.5.7.1.3.4 Bridge Inspection Program

Coordinate with USACE engineering elements to support the inspection and reports on the structural integrity of USACE owned public and non-public bridges which cross locks, dams and other NavLocks System structures.

C.5.7.1.4 Design Services

Coordinate with USACE engineering elements to determine the most efficient and effective structure and procedures which will be used to procure design services. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System in TE-3

C.5.7.1.5 Supervision and Administration of Construction Projects

Coordinate with USACE construction elements to provide efficient and effective support as required for NavLocks System construction projects. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

C.5.7.1.6 Surveying (land)

Coordinate with USACE engineering elements to support the surveying services as required. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

C.5.7.2 G&A Services (Off site)

Coordinate with USACE headquarters, divisions, and district organizational elements to determine the most efficient and effective structure and procedures which will be used to

provide general and administrative services. These services, which include functions such as security, safety, human resources, legal, finance, and accounting, shall be aligned and funded to meet the quality, timeliness and performance requirements of the NavLocks System.

C.5.7.3 Real Estate Tech Support

Coordinate with USACE real estate elements to determine the most efficient and effective structure and procedures which will be used to procure real estate services. These services, which include right of entry permits for dredging, real property inventories, easement and lease negotiations, in-grant and out-grant negotiations, shall be aligned and funded to meet the quality, timeliness and performance requirements of the NavLocks System.

C.5.7.4 Planning, Programs and Projects Management (PPPMD)

Coordinate with USACE PPPMD elements to determine the most efficient and effective structure and procedures, which will be used to procure planning, programs and project management services. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

To ensure effective PPPMD support for system availability, the following activities are required:

C.5.7.4.1 Environmental Services/BIOPS

Provide efficient and effective environmental support as required for navigation activities. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

C.5.7.4.2 Budgeting and Funding

Provide efficient and effective budgeting and funding support activities as required for NavLocks System activities. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

C.5.7.4.3 Planning, Programming, and Project Management (PPPM) Services

Provide efficient and effective planning, programming, and project management services as required for navigation activities. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

C.5.7.5 Contracting Support

Coordinate with USACE contracting elements to determine the most efficient and effective structure and procedures which will be used to procure services. These services shall be aligned and funded to meet the quality, timeliness, and performance requirements of the NavLocks System.

C.5.8. CHANNEL OPERATIONS AND MAINTENANCE

Perform all functions including project management and oversight of channel operations and maintenance within the NavLocks System. Conduct actions necessary to keep channels open to navigation to meet navigation performance standards.

To maintain channel (and system) availability, the following activities are required:

C.5.8.1 Dredging

Perform navigation channel dredging to meet NavLocks System performance requirements. This includes mechanical and hydraulic dredging of the NavLocks System and the dredging in St. Mary's River, Missouri River, and Intracoastal Waterways. Excluded are hopper dredging, sidecast dredging and coastal dredging under normal conditions.

C.5.8.2 Dredge Material Management

Provide proper in-water or upland dredged material placement according to Federal and State requirements when the dredging occurs in the NavLocks System (this does not include placement of coastal dredged material).

C.5.8.3 Water Quality

Comply with State and Federal Water Quality terms and standards. Coordinate with other USACE technical elements to determine the most efficient and effective to fund and perform water quality analysis.

C.5.8.4 Bank Stabilization, Dikes, and Revetments

Maintain bank stabilization, dikes, and revetments to maintain the navigability of the channels. Construct and repair river control structures, such as rock protection, wing, and closure dams (including dike and revetment notching).

C.5.8.5 Aids to Navigation (fixed and floating)

Identify and mark hazards to navigation, other than Coast Guard mandated aids to navigation (marker piles, stone mounds, etc, to assist vessels avoiding grounding).

C.5.8.6 Obstruction removal

Remove natural occurring obstructions to maintain the NavLocks System functionality. Non-natural obstructions will be handled according to Federal and State laws and procedures, and MOAs/MOUs with other agencies.

C.5.8.7 Channel Reconnaissance & Hydrographic Surveys (Channel Patrol)

Perform channel reconnaissance and hydrographic surveys to uncover channel impediments that could cause vessel groundings and restrict the use of navigation channels.

C.5.8.8 River Harbor Maintenance Dredging

Plan, schedule, and dredge harbors within the NavLocks System to insure lock system availability. Maintain the harbors listed below:

- *Chad to add list of harbors*

C.5.9 MAJOR REHABILITATION and NEW PROJECT CONSTRUCTION

Identify, request, and fund the planning and reporting activities required to request major rehabilitations and new construction. This work includes the O&M funded preparation activities that precede a major rehabilitation. Specific tasks include data acquisition, data analysis (“what if” scenarios), and project justification documentation. These reports must be completed in accordance with Project Management Divisions guidance and formats.

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C.5.10 MOORING / PROTECTION CELLS (BRIDGES, APPROACHES) REPAIR AND REPLACEMENT

Construct and repair federal mooring and protection cells within the NavLocks System for the continuity and safety of the navigation mission. This includes periodic inspections to assess current condition.

C.5.11 NON-NAVIGATION EMERGENCY RESPONSE

Respond to emergency activities under the responsibility of the USACE, and assess the impact to performance of NavLocks System mission and report this assessment to higher management for resolution.

Provide support for natural disasters and public emergencies in accordance with past practice and local staffing levels, and maintain adequate emergency response capabilities.

C.6. REFERENCES, REGULATIONS, FORMS, AND REPORTS

C.6.1. REFERENCES AND REGULATIONS

References and Regulations are written directives that define and clarify how USACE tasks and missions should be performed. Regulations mandate performance requirements and standards of functional duties and actions that are mandatory for the NavLocks System function to meet. References and Regulations help USACE monitor and evaluate productivity and provide structure to the USACE working environment. To access USACE Publications, go to http://www.usace.army.mil/publications . Army publications including regulations (AR) and pamphlets (PAM) are at http://www.apd.army.mil/ . DoD Issuances including directives (DODD), instructions (DODI), and publications are found at http://www.dtic.mil/whs/directives/ .

Due to changes in the USACE work environment, References and Regulations periodically change and may be superseded or become obsolete. The following list of References and Regulations were researched in early 2005 and may not necessarily represent the most current at the time of the PWS solicitation.

Effective/ Publish Date	TYPE	NUMBER	Regulation Title or Reference Name
TBD			

C.6.2. FORMS

Forms are documents with blanks used to insert information or details or a fixed order of words or procedures in accordance with specific criteria. Forms are used to request a variety of services, are used as documentation, and are used to revise and update services already in

place. The use and maintenance of forms is a required part of the workflow process.

FORM Number	FORM Title	Requirement
TBD		

C.6.3. REPORTS

A Report is a formal account of proceedings or transactions in written or verbal format. Reports document critical priorities and decisions. Reports serve as important references and sources of information that enhance the successful completion of job tasks and greatly support search. These Reports were researched in early 2005 and may not necessarily represent the most current at the time of the PWS solicitation.

Frequency of Report	Regulation	Report Name
TBD		

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TECHNICAL EXHIBITS

Performance Requirements Summary

Estimated Workload

Lock Availability for FY06

Lock Hours of Operation

Lock Site Locations

Listing of Contracts

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