



**US Army Corps
of Engineers®**
Buffalo District

DRAFT



PROJECT MANAGEMENT PLAN

WESTERN LAKE ERIE BASIN WATERSHED FRAMEWORK AND ENVIRONMENTAL STATEMENT

WESTERN LAKE ERIE BASIN, OH, MI, IN

Section 441, Water Resources Development Act of 1999 (PL 106-53)



March 2006

WESTERN LAKE ERIE BASIN STUDY

OHIO, MICHIGAN, AND INDIANA

(DRAFT May 2006) PROJECT MANAGEMENT PLAN

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LIST OF ACRONYMS (EDIT AS APPLICABLE)

A/E	Architect/Engineer
AFARS	Army Federal Acquisition Regulation Supplement
AMP	Ambient Monitoring Program
AR	Army Regulation
ASLF	Atlantic States Legal Foundation
BMP	Best Management Practice
CEFMS	Corps of Engineers Financial Management System
CELRB	Corps of Engineers Lakes and Rivers – Buffalo
CELRBM	Corps of Engineers Lakes and Rivers – Buffalo Memorandum
CELRD	Corps of Engineers Lakes and Rivers Division
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulation
CHRP	Comprehensive Habitat Restoration Plan
CSO	Combined Sewer Overflow
CW	Civil Works
CWE	Current Working Estimate
CX	Center of Expertise
DDE-PM	Deputy District Engineer for Project Management
DE	District Engineer
DFARS	Defense Federal Acquisition Regulation Supplement
DOD	Department of Defense
DQLL	Design Quality Lessons Learned
EA	Environmental Assessment
EFARS	Engineer Federal Acquisition Regulation Supplement
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ER	Engineer Regulation
FAR	Federal Acquisition Regulation
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
FS	Feasibility Study
FY	Fiscal Year
GIS	Geographic Information System
HAB	Habitat
HYG	Hydrogeologic
I....	Indiana
IFG	Inland Fisher Guide
IRM	Interim Remedial Measure
ITR	Independent Technical Review
M....	Michigan
MAWI	Multi-scale Assessment of Watershed Integrity
MCP	Management & Coordination
MIPR	Military Inter-agency Purchase Request
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NEC	National Economic Council
NEPA	National Environmental Policy Act

NFPA	National Fire Protection Association
NPS	Non-point Source
NRDA	National Resource Damage Assessment
NTP	Notice to Proceed
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
O&M	Operations & Maintenance
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PDT	Project Delivery Team
PEIS ???	Programmatic Environmental Impact Statement
PGL	Policy Guidance Letter
PL	Public Law
PLA	Project Labor Agreement
PM	Project Manager
PMBP	Project Management Business Process
PMP	Project Management Plan
POC	Point of Contact
PR&C	Purchase Request & Commitment
QCP	Quality Control Plan
RI	Remedial Investigation
RTS	Regional Technical Specialist
SBA	Small Business Administration
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SHPO	State Historic Preservation Office
SOP	Standard Operating Procedure
SOW	Scope of Work
SVA	Stream Visual Assessment
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
VTC	Video Teleconferencing
WLEBS	Western Lake Erie Basin Study
WRDA	Water Resources Development Act

1.0 INTRODUCTION

This Project Management Plan (PMP) has been developed to address the execution of the Western Lake Erie Basin Study. The project was authorized under Section 441 of the Water Resources Development Act (WRDA) 1999.

1.1 Background

The study area is located in the western basin of Lake Erie encompassing watershed areas primarily in the State of Ohio with significant portions in the States of Indiana and Michigan. This current study effort focuses on the watersheds of the Maumee and adjacent Portage, and Ottawa Rivers. The lake portion of the study area is characterized by shallow littoral waters generally less than 25 feet deep.

Authority for the Western Lake Erie Basin Study was given by Section 441 of the Water Resources Development Act (WRDA) of 1999, which directed the Assistant Secretary of the Army for Civil Works to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee and adjacent Ottawa, and Portage Rivers. In carrying out the study, the Secretary was directed to cooperate with interested Federal, State, and local agencies and non-governmental organizations and consider all relevant programs of the agencies.

A Section 905(b) analysis was prepared in response to congressional directives contained in Senate Report 106 – 395 and Conference Report 106 – 988. The Senate Report states: “The Committee has provided \$100,000 for the U.S. Army Corps of Engineers to prepare a Section 905 (b) report and, if appropriate, to develop a study management plan for the Western Lake Erie Basin study”. This original 905(b) analysis was signed and approved by the Buffalo District Commander in October 2001 and recommended that a Project Management Plan be developed for a Feasibility Study along with a Feasibility Cost Sharing Agreement to be 100% federally funded for an additional \$300,000. Subsequently, an additional \$300,000 was directed toward the Western Lake Erie Basin Study in the 2002 Energy and Water Development Bill “to complete the reconnaissance level studies”. Representative Kaptur (OH-09) supported this funding in order to allow for comprehensive problem and opportunity identification throughout the entire watersheds specified in the original legislation. This reflected the need to emphasize a regional watershed perspective and not just to focus on the greater Toledo area. The Energy and Water Development Bills of 2003 and 2004, respectively provided \$100,000 and \$130,000 in additional funds for the expanded reconnaissance study and PMP development HQUSACE approved the Expanded Reconnaissance Study as a basis for preparation of a PMP(s) and FCSA for detailed watershed studies on December 9, 2003. A copy of that HQUSACE approval memorandum is included in ????

1.2 Authority

As indicated previously, authority for the Western Lake Erie Basin Study was given by Section 441 of the Water Resources Development Act (WRDA) of 1999, which directed the Assistant Secretary of the Army for Civil Works to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee and adjacent Ottawa, and Portage Rivers. In carrying out the study, the Secretary was directed to cooperate with interested Federal, State, and local agencies and non-governmental organizations and consider all relevant programs of the agencies.

1.3 Basin/Watersheds General Conditions Overview

The conditions and problems and opportunities in the watershed will be examined by the Buffalo District USACE in coordination with an inter-agency team, to develop a scope of studies to identify and determine conditions and the extent of problems, needs, and opportunities. One of the first challenges is development of a complete understanding of the interactions of the significant water uses and resources in the watershed as changes in the uses and resources occur. The conditions have been divided into basin and sub-watersheds.

The Western Lake Erie Basin Study area. The study area is located in the western basin of Lake Erie encompassing watershed areas primarily in the State of Ohio with significant portions in the States of Indiana and Michigan. The study effort focuses on the watersheds of the Maumee and adjacent Ottawa, and Portage Rivers. The lake portion of the study area is characterized by shallow water (littoral zone) generally less than 25 feet deep. The shoreline supports a variety of fish and wildlife. It is well known for its walleye sport fishery. Substantial shoreline development areas include the Ottawa River Area, Toledo Harbor, and Port Clinton. Reference Figures 1 and 4.

The presence of Lake Erie, in the region tends to moderate the temperature, which ranges from mid-20s (°F) in January to mid-70s (°F) in July. Precipitation is well distributed throughout the year with an annual average precipitation of 35 inches. Prevailing winds in the area are from the west through southwest directions. Wind seiche and a barometric pressure change on the lake surface create drastic short-term fluctuations in lake levels, particularly at the eastern and western extremities of the Lake. These fluctuations at the western extremities of the lake tend to influence water levels at the nearby Toledo Harbor and Ottawa River. In this area lake levels have ranged from 8.3 feet above low water datum to 7.5 feet below low water datum in direct proportion to the effects of wind seiche and seasonal variations.

The Maumee River Basin. The Maumee River drains more than 4.2 million acres in Ohio, Indiana, and Michigan. It is the largest tributary discharging into Lake Erie in the United States and Canada and discharges just under 24 percent of the surface water that flows into Lake Erie. The four largest tributaries to the Maumee River, in descending order, are the Auglaize River, the St. Joseph River, the St. Mary's River, and the Tiffin River. The Maumee River is formed at the confluence of the St. Joseph and St. Mary's Rivers near Ft. Wayne, Ind. It flows approximately 120 river miles northeast to Toledo, Ohio where it empties into Lake Erie at Maumee Bay. Reference Figures 1 and 4.

The modern Maumee River Basin was formed during the glacial ice recession from the western end of the Lake Erie Basin, between 8,000 and 12,000 years ago. The Basin comprises a flat lake plain in the center and sloping till planes around the edges. It is overlain by three types of Pleistocene glacial till (deposits), consisting of poorly sorted and generally un-stratified particles ranging in size from clay to large boulders; and to a lesser degree, course-grained stratified sediments, consisting of sand and gravel; and fine-grained stratified sediments, consisting of clay, silt, and very fine sand. Sediments overlying bedrock range in thickness from less than 1 ft near lake Erie to more than 200 ft in northwestern Indiana and southwestern Michigan.

More than 70 percent of the acreage is cultivated cropland, the bulk of which is dedicated to corn and soybeans. Confluence and development areas include: Fort Wayne, Indiana; Defiance, Ohio, and Toledo, Ohio (at Lake Erie). Several hundred thousand people live within the basin.

Basin activities and developments have resulted in impairments to water and sediment quality from

sedimentation and contaminants. Impairments from contaminated sediments include those to benthic and aquatic communities and associated restrictions on human consumption of contaminated fish. The Maumee River discharges more tons of suspended sediment per year than any other tributary to the Great Lakes. Some of the most greatly modified stream channels and impacted aquatic invertebrate and fish communities in Ohio are found in selected areas of the Maumee River Basin. Remediation efforts have been initiated and continue.

The International Joint Commission identified the lower main stem of the Maumee River as an Area of Concern (AOC); a waterway where beneficial uses of the water resources have been impaired by human activities. The Maumee AOC includes the lower Maumee River from the Bowling Green water intake near Waterville to Maumee Bay, as well as other tributaries to Maumee Bay and Lake Erie. The Maumee Remedial Action Plan (RAP) began over a decade ago as a community effort to restore beneficial uses (Fishable and Swimmable). The Maumee River Implementation Committee (MRIC) makes the official decisions of the RAP and provides general oversight with regards to policy. Under MRIC Issue Action Groups are identified to deal with specific issues that affect the AOC.

The Ottawa River Basin. The Ottawa River, a tributary to Lake Erie, empties into the Lake's westerly end about 3.5 miles northerly from the mouth of the Maumee River and Toledo Harbor, Ohio. The river has a total length of 41.6 miles including 41 miles in Lucas County, Ohio and the remainder in Monroe County, Michigan. It has a drainage basin of 178 square miles. The lower section of the river is primarily located in the city of Toledo, Lucas County, Ohio. Reference Figures 1 and 4.

The river is shallow with depths averaging 2 feet below low water datum. This can be substantially impacted by lake seiche. This also limits navigation to small boats predominantly moored at marinas and yacht clubs. The river serves both local based and transient watercraft. The existing traffic on the river consists entirely of recreational craft.

Water quality of the Ottawa River is classified as highly polluted and unsafe for swimming, fishing and other water activities. Upstream landfills, sewer outfalls, and agriculture runoff have been the sources of pollution which degrades water quality and adversely impacts river bottom sediments. The use of the Ottawa River for activities such as swimming, fishing and related water activity was banned in the 1990's by the Toledo Department of Health and the Ohio Department of Health.

In association with the Maumee RAP/MRIC the Ottawa River Action Group and subsequently the Ottawa River Remediation Team was formed. The Ottawa River Remediation Team is a partnership of environmental professionals working to expedite the restoration of beneficial uses through strategic watershed planning and coordination throughout the Maumee AOC community.

As a result of this coordination the Ottawa River-Ten Mile Creek watersheds cooperators had 12.9 acres registered in filter strips, wetlands and windbreaks. A number of landfills, dumps and uncontrolled waste sites within the basin have been identified and are going through remediation. Combined sewer and sanitary sewer overflows have been studied under findings and orders from Ohio EPA. Contaminated stream sediment risk assessment is being completed in order to prioritize areas for remediation. Finally, the 1999 study; Valuing the Ottawa River: The Economic Values and Impacts of Recreational Boating, was completed to provide the basis to build the necessary local financial support to make dredging of the Ottawa River possible.

The Portage River Basin. The Portage River, with its mouth at Port Clinton, is 69 miles long and its basin is about 591 square miles (378,443 acres). The River is one of northwest Ohio's major tributaries to Lake

Erie. The watershed lies entirely within Ohio. Reference Figures 1 and 4.

It drains most of the Great Black Swamp, which hindered development of northwest Ohio until the 1830s. Most ditches and small streams flowing into the Portage, and parts of its major tributaries, are man-made streams designed to help drain the Great Black Swamp.

The watershed has little topographic relief. The basin headwaters originate from the Defiance Moraine, immediately north of Findlay, Ohio. The top of this ridge lies 260 feet above the level of Lake Erie, but the river decline is rapid in the headwaters, which results in rather flat stream slopes throughout the central and lower reaches of the river. The stream pattern of the basin consists of a single channel threading the lower 30 miles of the basin. Three major tributaries, the North Branch, Middle Branch, and East Branch, meet at the same general confluence.

The Portage River has mostly been spared the severe pollution problems of other rivers in the Western Lake Erie Basin. About 75 percent of the Portage River meets Ohio EPA Standards, making it one of northwest Ohio's highest quality streams. It is an important part of Lake Erie food chain. There are still many wetlands in the basin.

The basin includes some of Ohio's most productive farmland. Basin soils are clays and mucks in the downstream reaches and sand, gravels, and admixtures of clays in the headwaters regions. The streams provides drainage, which is essential for successful agriculture in the heavy clay soils. Farming and agriculture is a major industry in the basin.

The largest cities in the Portage River basin, Bowling Green, Fostoria, and Port Clinton, are all on the edges of the watershed. This is no surprise considering original developments were in areas avoiding the swamp. In all, roughly 100,000 people make their home within the basin.

The Portage provides drinking water, water for industrial use, and is a resource for draining storm water, and treated wastewater. With the exception of Bowling Green and Port Clinton, most of the area uses wells, which the Portage helps recharge.

Although the basin is largely agriculture, the main industries that provide livelihoods for many residents are automotive parts, quarrying operations and food processing. Recreation is another major industry. The Portage supports recreation and tourism including excellent bass streams and boating areas. Thousands of people fish and boat on the River every year; others hunt and trap in the wild areas along the river and its tributaries.

Environmental concerns include non-point pollution sources, inappropriate land use, and sewage discharge. Due to PCB contamination, the Ohio EPA recommends no more than one meal per month of channel catfish and common carp caught in the Portage River.

2.0 SCOPE OF WORK

This project entails USACE developing a multi-purpose/multi-objective evaluation of the Western Lake Erie Basin and Watersheds to (1) integrate existing projects/plans/studies; (2) assess program progress; and (3) plan future lake and watershed revitalization programs and projects into a comprehensive Western Lake Erie Basin and Watersheds Management Plan. The final product will be used as a tool for the area to move toward the rehabilitation of the Western Lake Erie Basin and Watersheds area.

Basin/Watershed studies are planning initiatives that have a multi-purpose and multi-objective scope that accommodate flexibility in the formulation and evaluation process. The outcome of a basin/watershed study will generally be a basin/watershed management plan. Basin/watershed management plans are documents that identify the combination of recommended actions to be undertaken by various partners and stakeholders in order to meet the needs and achieve the objectives identified in the study and may identify existing studies, further studies or projects for implementation.

The Corps along with its Partners in the Western Lake Erie Basin will perform the following tasks which define the basic process of developing a comprehensive watershed assessment:

- Define the study area based on hydrologic units.
- Establish a watershed group (partnership) to participate during the planning process.
- Establish a framework for state, local, tribal and Federal level involvement to help identify kinds of activities that should be undertaken in the watershed to address comprehensive water resource issues.
- Investigate the problems, needs, and opportunities of a watershed to include, but not limited to, flood damage reduction, ecosystem restoration, water quality, water supply, drought preparedness, recreation and navigation.
- Develop goals and objectives.
- Develop a scope of work for accomplishing the watershed study tasks.
- Research historic and current conditions and uses of the watershed.
- Identify potential future changes/initiatives in the watershed including the identification of resource uses, needs, and conflicts. Determine the likely future conditions based upon proposed activities and development.
- Qualitatively assess the cumulative effects of various activities in the watershed.
- Evaluate alternative uses of the resources including the positive and negative effects on economic development, the environment, and social well-being based upon factual scientific, social and economic information.
- Prioritize water and land-related resource problems and opportunities.
- Identify and evaluate conflicting uses and monetary and non-monetary trade-offs among conflict uses.
- Work with stakeholders to collectively develop possible project measures for recommended future activities.
- Preliminary assessment of project costs, benefits, and environmental impacts of any recommended activities.
- Work with stakeholders to collectively determine initiatives to recommend in a watershed action plan.
- Use a decision framework and stakeholder involvement to justify recommendations and to explain how recommended activities would systematically improve integrity of the watershed.
- Determine the best schedule for implementing activities, programs or construction activities and identify which agency is best suited for accomplishing such activities.
- Prepare comprehensive watershed plan.
- Pursue any Corps identified projects under normal budget procedures.

This scope explicitly replies to the Maumee River watershed, Ottawa River watershed and Portage River watershed as described in the original study authorization, Section 441 of the Water Resources Development Act (WRDA) of 1999, which directed the Secretary of the Army for Civil Works to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee, Ottawa, and Portage Rivers. In carrying out the study, the Secretary was directed to cooperate with interested Federal, State, and local agencies and non-governmental organizations and consider all relevant programs of the agencies.

2.1 Study Conduct:

Project management will be accomplished per the USACE Buffalo District management hierarchy and associated Divisions/Branches/Sections with associated expertise [Management, Programs and Project Management, Planning, Engineering, Economics, Environmental (Physical/Natural, Community/Social, Cultural Resources), etc]. Input will be acquired from the internal and external PDTs, Agencies/Public (VISION) or Partners in the Western Lake Erie Basin. There will be critique and approval from the Project Committee decision makers.

The Project Management, Project Development Team, and Project Committee formation and diagram are discussed in associated Appendices.

The project will include Scoping and Agency/Public Coordination (Vision) (Reference Section 5.0) and Compliance.

The primary objectives of the study are to comprehensively analyze the basin/watersheds conditions, problems and opportunities for improvement, find possible solutions to these needs, assess/evaluate and recommend a course of action. In order to accomplish this, basin/watersheds resources will be identified and assessed. The existing conditions of the resources will be examined and projections made of the future conditions of the resources in the absence of any additional projects beyond those currently authorized for construction. Gathering information about potential future conditions requires forecasts, which should be made over a period of analysis (50 years as per Corps Planning Guidance) to indicate how changes in economic and other conditions are likely to have an impact on problems and opportunities. The program strategic plans will be used as part of this assessment. A checklist will be established to ensure that the quality of data being used is accurate. Considerations in the checklist will include author/source, timeliness, assumptions used, thoroughness, conclusions and reliability of references.

Ecosystem resources conducive for rehabilitation will be identified as part of a developmental process for establishing a Vision for the Western Lake Erie Basin and Watersheds. The visioning process is an integral part of the WLEBS and is addressed in Section 5.2 of this Project Management Plan. Examining the current, future, and sustainable ecosystem conditions will lead to the determination of the water resources related problems and opportunities for improvement of the basin/watersheds. When the examination of the existing, future without project, and sustainable ecosystem conditions are established for the watershed resources, this model will then aid in determining the comprehensive set of problems and opportunities for improvement.

In addition to ecosystem resources (including water quality, sedimentation, fish and wildlife habitat), the WLEBS will include itemized flood damage reduction, navigation, and recreation uses as endpoints. Each desired endpoint will be evaluated to determine whether or not it is attainable.

In order to coordinate the various project tasks outlined in Appendix H, a wiring diagram will be developed showing which disciplines or areas of inquiry are related and dependent on each other.

2.2 Review of Prior and Ongoing Studies and Reports:

The Western Lake Erie Basin and Watersheds has been recognized for its resources to Ohio, Indiana, and Michigan. A large number of studies or projects have been completed or are underway in the

basin/watersheds. The WLEBS will not halt other ongoing efforts in the watershed. Information will be exchanged with the study efforts to capitalize on the synergism of the work efforts.

Prior reports relating to the Western Lake Erie Basin and Watersheds are too numerous to list. Completed or on-going WLEBS projects include:

- USEPA/State Point Source Regulatory
- USEPA/State Water Body Assessments
- USDA-NRCS Best Management Practices
- USDA-NRCS Conservation Reserve Enhancement Program
- FEMA Flood Plain Management
- Toledo Waterways Initiative Long Term Plan
(including sewer system evaluation surveys)
- Western Lucas County Wet Prairie Complex Protection Project

- Western Lake Erie Basin Study (GI)
- Great Lakes Remedial Action Plan - Maumee River (GI)
- Ottawa River – Navigation (CG)
- Ottawa River (CG-CA 204)
- Ottawa River - Shoreland Drive (CG-CA 14)
- Ohio Environmental Infrastructure Imp. (CG 594)
- Toledo Harbor LTMP/DMMP (O&M)
(Reduced Sedimentation, Dredging/Disposal, CDF Management, Beneficial Use of
Dredged Material, New CDFs)
- Maumee Bay Habitat Restoration (CG-CA 204)
- Wynn Road BUDM CDF (CG-CA 204)
- Oregon BUDM CDF (CG-CA 1135)
- Toledo Harbor – Project Condition Surveys (O&M)
- Toledo Harbor – Maumee River Maintenance Dredging (O&M)
- Toledo Harbor – Maumee Bay Maintenance Dredging (O&M)
- Toledo Harbor – Island 18 Reutilization (O&M)
- Toledo Harbor – Environmental Activities (O&M)
- Auglaize River - Sediment Transport Model (O&M 516e)
- Port Clinton Waterfront (CG-CA 107)

A more comprehensive list of linked projects is contained in Appendix I.

2.3 Basin/Watershed Conceptual Model:

A conceptual model will be developed to describe the interrelationships of the various basin/watersheds resources. This model will be descriptive and likely diagram various functions and processes in the basin/watersheds. This will serve as a guide in determining the completeness of the studies and allow information gaps to be filled prior to completing studies. The conceptual model will help increase communication, aiding in the setting of priorities and future actions. The interagency planning team will be involved in the development. USACE will be responsible for the model development and integration into the WLEBS. Nationally significant resources as defined both in Corps policy and Federal legislation will be addressed.

2.4 Existing Conditions:

The existing conditions for the various basin/watersheds resources will be examined through the study. The level of detail will be determined for each basin/watersheds resource as appropriate. During the study, one or more metrics will be selected on the basis of some quantitative or qualitative characteristic of the basin/watersheds resource and will be used to identify the current status of the resource and to track changes (improvement or degradation) of the resource over time. USACE plans to utilize an ecological assessment and GIS methodology to establish baseline conditions for stream reaches and their local drainages.

Initially, existing information will be examined by people of associated expertise (i.e. Planning, Engineering, Economics, Environmental (Physical Scientists, Ecologists/Biologists, Community Planners/Social Scientists, Archaeologists/Historians) or awareness to develop existing and anticipated future conditions profiles for the region (watersheds) for the parameters outlined (See Below). Subsequently, these will be refined relative to more specific problem and/or project areas, as applicable/appropriate. Input will be acquired from the internal and external PDTs, Agencies/Public (VISION) or Partners in the Western Lake Erie Basin.

Related agency/interest websites and reports/references will be an initial source of information. Data gaps will be noted and supplemental data pursued as necessary/possible as the study progresses.

a. Consider Basic Environmental Resources and/or Assessment/Evaluation effects to:

Planning & Engineering

Economics

Benefits
Federal Cost
NonFederal Cost
Total Cost
Net Benefits
Benefits (AA)
Costs (AA)
B/C

Environmental Physical/*Natural Resources

Geography
*Air Quality
Geology
*Water Quality
Aquatics
Benthos
Aquatic Vegetation
Fisheries
Wetlands
Flood Plain
Terrestrial
Wildlife
Threatened and Endangered

Environmental Community/Social (*Man-Made) Resources

Demographics

Water and Land Use and Developments

**Community and Regional Growth

*Displacement of People

*Displacement of Farms

*Business and Industry

*Labor Force, Employment, and Income

**Public Facilities and Services

Recreational Resources

**Property Value and Tax Revenue

**Noise and Aesthetics

Health and Safety

*Community Cohesion

Environmental Justice

Environmental Cultural Resources

Archeological

Historical

* Rivers and Harbors Act - 122 Guidelines 17 Parameters

2.5 Future Without Project Conditions:

The future without project conditions for the basin/watersheds resources will be examined to aid in the determination of problems and needs of the watershed over the next 50 years. Trends will be identified that relate to watershed resources (See previous Section) and predicting future conditions.

2.6 Ecosystem Conditions:

For nationally significant ecosystem resources, as defined by Congress, assessments of historical values and functions will be made. These assessments will aid in determination of the problems and opportunities for improvement and serve as rehabilitation targets. This step shall include assessment of the practical feasibility of attaining a natural target.

2.7 Identification of Problems, Needs, and Opportunities:

The water resources related problems, needs, and opportunities of the basin/watersheds would be examined in a comprehensive and holistic manner. The conceptual model will be reexamined to determine if the studies have captured the interrelationships of the various basin/watersheds and processes affecting them. Existing, future without, and the natural ecosystem conditions, where appropriate, for each watershed resource will be examined concurrently to determine problems and opportunities.

Problems (and type and location), needs, and objectives will be identified (i.e. Institutional, Erosion/Sedimentation, Water Quality/Contamination, Water Supply, Navigation/Commercial/Recreational, Flooding, Stream Bank Erosion, Fish and Wildlife Habitat, associated Recreation, etc.).

2.8 Formulation of Measures/Alternatives:

Measures/Alternatives will be formulated to address the problems and opportunities identified in the plan. These alternatives will be examined to determine their effects on the generic basin/watersheds resources listed in Section 2.4, engineering feasibility, (completeness and effectiveness), economic justification (efficiency), and environmental/social acceptability.

Initially, various regional/local measures (and type and location) will be identified. Subsequently alternatives will be identified (i.e. relative to Institutional, Erosion/Sedimentation, Water Quality/Contamination, Water Supply, Navigation/Commercial/Recreational, Flooding, Stream Bank Erosion, Fish and Wildlife Habitat, associated Recreation, etc).

2.9 Assessment (Impacts) of Measures/Alternatives:

Initially, Measures/Alternatives will be assessed (Impacts Identified) by people of associated expertise (i.e. Engineering, Economics, Environmental (Physical Scientists, Ecologists/Biologists, Community Planners/Social Scientists, Archaeologists/Historians) for the basin/watersheds for the assessment and coordination/compliance parameters outlined (See Below). Subsequently, these will be refined relative to more specific problem and/or project areas, as applicable/appropriate. Input will be acquired from the internal and external PDTs, Agencies/Public (VISION) or Partners in the Western Lake Erie Basin.

a. Consider Basic Environmental Resources and/or Assessment/Evaluation effects to:

Planning & Engineering

Economics

Benefits
Federal Cost
NonFederal Cost
Total Cost
Net Benefits
Benefits (AA)
Costs (AA)
B/C

Environmental Physical/*Natural Resources

Geography
*Air Quality
Geology
*Water Quality
Aquatics
Benthos
Aquatic Vegetation
Fisheries
Wetlands
Flood Plain
Terrestrial
Wildlife
Threatened and Endangered

Environmental Community/Social (*Man-Made) Resources

Demographics

Water and Land Use and Developments

**Community and Regional Growth

*Displacement of People

*Displacement of Farms

*Business and Industry

*Labor Force, Employment, and Income

**Public Facilities and Services

Recreational Resources

**Property Value and Tax Revenue

**Noise and Aesthetics

Health and Safety

*Community Cohesion

Environmental Justice

Environmental Cultural Resources

Archeological

Historical

* Rivers and Harbors Act - 122 Guidelines 17 Parameters

b. Consider Usual Environmental Coordination and Compliance Items (See Usual Appendices also):
(Short List. Check Long List, as Applicable)

* Scoping (correspondence, meetings), Notices, Draft and Final Reports and Associated Appendices.

Statutes, EO, regulations, etc. (Reference Usual Appendices also)

* Preservation of Historical Archaeological Data Act of 1974, 16 USC et seq.; National Historic Preservation Act of 1966, as amended, 16 USC 470 et seq.; Executive Order 11593, Protection and Enhancement of the Cultural Environment, 13 May 1971:

* Clean Air Act, as amended, 42 USC 7401 et seq:

* Clean Water Act of 1977 (Federal Water Pollution Control Act Amendments of 1972) 33

USC 1251 et seq:

* National Environmental Policy Act, 42 USC 470a et seq:

* River and Harbor Act, 33 USC 401 et seq.

* Fish and Wildlife Coordination Act, 16 USC 661 et seq.

* Endangered Species Act, as amended, 16 USC 1531 et seq:

* Migratory Bird Treaty Act, 16 USC 703-711, et seq. and Executive Order 13186 Protection of Migratory Birds:

* Executive Order 11990, Protection of Wetlands, 24 May 1977:

* Wild and Scenic Rivers Act, 16 USC 1271 et seq:

* Marine Protection, Research, and Sanctuaries Act:

* Federal Water Project Recreation Act, as amended, 16 USC 460-1(12) et seq:

* Land and Water Conservation Fund Act, 16 USC 4601 et seq:

* Watershed Protection and Flood Prevention Act, 16 USC 1001 et seq:

* Executive Order 11988, Flood Plain Management, 24 May 1977.

- * Farmland Protection Policy Act (PL 97-98), and Executive Memorandum - Analysis of Impacts on Prime and Unique Farmlands, CEQ Memorandum, 30 August 1976:
- * Coastal Zone Management Act, as amended, 16 USC 1451 et seq.
- * Executive Order 12898, Environmental Justice.

State and Local:

These efforts may include specific studies and associated report appendices. Reference Section 2.13.

2.10 Evaluation (Trade-off Analyses) of Measures/Alternatives:

Initially, Measures/Alternatives will be Evaluated (Trade-off Analyses) by people of associated expertise (i.e. Planning, Engineering, Economics, Environmental (Physical Scientists, Ecologists/ Biologists, Community Planners/Social Scientists, Archaeologists/Historians) for the basin/watersheds for the assessment and coordination/compliance parameters outlined (See previous Section). Subsequently, these will be refined relative to more specific problem and/or project areas, as applicable/appropriate. Input will be acquired from the internal and external PDTs, Agencies/Public (VISION) or Partners in the Western Lake Erie Basin.

2.11 Prioritizations/Recommendations of Measures/Alternatives:

Initially, and based on the preceding, Measures/Alternatives will be Prioritized/Recommended by people of associated expertise (i.e. Planning, Engineering, Economics, Environmental (Physical Scientists, Ecologists/Biologists, Community Planners/Social Scientists, Archaeologists/Historians) for the basin/watersheds for the assessment and coordination/compliance parameters outlined (See previous Sections). Subsequently, these will be refined relative to more specific problem and/or project areas, as applicable/appropriate. Input will be acquired from the internal and external PDTs, Agencies/Public (VISION) or Partners in the Western Lake Erie Basin.

This will be final critiqued and finalized by the Project Committee decision makers.

2.12 Geographic Information System:

A GIS is currently being developed under the WLEBS cost-share program. The intent of this project is to develop a comprehensive database to aid the basin/watersheds in achieving the goals specified in the WLEBS Charter. The project involves determining the data needs of the WLEBS, identifying and researching existing sources of data and systems, and designing and fielding a GIS package meeting the project intent. Given the complexity of the basin/watershed, the scope of this project will be restricted to a limited set of data priorities to be determined by the WLEBS. The GIS will be designed in a modular fashion to allow expansion of data and capabilities. It is envisioned the GIS product would be delivered as a stand-alone software package which would be distributed to WLEBS members for their use.

2.13 Project Planning Compliance and Report.

The project planning compliance and report will consider and include at least the following:

a. Usual Report Sections:

Study and Authority

Prior Studies

Agency and Public Involvement

Existing Conditions

Anticipated (Without Project) Conditions

Problems, Needs, Objectives (Purpose)

Initial Alternative Measures and Plans Development

Initial Assessment (Impacts) of Alternative (Engineering, Economic, Environmental)

Initial Evaluation (Trade-offs) of Alternatives (Engineering, Economic, Environmental)

Agency and Public Coordination and Compliance

Initial Selection of Alternatives

Final Alternative Measures and Plans Development

Final Assessment (Impacts) of Alternative (Engineering, Economic, Environmental)

Final Evaluation (Trade-offs) of Alternatives (Engineering, Economic, Environmental)

Agency and Public Coordination and Compliance

Final Selection of Alternatives

Priority/Selected Plan Items

Compliance

Constraints

Note: See Respective Detailed Outlines

Environmental includes: Physical/Natural, Community/Social, Cultural Resources Environments.

b. Usual Appendices:

- ENGINEERING

* Hydrology & Hydraulics

* Coastal/Geotech

* Civil

* Environmental (Various)

* Cost

* Other

- ECONOMIC

* Benefits Analyses

* Other

- ENVIRONMENTAL (EA, or EA-FONSI, or EIS. Reference Previous Report Outline Items)

* Index and References

* Clean Water Act - Public Notice And Section 404(b)(1) Evaluation Report

* U.S. Fish and Wildlife Service Coordination Act Report (Letter)

* Coastal Resources Consistency Determination

* Cultural Resources (Letter)

* Environmental Correspondence

* Other

2.14 Project NEPA Compliance

The WLEBS report will be prepared in compliance with the National Environmental Policy Act (NEPA) (40 CFR 1500) following USACE ER 200-2-2 (Procedures for Implementing NEPA). The study and report will include an Environmental Assessment relative to the items identified in Section 2.9.

The project report is a Planning Report that will be presented to and considered by the Project Committee decision makers. Subsequent projects pursued would include specific project planning and NEPA documentation and coordination, as necessary/appropriate.

Tasks required for this compliance are included in Appendix H.

2.15 Work Elements:

Scopes of Studies for the various work elements required to accomplish the WLEBS are presented here (Generally/Previously) and in Appendix H.

2.16 Project Benefits:

The WLEBS report is an integrated document consisting of a basin/watersheds study and management plan including initial assessments/evaluations; therefore, it will contain alternative plans considered for basin/watersheds rehabilitation. Project benefits for the full suite of alternative plans will be assessed during the study, the results of which will identify a preferred alternative or alternatives.

2.17 Uncertainties in Scope of Work:

The PMP defines the tasks required to complete the WLEBS under Section 441 of WRDA 1999. These tasks and related costs are subject to change during the course of the study if plan modifications, additional plans, or other study modifications are warranted. If changes in the Scope of Work (SOW) are required, the total cost of the study will be adjusted to reflect such changes. Appendix G includes the risk management plan which addresses uncertainties in scope of work.

3.0 PROJECT RECOMMENDATIONS:

3.1 Projects that may be Implemented under Existing Authority

Existing USACE authorities will be examined to determine if existing projects could be modified to implement measures recommended by the WLEBS.

3.2 Projects that may be Implemented under the Continuing Authorities Program

USACE has several delegated authorities for projects meeting certain criteria. If projects are identified under the WLEBS, use of these authorities may provide more rapid implementation of the measures. The authorities and requirements are summarized below.

a) Section 205 of the Flood Control Act of 1948 - This provides the same complete project and adequate degree of protection as would be provided under specific Congressional authorization.

b) Section 206 of WRDA 1996 Aquatic Ecosystem Restoration - This provides for planning, design, and construction of aquatic ecosystem restoration and protection projects, when it is found that the project will improve the quality of the environment, is in the public interest and is cost effective.

c) Section 1135 of WRDA 1986 Fish and Wildlife Restoration - This provides for constructing environmental restoration projects where a USACE project contributed to the degradation of the environment.

d) Emergency Streambank and Shoreline Protection, Section 14 of the Flood Control Act of 1946 - This provides protection from streambank or shoreline erosion to public facilities by the construction or repair of protection works.

e) Section 107 of the River and Harbor Act of 1960 - Small Navigation Projects. This authorizes construction, operation and maintenance of small river and harbor improvement projects.

3.3 Projects Requiring Further Authorization by Congress

Alternative evaluation may yield needed projects to address the problems and opportunities that are beyond the scope of existing authorities and the continuing authorities program. Other recommendations may include potential solutions outside the mission of USACE. Other Federal agencies, as well as state, county and local agency opportunities will be evaluated and included as recommendations in the final WLEBS. It is understood that recommendations will not be focused on USACE programs, but rather the best means to obtain the project objectives. This integrated rehabilitation approach must also recognize CERCLA and NRDA activities within the basin/watersheds.

3.4 Evaluation Tools for Future Use

The study will develop tools that would be used by others in the evaluation of future actions. These will likely include assessment/evaluation/prioritization parameters and tools used/discussed in this study. One such tool is the conceptual model outlined in Appendix H.

3.5 Western Lake Erie Basin Study (WLEBS)

The WLEBS would present the results of the scheduled tasks, as outlined in Appendix H, in a concise manner.

4.0 KEY ASSUMPTIONS AND CONSTRAINTS

4.1 Assumptions:

- This project will be undertaken by the USACE in collaboration with Federal, State, and local agencies and include the active participation of interested groups and use of the full spectrum of technical disciplines in planning and decision-making.
- The WLEBS plan will be pursued and implemented assuming appropriate authorities, review, approval, and funding is available.

- The project will be conducted recognizing parallel programs for CERCLA, BMPs, and NEPA (which is to be integrated into the WLEBS). Requirement of these additional authorities will be considered in program design and implementation.
- As per the Corps Planning Guidance Notebook, the period of analysis (project life) shall be 50 years

4.2 Constraints:

Constraints are restrictions that limit the planning process. This study will consider resource, legal, and policy constraints. Resource constraints are those associated with limits on knowledge, expertise, data, information, money, and time. Legal and policy constraints are those defined by law, USACE policy, and guidance. The key constraints are as follows:

- The project schedule is dependent upon timely and adequate study/project resources, studies/reports, and approvals.
- The project will remain consistent with project(s) authorities.
- The WLEBS shall be developed in accordance with the following basin/watersheds policy/guidance:
 - PGL 61 – *Application of a Watershed Perspective to Corps of Engineers Civil Works Programs and Activities*
 - WRDA 2000 Implementation Memo for Section 202 – *Watershed and River Basin Assessments*
 - ER 1105-2-100 (PGN)
 - CW Strategic Plan
 - ER 1110-2-8154 – *Water Quality and Environmental Management for Corps Civil Works Projects*
 - 40 CFR 1500 – *Regulations for implementing NEPA*
 - ER 200-2-2 – *Procedures for implementing NEPA*
 - Rivers and Harbors Act - 122 Guidelines
 - 42 USC 4321-4347 – *National Environmental Policy Act of 1969 as amended*
 - 42 USC 9601-9675 – *Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA), as amended*

5.0 WESTERN LAKE ERIE BASIN/WATERSHEDS VISION

5.1 Customers/Stakeholders and Expectations

The true USACE customer/stakeholder is the American public. However, in this PMP Congressional representatives and the active WLEBS PDT members are the immediate customers. Stakeholders are those agencies, organizations, and individuals that have not directly contributed financially to the program, but are actively involved in the WLEBS, expressed great interest in the WLEBS or may be affected by the WLEBS program.

Politically, the project has many customers and the study area lies within the jurisdiction of the following Congressional (REP) Districts; Representatives Marcy Kaptur, OH-9; Paul Gillmor, OH-5; Michael

Oxley, OH-4; John Boehner, OH-8; Mark Souder, IN-3; Mike Pence, IN-6; John Dingell, MI-15; and J.H. "Joe" Schwarz, MI-7. Reference Figures 1 through 4.

The customers and stakeholders for this study include: United States Environmental Protection Agency (USEPA); United States Fish and Wildlife Service (USFWS); United States Geological Survey (USGS); United States Department of Agriculture - Natural Resource Conservation Service (NRCS); Federal Emergency Management Agency (FEMA); Ohio Environmental Protection Agency (OEPA); Ohio Department of Natural Resources (ODNR); Ohio State Historic Preservation Office (SHPO); the Lake Erie Management Plan Committee (LEMPC); associated Indiana State Agencies and Interests; associated Michigan State Agencies and Interests; Watershed Associations, Counties, Soil and Water Conservation Districts (SWCD's); Townships and Villages; the Maumee River Basin Partnership for Local Governments (MRBPLC); Toledo Metropolitan Area Council of Governments (TMACOG); Maumee Remedial Action Plan Committee (RAC); City of Toledo, etc. Reference Figures 1 through 4.

The customer and stakeholder expectations for the WLEBS include:

- To be actively included in preparation of the Project Management Plan, Feasibility Cost-Sharing Agreement, and WLEBS.
- To maximize the use of work-in-kind credits as a non-Federal share of the feasibility study.
- Sound engineering and science, cost effectiveness, and accountability for funding and decisions.
- Unification in the WLEBS of all rehabilitation efforts at the basin/watersheds level as a guide for future rehabilitation efforts of the basin/watersheds.
- Inclusion of technically prioritized, specific, and actionable recommendations.

5.2 Western Lake Erie Basin/Watersheds Vision

Develop a clear and achievable Western Lake Erie Basin/Watersheds rehabilitation Vision to guide WLEBS program and project planning. Incorporation of results from sub-Section 5.1 will be considered in the developmental process. The results of this effort will provide a programmatic goal to WLEBS for meeting its mission to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin to the benefit of the public. The Vision will be developed from a review of past planning activities and documents along with one or more public visioning meetings where the customer, stakeholders, and public will have an opportunity to provide input to the developmental process. A detailed description of the developmental process for the Vision is included in Appendix H.

5.3 Programmatic Performance Measures

Performance Measures are intermediate measuring sticks for determining the status of the WLEBS program and its progress toward the WLEBS Vision developed in sub-Section 5.2. Where the Vision is the WLEBS rehabilitation goal, Performance Measures should be specific to the WLEBS strategy and this Vision of a rehabilitated basin/watersheds once it is achieved. Performance Measures will be used to manage the rehabilitation program through adjustments to projects and resource allocations. A detailed description of the developmental process for the Performance Measures is included in Appendix H.

6.0 PROJECT OBJECTIVES

1. Develop a comprehensive Western Lake Erie Basin/Watersheds study and management plan to integrate existing and proposed basin/watersheds revitalization and development programs and projects. This project entails the USACE, Buffalo District developing a multi-purpose/multi-objective evaluation of the Western Lake Erie Basin/Watersheds to (1) integrate existing projects/plans/studies; (2) assess program progress; and (3) integrate future Basin/Watersheds revitalization and development programs and projects into a comprehensive Western Lake Erie Basin/Watersheds study and management plan. The final product will be used as a tool for the WLEBS PDT to move toward the rehabilitation and development of the Western Lake Erie Basin/Watersheds. The WLEBS is a management strategy comprised of the integration of program strategic plans and sound management practices. It will then represent an integration of existing program activities with a coordinating management scheme as a tool for guiding and assessing the status of future programmatic activities and supporting programmatic decisions. As outlined in Section I of Appendix E of ER 1105-2-100, the USACE six-step planning process will be used when developing the WLEBS. These steps include:

Step 1: Define Problems and Opportunities (identify the issues within the watershed and opportunities to rehabilitate the watershed)

Step 2: Inventory and Forecast (Conduct literature search and studies; use models to project future conditions and effects of possible project recommendations)

Step 3: Plan Formulation (Develop a set of alternative plans for rehabilitation of the watershed).

Step 4: Evaluation (Evaluate the alternative plans formulated in Step 3 to determine effects of each on the watershed, including ecological, historical and human effects)(Assessment of Alternatives Impacts).

Step 5: Comparison (Compare the alternative plans to determine advantages and disadvantages of each)(Trade-off Evaluation of Alternatives).

Step 6: Final Trade-off Analysis and Plan Selection (Based on comparison listed in Step 5, select a preferred plan).

2. Develop a WLEBS report (including Environmental Assessment) to characterize existing and anticipated conditions; problems, needs, and objectives; measures/alternatives; assess potential direct/indirect and cumulative impacts of measures/ alternatives; evaluate measures/ alternatives; and recommend measures/alternatives/ projects to be implemented within the basin/watersheds. Also to function as the final Planning/NEPA document for the WLEBS.

7.0 PROJECT DELIVERY TEAM

A complete Project Delivery Team (PDT) Member list for this project is included as Appendix A. The PDT includes all those individuals or groups who have an interest in a specific project. PDT members typically consist of the following: Corps in-house project team, customers, stakeholders, contractors, and regulators.

8.0 LOGIC DIAGRAM

The logic diagram included as Appendix B to this PMP includes project phases, elements and major milestones.

8.1 Major Work Elements

This project involves the development of an WLEBS Planning Report (including Environmental Assessment). The report will include integration of existing and proposed Federal, State, and local programs/projects into a comprehensive basin/watersheds scale rehabilitation/development plan. The WLEBS reports (including Environmental Assessments) will characterize existing and anticipated conditions; problems, needs, and objectives; measures/alternatives; assess potential direct/indirect and cumulative impacts of measures/ alternatives; evaluate measures/alternatives; and recommend measures/ programs and alternatives/projects to be pursued within the basin/watersheds.

The basic steps to be taken to perform a basin/watershed management study are as follows:

1. Establish a partnership and determine the primary problems, needs and opportunities in the basin/watershed. Agency/public coordination, as outlined by Planning/NEPA and Visioning coordination will be conducted to ensure full public participation in this process.
2. Develop goals and objectives.
3. Develop a scope of work and project management plan for accomplishing the basin/watersheds study tasks.
4. Research historic and current conditions and uses of the watershed (integrate CERCLA and other existing program/project strategic plans).
5. Conduct Multi-scale Assessment of Watershed Integrity (MAWI) which establishes a baseline assessment of the ecological integrity of the basin/watersheds.
6. Determine the likely future conditions of the basin/watersheds based upon trends and proposed activities and development.
7. Assess/Evaluate alternative uses of the resources including the positive and negative effects on economic development, the environment, and social well-being based upon factual scientific, social and economic information.
8. Prioritize water and land-related resource problems and opportunities.
9. Identify and evaluate conflicting uses and monetary and non-monetary trade-offs among conflicting uses.
10. Work with customers/stakeholders through scoping to collectively develop possible project measures for recommended future activities.
11. Preliminary assessment of project costs, benefits, and environmental impacts of any recommended activities.
12. Work with customers/stakeholders to collectively determine initiatives to recommend in a basin/watersheds action plan.
13. Use a decision framework and customers/stakeholder involvement to justify recommendations and to explain how recommended activities would improve integrity of the watershed.
14. Determine the best schedule for implementing activities, programs or construction activities and identify which agency is best suited for accomplishing such activities.
15. Final preparation of the Western Lake Erie Basin/Watersheds Planning Reports.
16. Pursue any identified programs/projects through the acquisition of funding.

8.2 Cost Estimates

(FINALIZE) The study and reporting cost is estimated at (\$????????????).

8.3 Schedule

(FINALIZE) A detailed Schedule and Logic Diagram is included as Appendix B of this document. Project close-out is currently scheduled for (\$????????????).

9.0 AGREEMENT REQUIRED WITH COST SHARE PARTNER

(STUDY COST SHARE ?) There are no cost share agreements required because this project is 100% Federally funded.

10.0 ACQUISITION STRATEGY PLAN

10.1 Guidance Documents

1. PMBP Project Delivery Acquisition Strategy
<https://lrbintra.lrb.usace.army.mil/PMBPManual/Documents/APPSHTML/PROC2050.htm>
2. EFARS 7-1 Acquisition Plans
<http://www.hq.usace.army.mil/cepr/efars/part07.pdf>
3. CELRBM 1180-1-7 Acquisition Strategy Standard Operating Procedure
https://lrbintra.lrb.usace.army.mil/pages/admin_advisory/contracting/sop/CELRBM1180-1-7.pdf

10.2 Scope

Acquisition planning involves the development of three components: (1) a Project Strategy (scope of this plan), (2) a Local Strategy (municipal level), and (3) a Regional Strategy (basin/watershed level). This plan defines the steps necessary to determine the method of contracting for resources required for the completion of the WLEBS. This is an on-going process throughout the life of the project. The level of detail of the individual Acquisition Strategy Plans developed for each discrete project element requiring such a plan will be equal to the value and complexity of the contemplated acquisition. Work to be completed by non-for-profit agencies first requires an MOU or MOA.

10.3 Responsibility

The PDT responsibilities include:

- Develop procurement options for identified project activities.
- Evaluate the full range of acquisition options.
- Timely coordination with the Small Business Administration (SBA) to ensure small businesses are given full consideration, and to avoid possible project delays.

The Resource Provider(s) and Buffalo District Deputy for Small Business responsibilities include:

- Provide PDT members with viable acquisition options for identified project activities.

The Contracting PDT Member responsibilities include:

- Determine if a formal, written acquisition plan requiring higher-level approval is required.
- Develop acquisition plan, if necessary, with assistance from the PDT.

10.4 Hierarchy of Alternative Resources To Be Evaluated

Acquisition of individual tasks to be completed for the project will be evaluated using the following hierarchy, once a viable resource has been identified, subsequent resources do not require evaluation.

1. CELRB In-house Personnel
2. Other CELRD or USACE Personnel
3. Existing CELRB Contracts
4. Existing CELRD Contracts
5. Other Existing USACE Contracts
6. Other Existing Government Agency Contracts
7. New Contract

10.5 Acquisition Strategy Plan Template

The template to be used in the development of future Acquisition Strategy Plans for this project is provided as Appendix C to this PMP.

11.0 REAL ESTATE REQUIREMENTS/ISSUES

Since this project will not involve any intrusive work, entry agreements are not required. However, the Buffalo District Real Estate office is responsible for obtaining the necessary approval(s) for site access during site visits.

12.0 VALUE ENGINEERING REQUIREMENTS

Value Engineering studies are performed for all construction projects with current working estimate (CWE) of \$2 million and greater and on supply, service and operation & maintenance projects with CWE exceeding \$1 million. In addition, a value engineering study must be performed on all Civil Works projects with CWE of \$10 million and greater. This project does not fall into any of these categories.

13.0 SAFETY PLAN

A Visitor Health & Safety Briefing has been prepared by the Buffalo District for the purposes of conducting site visits and is included as Appendix D.

14.0 SECURITY CONSIDERATIONS

This project does not involve any national security issues or classified information.

15.0 ENVIRONMENTAL REQUIREMENTS

This project shall undergo an environmental review in compliance with NEPA. The final NEPA documentation for this study will be Environmental Assessments. As per USACE ER 200-2-2 (PROCEDURES FOR IMPLEMENTING NEPA), 9. Categorical Exclusions, c. Planning and Technical studies ... Subsequent Planning/NEPA documentation/ coordination (Planning/EIS/Appendices or Planning/EA-FONSI/Appendices) would be accomplished, as needed/appropriate, for specific programs/projects and sites pursued prior to implementation/construction.

16.0 OPERATIONS AND MAINTENANCE

There are no immediate construction activities associated with this project. However, the WLEBS will need to be updated periodically as new information and data become available, and as WLEBS goals and objectives and rehabilitation/developments occur. The WLEBS will include recommendations for its long-term use, including a suggested schedule for updating the study/plan and budget with potential funding sources to accomplish this task. Subsequent specific programs/projects O&M requirements would be included via specific programs/projects authorities and planning reports.

17.0 COMMUNICATIONS PLAN

A communications plan is included as Appendix E to this PMP. It includes a communications matrix summarizing communication protocol between WLEBS participants.

18.0 CHANGE CONTROL PLAN

The Project Manager (PM) will be responsible for the overall management of cost and schedule. The assigned technical leads and individual branches or sections are responsible for the technical quality of their work products. Any office requiring changes to either the agreed upon schedule, budget, or scope of work will provide the information needed to revise the PMP to the PM.

The changes will be categorized by the PM as to their effect on scope, schedule, and budget as follows:

1. Changes to the overall scope, schedule or budget will be approved by the District Engineer (DE) or Deputy District Engineer for Project Management (DDE-PM) through a revised PMP, after consultation with the customer.
2. Changes that do not affect the overall scope, schedule or budget will be approved by the PM with appropriate documentation.

The project's plans (i.e., quality, communications, logic diagram, acquisition strategy, etc.) shall be updated:

- As necessary,
- at a minimum, annually, and
- within thirty (30) days from the time fiscal year funding is received.

19.0 QUALITY CONTROL PLAN

The Quality Control Plan is included as Appendix F to this PMP.

20.0 RISK MANAGEMENT PLAN

The Risk Management Plan is included as Appendix G to this PMP.

21.0 REPORTING REQUIREMENTS

Reporting of study progress and expenditures will be made using the guidelines given in ER 5-1-11 and ER 1105-2-100. Appendix E outlines the communications plan for this project, including reporting requirements.

22.0 PROJECT CLOSEOUT

The PM is responsible for project closeout; however, the required actions will require participation of a number of PDT members. This includes the requirement to closeout project financial cost accounts after project documents or the design and construction contracts are closed out.

The PM/PDT shall complete the following tasks as applicable:

1. Review unliquidated obligations and undelivered orders in the Corps of Engineers Financial Management System (CEFMS) for completed activities.
2. Ensure contractor evaluations, Architect/Engineer (A/E) evaluations, as-built drawings, and operations and maintenance (O&M) manuals are done in accordance with applicable regulations (if applicable).
3. Clear outstanding obligations and commitments in purchase request and commitments (PR&Cs).
4. Clear outstanding obligations and commitments in work items.
5. Close work items/reallocate funds, if appropriate.
6. Process cost transfer in accordance with applicable regulations, policies and District standard operating procedures (SOPs).
7. Prepare client letter closing the project.

23.0 REFERENCES

United States Army Corps of Engineers;

- PGL 61 – *Application of a Watershed Perspective to Corps of Engineers Civil Works Programs and Activities*
- WRDA 2000 Implementation Memo for Section 202 – *Watershed and River Basin Assessments*
- ER 1105-2-100 (PGN)
- CW Strategic Plan
- ER 1110-2-8154 – *Water Quality and Environmental Management for Corps Civil Works Projects*
- 40 CFR 1500 – *Regulations for implementing NEPA*
- ER 200-2-2 – *Procedures for implementing NEPA*
- Rivers and Harbors Act - 122 Guidelines
- 42 USC 4321-4347 – *National Environmental Policy Act of 1969 as amended*
- 42 USC 9601-9675 – *Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA), as amended*

USACE, Buffalo; Western Lake Erie Basin, Revised Expanded Reconnaissance Study, Section 905(b) Analysis, (WRDA 86); Revised June 2003,

USACE, Buffalo; (WEB SITE); PM Toolkit; PMP Guidance.

USACE, Buffalo; Onondaga Lake PMP.

U.S. Census Bureau - 2000 Census.

United States Environmental Protection Agency (USEPA);

United States Fish and Wildlife Service (USFWS);

United States Geological Survey (USGS);

U.S. Geologic Survey. March 1997. Official Description of the Gap Analysis Program. (<http://www.gap.uidaho.edu/About/Overview/GapDescription/default.htm>)

United States Department of Agriculture -

United States Department of Agriculture - Natural Resource Conservation Service (NRCS);

Ohio Environmental Protection Agency (OEPA);

Ohio Department of Natural Resources (ODNR);

Ohio State Historic Preservation Office (SHPO);

National Register of Historic Places. 2004. (www.nationalregisterofhistoricplaces.com)

Ohio, 2003. *Statewide Comprehensive Outdoor Recreation Plan*.

Indiana ...

Michigan ...

WESTERN LAKE ERIE BASIN STUDY/REPORT

PMP APPENDIX B – SCHEDULE

Activity ID	Activity Name	Start	Remaining Early Start	Finish	Budgeted Total Cost	Budgeted Labor Cost	Budgeted Nonlabor Cost	Milestone - Civil Works
138470 W. Lk Erie Basin Study		03-Oct-05 A	23-Apr-07	22-Apr-10	\$2,000,000.00	\$1,259,315.05	\$740,684.94	
138470.CW Standard Civil Works Project		03-Oct-05 A	23-Apr-07	18-Apr-08	\$507,138.65	\$450,714.99	\$56,423.66	
138470.CW.22T00 Feas Prog & Proj Mgmt		03-Oct-05 A	23-Apr-07	18-Apr-08	\$1,000.00	\$1,000.00	\$0.00	
FEA1760	FY06 - IN-HOUSE LABOR	03-Oct-05 A	23-Apr-07	29-Aug-07	\$0.00	\$0.00	\$0.00	
FEA1765	FY06 - DETROIT SUPPORT	03-Oct-05 A	23-Apr-07	29-Aug-07	\$0.00	\$0.00	\$0.00	
FEA1770	FY07 - In House Labor and Non-Labor	01-Nov-06 A	23-Apr-07	18-Apr-08	\$1,000.00	\$1,000.00	\$0.00	
FEA1771	FY07 WKBOTHCOE (LRE Real Estate)	23-Apr-07*	23-Apr-07	20-Mar-08	\$0.00	\$0.00	\$0.00	
138470.CW.00500 Project Management Plan (PMP)		23-May-06 A	23-Apr-07	11-Dec-07	\$506,138.65	\$449,714.99	\$56,423.66	
PMP0010	Conduct Program and Project Management	23-May-06 A		20-Nov-06 A	\$0.00	\$0.00	\$0.00	
PMP0020	Start PMP	23-May-06 A			\$0.00	\$0.00	\$0.00	CW030
PMP0030	Complete Draft PMP	01-Jun-06 A		29-Sep-06 A	\$86,937.02	\$81,086.36	\$5,850.66	
PMP0050	Revise PMP	02-Oct-06 A		20-Nov-06 A	\$0.00	\$0.00	\$0.00	CW040
PMP0040	Review E-PMP	08-Nov-06 A		20-Nov-06 A	\$0.00	\$0.00	\$0.00	
PMP0031	Louisville - H2 Complete Draft PMP	08-Nov-06 A	23-Apr-07	11-Dec-07	\$5,000.00	\$5,000.00	\$0.00	
PMP0032	Detroit - H7 Feasibility Study of Existing Conditions	08-Nov-06 A	23-Apr-07	11-Dec-07	\$0.00	\$0.00	\$0.00	
PMP0035	Feasibility Study of Existing Conditions	01-Apr-07 A	23-Apr-07	28-Sep-07	\$414,201.63	\$363,628.63	\$50,573.00	
PMP0060	Receive FY07 Funds	23-Apr-07*	23-Apr-07		\$0.00	\$0.00	\$0.00	CW030
138470.22000 Feasibility Studies		01-Aug-06 A	23-Apr-07	22-Apr-10	\$1,492,861.35	\$808,600.06	\$684,261.28	
138470.22000.22T00 Feas Prog & Proj Mgmt		01-Aug-06 A	23-Apr-07	22-Apr-10	\$1,492,861.35	\$808,600.06	\$684,261.28	
138470.22000.22T00.22T00 Blanchard		01-Aug-06 A	23-Apr-07	21-Mar-08	\$211,603.54	\$189,600.04	\$22,003.50	
BLR050	Blanchard River Feasibility Study	01-Aug-06 A	23-Apr-07	13-Mar-08	\$208,103.54	\$186,100.04	\$22,003.50	
BLR025	Decision Document Follow-up - H1 - Huntington	01-Sep-06 A	23-Apr-07	29-Aug-07	\$3,500.00	\$3,500.00	\$0.00	
BLR100	Blanchard River Feasibility Study H2 Louisville	08-Nov-06 A	23-Apr-07	23-Apr-07	\$0.00	\$0.00	\$0.00	
BLR200	Prepare Draft Report w/o Project Conditions	23-Apr-07	23-Apr-07	07-Feb-08	\$0.00	\$0.00	\$0.00	
BLR375	Draft Final Blanchard			23-Apr-07*	\$0.00	\$0.00	\$0.00	
BLR300	Prepare Final Report w/o Project Conditions	08-Feb-08	08-Feb-08	20-Mar-08	\$0.00	\$0.00	\$0.00	
BLR350	WP "A" Final Report Complete w/o Project Conditions	21-Mar-08	21-Mar-08	21-Mar-08	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T001 Work Package B		01-Nov-06 A	23-Apr-07	18-Apr-08	\$500.01	\$0.01	\$500.00	
138470.22000.22T00.22T0011 FY07 Work Plan		08-Nov-06 A	23-Apr-07	21-Mar-08	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T00111 Work Package D		08-Nov-06 A	23-Apr-07	21-Mar-08	\$0.02	\$0.01	\$0.00	
138470.22000.22T00.22T001111 All Work Packages - FY08		22-Apr-08	22-Apr-08	22-Apr-09	\$388,000.00	\$361,500.00	\$26,500.00	
COM1C	Prepare Final Report w/o Conditions	22-Apr-08	22-Apr-08	21-Jul-08	\$189,000.00	\$175,500.00	\$13,500.00	
COM1E	Final Report Complete w/o Conditions			21-Jul-08	\$0.00	\$0.00	\$0.00	
COM2C	Prepare Feasibility Scoping Meeting	22-Jul-08	22-Jul-08	20-Oct-08	\$60,000.00	\$56,000.00	\$4,000.00	
COM3C	Conduct Feasibility Scoping Meeting			20-Oct-08	\$0.00	\$0.00	\$0.00	
COM3E	Prepare PGM	21-Oct-08	21-Oct-08	22-Jan-09	\$125,000.00	\$117,000.00	\$8,000.00	
COM4C	PGM Complete			22-Jan-09	\$0.00	\$0.00	\$0.00	
COM4E	Submit PGM	23-Jan-09	23-Jan-09	22-Apr-09	\$14,000.00	\$13,000.00	\$1,000.00	
COM5C	HQ Approval of PGM			22-Apr-09	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T0011111 All Work Packages - FY09		23-Apr-09	23-Apr-09	22-Apr-10	\$100,500.00	\$97,500.00	\$3,000.00	
COM6C	Conduct IPR#2	23-Apr-09	23-Apr-09	17-Jul-09	\$33,500.00	\$32,500.00	\$1,000.00	
COM6E	IPR#2			17-Jul-09	\$0.00	\$0.00	\$0.00	
COM7C	Prepare AFB Package	20-Jul-09	20-Jul-09	13-Oct-09	\$33,500.00	\$32,500.00	\$1,000.00	
COM7E	AFB Package Complete			13-Oct-09	\$0.00	\$0.00	\$0.00	
COM8C	Concurrent HQ/LRD Public Review of Draft Report	14-Oct-09	14-Oct-09	12-Jan-10	\$33,500.00	\$32,500.00	\$1,000.00	
COM8E	Final Report Complete			12-Jan-10	\$0.00	\$0.00	\$0.00	
COM9C	Pre-Brief	13-Jan-10	13-Jan-10	27-Jan-10	\$0.00	\$0.00	\$0.00	
COM9C	Division Engineer's Public Notice	28-Jan-10	28-Jan-10	10-Feb-10	\$0.00	\$0.00	\$0.00	
COM9C	Dry Run for Mock CWRB	11-Feb-10	11-Feb-10	25-Feb-10	\$0.00	\$0.00	\$0.00	
COM9C	Mock CWRB	26-Feb-10	26-Feb-10	11-Mar-10	\$0.00	\$0.00	\$0.00	
COM9C	CWRB	12-Mar-10	12-Mar-10	25-Mar-10	\$0.00	\$0.00	\$0.00	
COM9C	State and Agency Review	26-Mar-10	26-Mar-10	08-Apr-10	\$0.00	\$0.00	\$0.00	
COM9C	Chief's Report	09-Apr-10	09-Apr-10	22-Apr-10	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T002 First Contract Actions		02-Apr-07 A	23-Apr-07	28-Sep-07	\$632,257.78	\$0.00	\$632,257.78	
WLEB6a	Award Contract	02-Apr-07 A	23-Apr-07	28-Sep-07	\$632,257.78	\$0.00	\$632,257.78	
WLEB1	Start SOW	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00	
WLEB2	Draft SOW for IDIQ	23-Apr-07	23-Apr-07	04-Jun-07	\$0.00	\$0.00	\$0.00	
WLEB3	Submit request for services contract to LRD	05-Jun-07	05-Jun-07	18-Jun-07	\$0.00	\$0.00	\$0.00	
WLEB4	LRD Approval			18-Jun-07	\$0.00	\$0.00	\$0.00	
WLEB5	Negotiate Contract	19-Jun-07	19-Jun-07	28-Jun-07	\$0.00	\$0.00	\$0.00	
WLEB6	Award Contract			28-Jun-07	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T003 Second Contract Actions		23-Apr-07	23-Apr-07	28-Jun-07	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T004 Blanchard (NEW)		23-Apr-07	23-Apr-07	23-Apr-07	\$0.00	\$0.00	\$0.00	
WLEB13	Blanchard Final Report Complete w/o Project Conditions			23-Apr-07	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T005 WK PKG B - Maumee Bay		23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00	
WLEB1	Prepare Draft w/o Project Conditions Report	23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00	
138470.22000.22T00.22T006 St. Mary's - (NEW)		23-Apr-07	23-Apr-07	24-Dec-07	\$160,000.00	\$160,000.00	\$0.00	
WLEB1	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00	

W. Lk Erie Basin Study		Classic WBS Layout				20-Apr-07 14:41			
Activity ID	Activity Name	Start	Remaining Early Start	Finish	Budgeted Total Cost	Budgeted Labor Cost	Budgeted Nonlabor Cost	Milestone - Civil Works	
WLEB14	Prepare Draft Existing Conditions Report (H7)	23-Apr-07	23-Apr-07	24-Dec-07	\$0.00	\$0.00	\$0.00		
WLEB1	Detroit - Plan Formulation - H7	23-Apr-07	23-Apr-07	24-Dec-07	\$160,000.00	\$160,000.00	\$0.00		
WLEB15	Draft Existing Conditions Report Complete			24-Dec-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T007	Upper Maumee (NEW)	23-Apr-07	23-Apr-07	24-Dec-07	\$0.00	\$0.00	\$0.00		
WLEB16	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB17	Prepare Draft Existing Conditions Report (H7)	23-Apr-07	23-Apr-07	24-Dec-07	\$0.00	\$0.00	\$0.00		
WLEB18	Draft Existing Conditions Report Complete			24-Dec-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T008	St. Joseph's (NEW)	23-Apr-07	23-Apr-07	20-Dec-07	\$0.00	\$0.00	\$0.00		
WLEB19	Start SOW	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB20	Draft SOW for Sole Source	23-Apr-07	23-Apr-07	04-Jun-07	\$0.00	\$0.00	\$0.00		
WLEB21	Submit request for services contract to LRD	05-Jun-07	05-Jun-07	18-Jun-07	\$0.00	\$0.00	\$0.00		
WLEB22	LRD Approval			18-Jun-07	\$0.00	\$0.00	\$0.00		
WLEB23	Negotiate Contract	19-Jun-07	19-Jun-07	28-Jun-07	\$0.00	\$0.00	\$0.00		
WLEB24	Award Contract			28-Jun-07	\$0.00	\$0.00	\$0.00		
WLEB25	Start Existing Conditions Report	29-Jun-07	29-Jun-07		\$0.00	\$0.00	\$0.00		
WLEB26	Prepare Draft Existing Conditions Report	29-Jun-07	29-Jun-07	20-Dec-07	\$0.00	\$0.00	\$0.00		
WLEB27	Draft Existing Conditions Report Complete			20-Dec-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T009	FY07 Wk Plans - Lower Maumee	23-Apr-07	23-Apr-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB28	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB29	FDR Report (H&H)	23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00		
WLEB30	Prepare Draft Existing Conditions Report (A-E 1)	29-Jun-07	29-Jun-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB31	Draft Existing Conditions Report Complete			21-Nov-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T010	Wk Pkg D - Ottawa	23-Apr-07	23-Apr-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB32	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB33	FDR Report (H&H)	23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00		
WLEB34	Prepare Draft Existing Conditions Report (A-E 1)	29-Jun-07	29-Jun-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB35	Draft Existing Conditions Report Complete			21-Nov-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T011	Auglaize (NEW)	23-Apr-07	23-Apr-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB35	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB36	FDR Report (H&H)	23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00		
WLEB37	Prepare Draft Existing Conditions Report (A-E 1)	29-Jun-07	29-Jun-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB38	Draft Existing Conditions Report Complete			21-Nov-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T012	Tiffin (NEW)	23-Apr-07	23-Apr-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB38	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB39	FDR Report (H&H)	23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00		
WLEB40	Prepare Draft Existing Conditions Report (A-E 1)	29-Jun-07	29-Jun-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB41	Draft Existing Conditions Report Complete			21-Nov-07	\$0.00	\$0.00	\$0.00		
138470.22000.22T00.22T013	Portage (NEW)	23-Apr-07	23-Apr-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB41	Start Existing Conditions Report	23-Apr-07	23-Apr-07		\$0.00	\$0.00	\$0.00		
WLEB42	FDR Report (H&H)	23-Apr-07	23-Apr-07	26-Sep-07	\$0.00	\$0.00	\$0.00		
WLEB43	Prepare Draft Existing Conditions Report (A-E 1)	29-Jun-07	29-Jun-07	21-Nov-07	\$0.00	\$0.00	\$0.00		
WLEB44	Draft Existing Conditions Report Complete			21-Nov-07	\$0.00	\$0.00	\$0.00		

(DRAFT) PMP APPENDIX C - ACQUISITION STRATEGY PLAN

(PROJECT/TASK NAME) FOR WESTERN LAKE ERIE BASIN WATERSHED MANAGEMENT FRAMEWORK Western Lake Erie Basin, Ohio, Michigan, and Indiana

Part A: Purpose.

The purpose of this plan is to document the acquisition strategy to be used to acquire planning and design services, and to obtain local concurrence in accordance with applicable regulations. A formal acquisition plan is not required for this acquisition per EFARS 7.103 since the total contract cost will not exceed \$15 million, or exceed \$5 million per year.

Part B: References.

1. Federal Acquisition Regulation (FAR)
2. Defense Federal Acquisition Regulation Supplement (DFARS)
3. Army Federal Acquisition Regulation Supplement (AFARS)
4. Engineer Federal Acquisition Regulation Supplement (EFARS)
5. ER 5-1-11, U.S. Army Corps of Engineers Business Process
6. CELRBM 1180-1-7, Acquisition Strategy Standard Operating Procedure, 22 July 2002

Part C: Acquisition Background and Objectives.

1. **Project Background:** Buffalo District, U.S. Army Corps of Engineers, under the authority of Section 441 of the Water Resources Development Act (WRDA) of 1999, has entered into this Partnership to help develop a framework for improving the Western Lake Erie Basin. Pursuant to this authority, the Congress (Senate and/or House Committees) has authorized the U.S. Army Corps of Engineers to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee, Ottawa, and Portage Rivers.
2. **Site Description:** The Western Lake Erie watershed covers 3 states (Ohio, Michigan, and Indiana), 9 major sub-watersheds (St. Joseph, St Marys, Upper Maumee, Lower Maumee, Tiffin, Auglaize, Blanchard, Portage, and Ottawa), 29 counties, and 7,200 square miles of drainage area.
3. **Site Background:** In the late 1800s the Ancestral Great Black Swamp, occupied much of the Western Lake Erie Basin. Land use changes over the last 150 years have resulted in greater sediment loads into shallow western Lake Erie. Consequently, Toledo Harbor requires the most effort to dredge of all the U.S. Great Lakes Harbors. Recent dredging has averaged about 850,000 cy annually, and been as high as 1.4 million cy. Flooding is another concern in the Basin, particularly in urban areas.

The National Flood Insurance Program had 724 claims totaling over \$3.5 M for the counties in the Basin in Ohio from 1978 – 2000 with 299 from the city of Toledo alone. The Ohio Emergency Management Agency reports \$4.1M in total costs for the summer 2000 flood event in Lucas County. AmeriCorps Serving Northwest

Ohio (ASNO) estimated \$16.5M in damages with 60 tons of debris removed from 108 homes benefiting 5,000 people in its summer 2000 flood recovery. The many concerns in the Basin need are being addressed by a collaborative partnership of Federal, state and local interests and stakeholders.

4. Current Project Status: A Feasibility Cost Share agreement with the city of Toledo is being finalized to work on this project
5. Contract Scope Required: In order to fulfill this mission, CELRB will issue task order(s) for the following tasks:
(ENTER TASKS HERE)
6. Cost and Duration: The total cost of this contract is currently estimated to be approximately *(ENTER IGE AMOUNT HERE)*. The estimated cost of each task order will be determined as the scope of work for each task order is finalized. *(ENTER SUMMARY OF TASKS HERE)* are estimated to require approximately eighteen (18) months.
7. Risks: The risks inherent in this mission include accurately estimating major portions of the work, the inability to accurately describe the required tasks by definitive plans and specifications, possible changes to federal, state and local statutes affecting the scope and schedule, and physical hazards confronting workers at the jobsite. These risks are at times low and at other times severe enough to cause schedule delays and price increases. For these reasons, the overall risks are gauged as moderate. To reduce these risks, close, early and continuous coordination with all participating parties shall occur. Additionally, sound acquisition planning shall assist in mitigating some of these risks.

Part D: Plan of Action

1. Planning and Design Development Meeting: A Planning and Design Development Meeting was held at the *(LOCATION)* on *(DATE)* to review project scope, schedule, cost, and customer requirements and to formulate an acquisition strategy for the *(PROJECT/TASK NAME)*. In attendance for discussions on the subject project were:
NAME (OFFICE SYMBOL)
2. Resource Identification:
 - (a) In-house Personnel: Preparation of the scope(s) of work and Independent Government Estimate(s) for performance of the *(PROJECT/TASK NAME)* will be performed by CELRB in-house resources.
 - (b) Existing CELRB Contracts: The following *(NUMBER)* existing CELRB contracts were identified as potentially being able to satisfy the requirements of the subject project:

<i>CONTRACTOR</i>	<i>CONTRACT NUMBER (TYPE)</i>
-------------------	-------------------------------
 - (c) Existing CELRD Contracts: The use of existing CELRD contracts was/was not *(CHOOSE ONE)* evaluated. It was determined that sufficient contract capacity exists with qualified contractors under existing CELRB contracts.
 - (d) Existing USACE / Other Federal Contracts: The use of existing USACE / Other Federal contracts was/was not *(CHOOSE ONE)* evaluated. It was determined that sufficient contract capacity exists with qualified contractors under existing CELRB contracts.

3. Contractor Evaluation Procedures: Each contract identified above was discussed and evaluated based on type and scope of current contract, remaining contract capacity and duration, and contractor past performance. The conclusions of these discussions are summarized below:

(LIST SUMMARY OF DISCUSSIONS FOR EACH CONTRACT)

4. Recommendation:

(LIST RECOMMENDATIONS FOR ACQUISITION)

5. Contract Negotiations and Award: The Purchase Request & Commitment (PR&C) will include individual task orders for each aspect of the work to be performed. Firm fixed price task orders will be negotiated for those aspects of the work that can be defined with a high degree of certainty. For aspects of the work with a high degree of scope uncertainty, cost reimbursable task orders will be considered.
6. Budgeting and Funding: Funding for this contract will be provided through (*PROGRAM*) to the Buffalo District.
7. Government Furnished Equipment: None anticipated.
8. Government Furnished Information: The Government shall furnish all available data, reports and other information relating to the subject project that is determined to be, in the Government’s opinion, essential to the Contractor’s successful completion of any assigned Task Order.
9. Other Considerations: All aspects of any Task Order required under this contract will meet DOD, OSHA, NFPA, NEC, and all other applicable standards. Insurance requirements for work on Government installations as contained in FAR will be required if applicable.
10. Milestones for Acquisition: CELRB approval of this Acquisition Strategy Plan is anticipated by (*DATE*). Acquisition milestones for the facet of the project currently under consideration are presented below:

(ADD/DELETE MILESTONES AS APPROPRIATE)

<u>Activity</u>	<u>Completion Date</u>
Prepare Draft Scope of Work	<i>dd-mmm-yy</i>
PDT / ITR Review Scope of Work	<i>dd-mmm-yy</i>
Final SOW to Contracting	<i>dd-mmm-yy</i>
Issue Request For Proposal	<i>dd-mmm-yy</i>
Receive Contractor’s Proposal	<i>dd-mmm-yy</i>
Approve Independent Government Cost Estimate	<i>dd-mmm-yy</i>
Prepare Pre-Negotiation Objectives Memorandum	<i>dd-mmm-yy</i>
Conduct Negotiations	<i>dd-mmm-yy</i>
Prepare Price Negotiation Memorandum	<i>dd-mmm-yy</i>
Award/NTP	<i>dd-mmm-yy</i>

Part E: Acquisition Strategy Plan Endorsement.

1. This Acquisition Strategy Plan was prepared by:

Name, Office Symbol

Date

2. I concur with the contents and recommendations of this Acquisition Strategy Plan:

Name, Office Symbol

Project Manager

Date

Name, Office Symbol

Program Manager

Date

Name, CELRB-PM-PL

Chief, Planning Branch

Date

Name, CELRB-TD

Chief, Technical Services Division

Date

Name, CELRB-PM

Deputy District Engineer – Project Management

Date

Name, CELRB-CT

Deputy for Small Business

Date

3. I approve this Acquisition Strategy Plan:

Name, CELRB-CT

Chief, Contracting Division

Date

PURPOSE:

- Provide visitors with an initial Health & Safety Briefing prior to visiting Western Lake Erie Basin.
- Allow visitors to locate closest medical facility.
- Provided guidance on how to get help via calling or traveling to medical facility.
- Allow PDT to document compliance with CELRB Facility Safety System (FASS) requirements
- Provide a vehicle for identifying and tracking project hazards.

Note: This Health and Safety Briefing does not take the place of a complete Site-Specific Health & Safety Plan Training Session, or contractor required Health & Safety mandates.

REFERENCES: EM 385-1-1, USACE H&S Requirements Manual

BUFFALO DISTRICT POINT OF CONTACT:

Project Manager:.....
 Emergency Management Office.....
 Safety and Occupational Health Office....

LOCAL SITE VISIT - POINTS OF CONTACT:

Cleveland Project Office.....
 Site Superintendent.....

ACCESS PROCEDURES & RESTRICTIONS

- USACE employees having the requirement to do field work will coordinate with the residents along the area to be visited prior to initiating work. Employees will also notify another member not in the field were they will be (i.e. tell a supervisor where/when/how long you will be away).
- All site work will be pre-coordinated with the CAP Program Manager or Project Manager.
- The “BUDDY SYSTEM” will be used at all times. (i.e. no working alone)
- Visitors will stay out of “RESTRICTED-POSTED” Areas.
- Report any injuries immediately to the Site Superintendent.

PHYSICAL HAZARDS

Employees working in the field should be conscious that wild animals are present. Show necessary caution when animals are present. Employees should always have a first-aid kit with in the field.

Fall/Slip/Trip/Water Hazards When Boarding/Using/Leaving a Boat. Potential Slip, Trip and Fall Hazards exist in the form of:

- Uneven ground at work sites and entering vessels.
- Be sure to wear the proper PPE at all times. Use of PDF, Safety Shoes, and Hard Hats as required. Use of Protective Eye Wear as Necessary.

- Be extremely careful around the edge of the water, especially when boarding or leaving any craft. Be aware of uneven grades, muddy slick or icy surfaces, etc.
- Watch for water, ice, oil, etc that could cause slip hazards when boarding or existing any craft.
- While on the craft, watch for steps, lines, cables and moving equipment. Make sure you are wearing your personal flotation device and are aware of other life saving equipment (life rings, life lines) on board the boat. Watch for sudden vessel movements and impact hazards from loose objects during rough water conditions.

Fall/Slip/Trip/ Potential Slip, Trip and Fall Hazards exist in the form of; Uneven Grades, Ditches, Culverts, Animal Burrow Holes, and from muddy-slick-ice surfaces, etc. Personnel shall exercise caution when walking on site grounds and attempt to stay on paved/even surfaces when possible. Outdoor Lighting is very limited – Night Time Operations are prohibited.

Hot Weather Hazards Hot weather can cause heat exhaustion, dehydration and sunburn. Make sure to drink plenty of liquids, wear light colors, use sunscreen, wear a hat, and wear glasses.

Cold Weather Hazards Cold weather can cause hypothermia and frostbite. Make sure to wear warm, dry clothing. Be aware of wind-chill and signs of hypothermia (shaking, blue color, light-headedness, etc).

Severe Weather: This area of Ohio can experience dramatic weather changes including wind and rain episodes. Be alert to public weather warnings and to any significant atmospheric changes while in the field. At the first sign of inclement weather, find suitable shelter.

Dredged Material When inspecting or working with the dredged material, be aware of the differing soil conditions (i.e. Water, sandy soil, debris, animal burrow holes, etc.). Watch your footing and wear appropriate PPE as needed.

SMOKING IS ALLOWED ONLY IN THE “DESIGNATED AREAS” (or as regulated by local regulations)

BIOLOGICAL HAZARDS

Site Visitors are required to advise the USACE Representative of any potential for a severe allergic reaction of which they may be aware of – PRIOR to site entry. Some of these Potential Hazards & Reactions may include:

- Stings from Bees & Wasp
- Bites from Ticks, Mosquito's, Bugs, etc.
- Poison Ivy or Poison Oak, etc.

Wear of Tyvek Coveralls is recommended during entry into wooded areas

Botulism Monitoring. Avian botulism has its source in toxin producing bacterium Clostridium botulinum. These spores are widely distributed as spores in organic soils. The occasional botulism condition is usually first noticed by its impact on the birds/wildlife utilizing the site. Botulism can generate more serious problems if not addressed quickly and appropriately. Let the appropriate USACE employee know if you notice any signs of these bacteria so it can be looked into immediately.

VEHICLE & TRAVEL HAZARDS

- Pre-Inspection of Vehicle prior to departure to site (i.e. windshield washer fluid, first-aid kit in car, wipers working, adjustment of seat and mirrors).
- Maintain Safe Driving Speeds.
- Operating a Cell Phone while driving is permitted only while using a head-set.
- Check cell phone usage to make sure it works.
- Have emergency numbers handy or preprogram into cell phone.
- Lodging Facilities – Safe Area, Well-lighted facilities, and secure rooms.

EMERGENCY RESPONSE

Try 911; however, emergency assistance for police, fire, medical, etc. may not be accessible from remote locations. The closest hospital may be determined from the following maps. See Attached Route Map for Directions to the Hospitals.

* Any unescorted work crews will have a cell-phone available at all times *

<u>AGENCY</u>	<u>EMERGENCY #</u>
Police.....	911
Fire.....	911
USACE-Emergency Mgmt.....	
Cleveland Project Office.....	
Toledo Area Office	

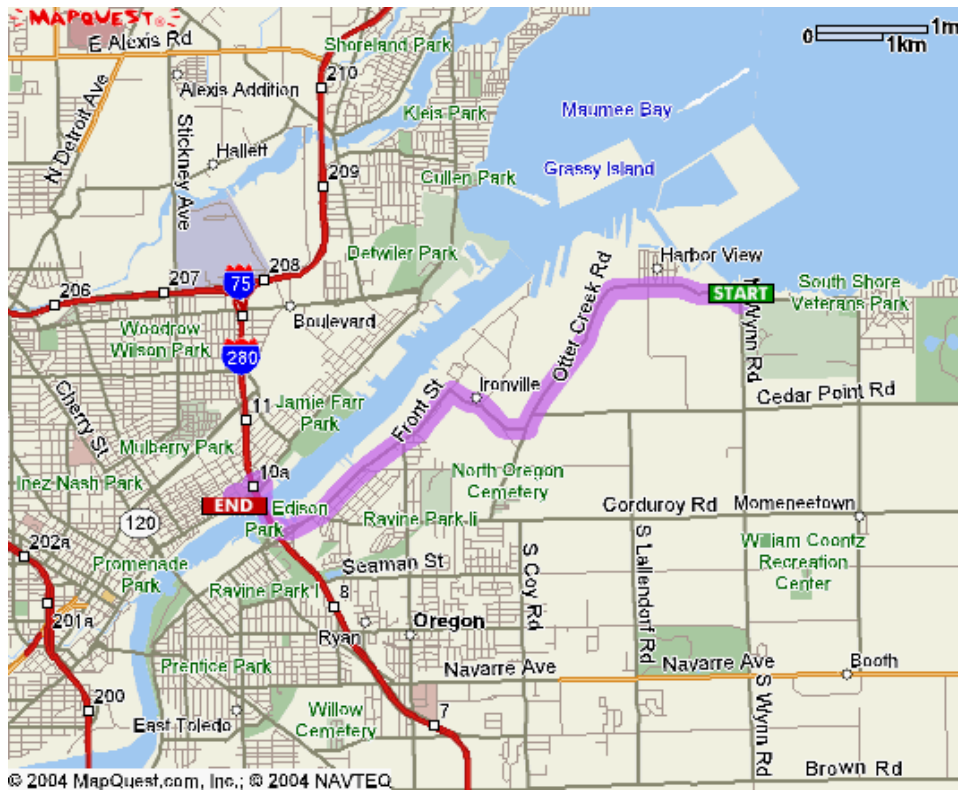
TOLEDO HOSPITAL

**RIVERSIDE MERCY HOSPITAL
1600 N SUPERIOR ST
TOLEDO, OH 43604
(419) 729-6000**

From I-75 North:

- 1: Take I-75 North toward Toledo
- 2: Merge onto OH-25N via EXIT 201b Toward Downtown
- 3: Turn RIGHT onto Monroe St. / OH-51
- 4: Turn LEFT onto North Summit Street / OH-65N.
- 5: Turn Left onto Bush Street.
- 6: Turn Right onto N. Superior Street.
- 7: End at 1600 N SUPERIOR ST TOLEDO OH

LOCATION MAP



FORT WAYNE HOSPITAL

St. Joseph Hospital
700 Broadway
Ft Wayne, IN 46802
260-425-3000

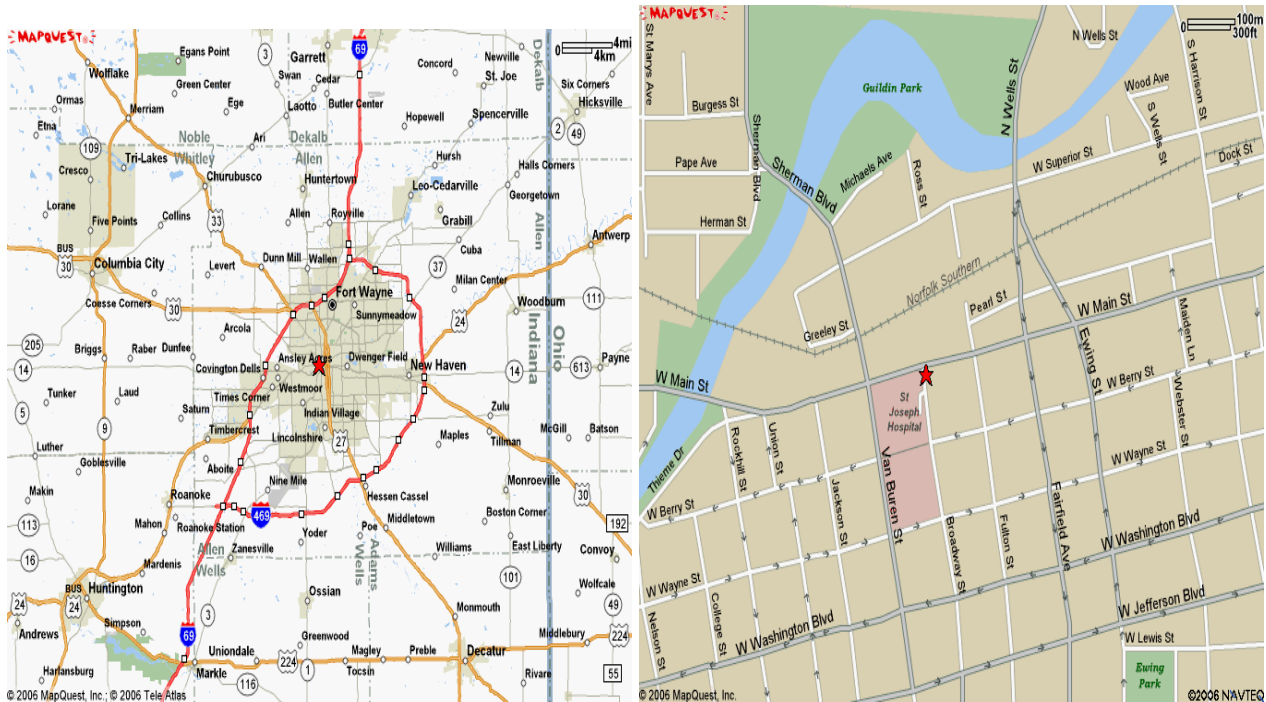
Directions from I-69 S:

- 1: Take I-69 S.
- 2: Merge onto US-27 S / IN-1 S via EXIT 111A toward FT. WAYNE.
- 3: Turn RIGHT onto E MAIN ST.
- 4: Turn LEFT onto BROADWAY ST.
- 5: End at St Joseph Hospital.

Directions from I-69 N:

- 1: Take I-69 N.
- 2: Take the US-24 W exit- EXIT 102- toward HUNTINGTON / FT. WAYNE.
- 3: Take the ramp toward FT. WAYNE.
- 4: Merge onto W JEFFERSON BLVD.
- 5: Turn LEFT onto BROADWAY ST.
- 7: End at St Joseph Hospital.

LOCATION MAPS



LIMA HOSPITAL

**Lima Memorial Hospital
1001 Bellefontaine Ave.
Lima, OH 45804
(419) 228-3335**

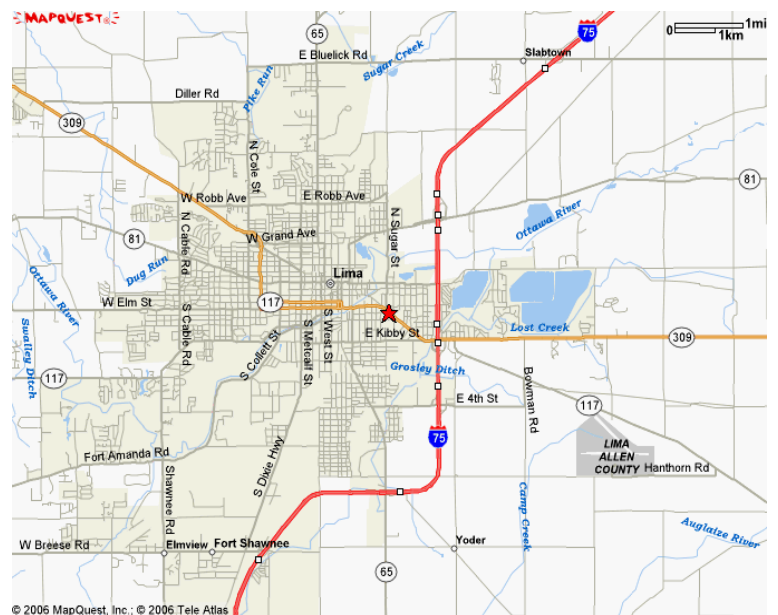
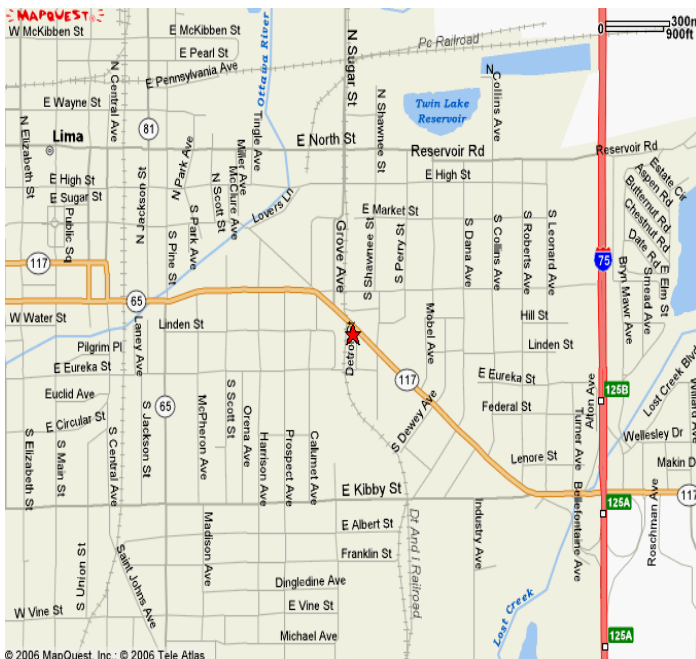
Directions from I-75 South:

- 1: Take I-75 South
- 2: Take the OH-309 W/ OH-117 W exit- EXIT 125B- toward LIMA. .2 miles
- 3: Turn Slight Right onto Harding HWY / E. Kirby St. / OH-117 / OH-309. Continue to follow OH-117 / OH-309. .7 miles
- 4: End at Lima Memorial Hospital.

Directions from I-75 North:

- 1: Take I-75 North
- 2: Take the OH-309 W/ OH-117 W exit- EXIT 125- toward Lima. .3 miles
- 3: Turn Left onto Harding HWY / E. Kirby St. / OH-117 / OH-309. Continue to follow OH-117 / OH-309. .9 miles
- 4: End at Lima Memorial Hospital.

LOCATION MAPS



Health & Safety Briefing Log

Briefer's Name: _____

Date & Time Briefing Conducted: _____

Visitors Name (print)	Company/Agency	Purpose of Visit
-----------------------	----------------	------------------

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

LRB SAFETY & OCCUPATIONAL HEALTH OFFICE
“FASS” Facility System Safety-PM Checklist

Project: Western Lake Erie Basin Project No.: _____
ITEM

Completed Date

Kick-Off Phase:

- 1. PM Attend “FASS” Overview given by LRB-SO at Post-PRB _____
- 2. For active Projects, PM contact LRB-SO to schedule PDT Training _____
- 3. LRB-SO assigns a Safety POC and PM provides Labor # and \$\$\$\$ _____
- 4. Safety POC conducts FASS Training for PDT _____

Planning Phase:

- 5. PDT develops “PHL” Preliminary Hazard List with customer _____
- 6. PDT develops “HTL” Hazard Tracking List _____
- 7. PDT Develops Site Specific H&S Plan to protect USACE Employees _____
- 8. PM Post H&S Plan & “HTL” to Project Web-Page _____
- 9. H&S Plan & “HTL” integrated into PMP _____

Design Phase:

- 10. Review “HTL” during “Design Phase” to eliminate hazards _____
- 11. Complete “PHA” Project Hazard/Risk Assessments _____

Construction Phase:

- 12. Provide S&H Documents to Contractors for integration _____
- 13. QA and Capture of Lesson’s Learned _____

Close-out Phase:

- 14. PDT verifies & updates “HTL” Hazard Tracking List _____
- 15. PDT Prepares transfer documents/turn-over _____

PMP APPENDIX E - COMMUNICATION PLAN

Project Name:	Western Lake Erie Basin Partnership, Framework and Study		
Project Manager:	CELRB-PM-PA	Date:	Feb. 2006
Communication Professional:	Outreach Program Specialist, CELRB-PM-PB		

References:

USACE Communication Principles
USACE ER 200-2-2

Purpose of the Plan

The purpose of this plan is to determine how communication can assist the Western Lake Erie Basin Partnership in reaching its objectives. This plan provides the overarching guidance and execution requirements for communicating the mission, capabilities and goals of the Partnership in order to build and maintain trust and confidence in the Partnership’s abilities among stakeholders.

This plan provides:

- Audience identification
- Messages and purpose for communication
- Method and medium to communicate with target audiences
- Implementation strategy
- Method for evaluation and feedback

Synopsis: This project entails the Buffalo District, U.S. Army Corps of Engineers (USACE), developing a Partnership, framework and study for the Western Lake Erie Basin (WLEB) in northwest Ohio, eastern Indiana, and southeastern Michigan including the watersheds of the Maumee, Ottawa and Portage Rivers. The study will develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the WLEB. The partnership, framework and study will integrate rehabilitation goals and management efforts into a unified strategy to achieve a desirable balance among multiple, and often competing, watershed goals and objectives without duplication of effort. These are the beginning stages of a watershed management plan, a tool that recommends future actions to be undertaken by various partners and stakeholders in order to meet watershed resource needs and achieve watershed goals and objectives. There is no final National Environmental Policy Act (NEPA) document for this project. The purpose of the partnership, framework and study is to characterize existing conditions, identify and assess potential direct, indirect and cumulative impacts of any recommended projects to be implemented within the watershed area, and to serve as a tool to measure progress. This effort is scheduled for completion in 2008.

1. Identify target audience(s) and issue(s) of concern

Target Audience	Issue(s) of Concern
Internal/external PDT members	Programs and projects in progress on the watershed and the schedule; available labor funding; contract acquisition and status
Elected Officials	Progress/schedule; budget, expenses, and execution; public opinion; special interests

General Public	Basin rehabilitation/restoration; conservation; pollution prevention/reduction; cost and usefulness; impacts on issues such as: private property rights, land use and development; taxes, environmental, and quality of life; opportunity for input and involvement; vision and goals
Western Lake Erie Basin Partnership	Linkages to current and future WLEB projects, programs, project schedule and costs associated with project recommendations
Agricultural and Business Community	Land use modifications/restrictions; implementation costs; impacts to production and operations; accountability
Native American Nations - There are no Federally recognized tribes currently located in the WLEB Watershed.	N/A
Scientific/Academic Community	Project goals and objectives; opportunity for input, involvement and scrutiny; application of sound scientific approaches and principles; potential for academic pursuits

2. Identify message and purpose for communication

All communications will follow the framework established in the USACE Communication Principles

1. Listen to all constituencies both inside and outside the Partnership regarding issues of importance to them, respecting their viewpoints.
2. Communicate early, clearly, completely, honestly, accurately, and often with all constituencies on issues of importance.
3. Be accessible to all constituencies and respond promptly without censorship or misinformation.
4. Do what we say we will do.

A. Command Messages

The following command messages will be used for the Partnership. Other supporting messages will be developed as the Partnership progresses:

- The Western Lake Erie Basin Partnership is a tri-state partnership dedicated to enhancing multi-purpose projects that improve land and water resource management in the basin and promote a healthy productive watershed.
- The Partnership, framework and study will address and promote the integrity of the entire Western Lake Erie Basin watershed system.
- The Partnership, framework and study will be accomplished by USACE and the Natural Resources Conservation Service (NRCS) as the co-leads of the Partnership's Leadership Committee in collaboration with the Western Lake Erie Basin Partners and with the involvement of the communities located within the watershed.

B. Key Messages

Key messages will be developed and appended to this communications plan. These messages will highlight what makes the WLEB watershed unique and various efforts individuals can undertake to improve conditions in the watershed. At various points throughout the Partnership's years, key messages will change. It is important that all key messages are coordinated with the entire WLEB Partnership prior to public distribution and/or interaction with the media so that there is no perception that USACE is making decisions independently of the other partners. Most of the information generated by this Partnership, framework and

study will be available to the public under the Freedom of Information Act (FOIA). However, interagency or intra-agency memoranda or letters may be deemed confidential and not appropriate for public distribution. Such correspondence falls under FOIA exemption number 5, and requests for this type of information will be coordinated with the Buffalo District FOIA Officer and other appropriate members of the PDT.

Due to the extensive public interest and diverse issues associated with this Partnership, media attention is anticipated. Media inquiries will be referred to the Partnership's Outreach Coordination Team co-leads for response and coordination with appropriate WLEB partners.

C. Purpose for communication (intended outcome):

The WLEB Partnership will speak with one voice, promote transparency, encourage participation, be responsive, create awareness, educate and inform. The Partnership practices and promotes active listening and two-way communication as an imperative component of our communication processes, contributing to the effectiveness of interaction with all audiences for the following purposes:

- a. Inform: To provide balanced and objective information to assist the audience in understanding the Partnership's mission and expected outcomes.
- b. Consult: To obtain feedback on analysis, alternatives, and/or decisions.
- c. Involve: To work directly with the target audiences throughout the process to ensure that their issues and concerns are understood and considered.
- d. Collaborate: To partner with the target audiences in each aspect of the decision-making process for the project, including the development of alternatives and the identification of a preferred solution.
- e. Persuade: To convey educational information to influence the audience to change behavior, formulate or revise opinions, and/or issue a call to action.

3. Develop communication goals and objectives, tied to Partnership goals and objectives

Communications for this Partnership, framework and study will be web-based and accomplished through electronic networking or in kind services provided by the Partners, especially through non-government organizations and partner universities. USACE Outreach expertise will be provided to the Partners in an advisory capacity.

- A. Goal: To provide information about the forming of the Partnership, the Partnership's efforts to date, proposed projects and their potential effect on WLEB watershed integrity.

Objectives:

1. Increase in media reports
2. Increase in website visits

- B. Goal: To instill public confidence and trust in the work of the WLEB Partnership toward restoring the integrity of the Western Lake Erie watershed.

Objectives:

1. Begin to see public statements in support of WLEB Partnership work
2. Begin to see speaker and interview requests
3. Increase in organizations agreeing to exhibit at or cosponsor WLEB Partnership public information events

- C. Goal: To provide information, and issue a call for action, to members of target audience(s) concerning ways in which they can become involved in efforts to improve land and water resource management in the basin to establish a healthy productive watershed.

Objectives:

1. Active participation by community in practical, hands-on events and/or informational meetings
2. Increase in speaking engagement and interview requests

4. Method and medium to communicate with target audience(s)

A. Public information events

1. Workshops – either in person or web based
2. Project public information and scoping meetings and hearings

B. Public information products

1. Fact sheet – a Partnership fact sheet will be developed and distributed
1. Website – the Partnership website will be maintained by the USACE
2. There will be no local information repositories with hard copies of documents. All documents for public release will be accessible on the Partnership website.

C. Media

1. News releases / media advisories distributed to:
 - a) Toledo Blade – Toledo, Ohio
 - b) The Crescent News – Defiance, OH
 - c) Journal Gazette – Ft. Wayne, IN
 - d) Hillsdale Daily News – Hillsdale, MI
 - e) The Great Lakes Information Network
 - f) A list service that can be subscribed to on the Partnership website
2. News conferences, as appropriate
3. Media availability sessions at public information meetings

5. Implementation Strategy

A. External Communications

To ensure consistency of message and to monitor the level of target audience interest and involvement, the Partnership Outreach Coordination Team leads will issue all news releases and coordinate all responses to media and public inquiries (telephone, mail, and/or email) and requests for speakers from the WLEB Partnership. All news releases and other public information products will be coordinated through the Partnership Outreach Coordination Team, reviewed by Partnership Operational Committee and approved by the Partnership Leadership Committee. Senior Leadership Committee outreach representatives will verify the accuracy of information. Coordination of news release information is considered a priority because of the timeliness factor and immediacy of the news business and will be released with the consensus of a quorum of WLEB Partnership Leadership Committee members.

Outreach Coordination Team co-leads will coordinate responses for speakers and information through the responsible WLEB Partner agency Outreach Coordination Team members who will in turn, coordinate

further within their own organization as needed. All inquiries will receive a response or status update within three business days.

Members of the Leadership Committee, as well as their agency's highest-ranking available officials, serve as the primary spokespersons for the Partnership. Leadership Committee members may, at their discretion, defer query responses and/or speaking engagements to appropriate subject matter experts within their agencies as needed.

B. Internal Communications

The following rules of communications shall apply to all internal communications:

- a. The PM is the sole POC with the customer and public unless authorization is given otherwise. Any form of inquiry directed to members of the PDT will be coordinated with the PM prior to a response.
- b. Informal communication is encouraged through any means. If informal communication becomes formal, results will be documented in writing and sent to the Project Manager via e-mail or hard copy.
- c. E-mail messages and voice mail messages will be responded to within 1 day of receipt.
- d. All incoming and outgoing internal formal communications will be posed to the project intranet site. The PM will be responsible for ensuring these files be put on the project web site.
- e. All written communications will adhere to the following correspondence guidelines:
 - Buffalo District Pamphlet 25-1-5, Preparing & Managing District Correspondence
 - AR 25-50, Preparing and Managing Correspondence
 - AR 310-25, Dictionary of United States Army Terms
 - AR 310-50, Authorized Abbreviations, Brevity Codes, and Acronyms.

C. Records Management

The Project Manager will be responsible for gathering and storing the project files. All contractors will provide the PM with both hard copies and electronic copies of documentation for the work project. Electronic files should be in MS Word, Adobe (PDF) and/or MS Excel format as deemed appropriate. As documents are developed during the course of the project, they will be posted on the WLEB Partnership web site.

Certain key documents will require wider distribution, including the documents that require public review. Documents requiring public review as well as key final decision documents will also be made available on the Partnership website and availability will be announced through the Great Lakes Information Network, throughout the Partnership network, Partnership electronic list service and through local newspapers.

6. Evaluation/feedback plan

Feedback will be obtained using a variety of mechanisms including, but not limited to, the following:

- Comments received during monthly Outreach Coordination Team meetings/teleconferences.
- After action reviews.
- Comments received during meetings with the Partnership and elected officials.

Communications Matrix

FROM	TO	CONTENT	METHOD	FREQUENCY	COPY
Project Manager	Whole Team	Status Report	Brief E-mail Attachment	Monthly	Project Management (PM) Team Leader
Project Manager	Specific Project Delivery Team Members	Information request	E-mail, Telephone, Team Meetings	As needed	
Specific PDT Members	Project Manager	Provide requested information	E-mail and/or E-mail w/ attachment, Telephone, In-Person	High Priority: Same day, Others within 3 days unless otherwise agreed-to-time	PDT members as required by nature of request and information
Customer	Project Manager	Information request	E-mail, Telephone, Postal Service, In-person	As needed or desired	
Project Manager	Customer	Provide requested information	Telephone, E-mail, In-person	Within 1 day unless otherwise agreed-to-time	Specific PDT members as required by nature of the request
Customer	Project Manager	Information request	Formal Letter or Memo	As needed or Required by Agreement	Specific PDT members and/or PM Team Leader as required
Project Manager	Customer	Provide requested Information	Formal Letter or Memo	Within 1 week unless response requires Chain-of Command Signatures or Review	Specific PDT members, PM Team Leader, Project and Programs Branch Chief and Planning, Programs, and Project Management Division Chief as required
Project Manager	Senior Leaders	Status	Project Review Board (PRB) PowerPoint Slide	Monthly	
Senior Leaders, Branch Chiefs	Project Manager	Status and/or Information request	E-mail, Telephone, In-Person	As needed	
Project Manager	Senior Leaders, Branch Chiefs	Provide requested information	E-mail and/or attachments, Telephone, In-person	ASAP	Specific PDT Members as appropriate to nature of request
Specific PDT Members	Specific PDT Members	Information Exchange	E-mail, and/or attachments, Telephone, In-Person	As needed to move project forward	Project Manager
Project Manager	Office of Public Affairs	Status	E-mail	As needed and/or prior to significant event	
DPM	Representative Kaptur, Souder, Gillmor, Dingell, Schwarz	Status/ Important milestones	Telephone	As needed	Project Manager

Appendix A

Key messages: (still being developed)

- The Great Lakes are the largest surface fresh water system in the world.
- With 6 quadrillion gallons the Great Lakes represent 9/10 of the surface freshwater in the United States.
- The Maumee River drainage area covers 6,690 square miles and contributes 24% of the surface flow to Lake Erie.
- The Maumee River is the largest tributary to the Great Lakes. It drains more than 4.23 million acres in Ohio, Indiana, and Michigan.
- There are eight major sub watersheds which include: Augalize River (2,435 sq. miles), St. Mary's River watershed upstream from Fort Wayne (839 sq. miles), Indiana, St. Joseph watershed (1,086 sq. miles), Tiffin River watershed, upper main stem watershed, lower main stem watershed, middle main stem from Defiance to Waterville, Ohio, lower main stem from Waterville to Toledo Harbor.
- Roughly eighty percent of the Maumee River watershed, 3.2 million acres is agricultural cropland, the bulk of which is corn and soybeans. Remaining land uses are forested, industrial and urban.
- Use of the Ottawa River for activities such as swimming, fishing and related water activity was banned in the 1990s by the Toledo Department of Health and the Ohio Department of Health. The Ottawa River is 41 miles long and has a drainage basin of 178 square miles. It has recreational navigation problems and highly contaminated sediments.
- The Portage River, with its mouth at Port Clinton, is 69 miles long and its basin is about 591 square miles (378,443 acres). It drains most of the Great Black Swamp, which hindered development of northwest Ohio until the 1830s. It is polluted with combined sewer system runoff and sediment volume.
- Unstable, eroding banks along the Maumee River are a major contributor of sediment which eventually makes its way into Maumee Bay.
- The Maumee is the single largest source of sediment to Lake Erie and discharges more ton per acre of suspended sediment than any other tributary in the Great Lakes Basin.

(Draft) PMP APPENDIX F – Quality Control Plan for Development of a Western Lake Erie Basin Study Report

1. QUALITY CONTROL PLAN OBJECTIVE

The quality control objective is to achieve planning products and services that meet or exceed customer requirements, and are consistent with Corps policies and regulations.

2. GUIDELINES FOLLOWED FOR INDEPENDENT TECHNICAL REVIEW

The guidelines for independent technical review (ITR) are set forth in the Lakes and Rivers Division Quality Management Plan, CELRDC5-1-1, particularly Appendix A-7, Quality Management of Planning Products.

3. ROSTER OF THE PROJECT DELIVERY TEAM (PDT)

Reliance on informed judgment needed for development of the Western Lake Erie Basin Study Report emphasizes the need for using the most experienced project delivery team members. Periodic peer consultation using highly experienced individuals, rather than review, will be included especially after initial field investigations to broaden and test the conclusions reached from the limited data available. Each member of the project delivery team is responsible for the quality of their own work. Review of the entire document or sub-component of the document shall be undertaken by each PDT member and subsequently by the appropriate team leader or Branch Chief prior to the ITR. A list of PDT members can be found in the following table.

Organization / Function	Name / Title	Grade
Planning Management Team / Project Manager	Project Manager	GS-12
Project Mgmt Branch / Program Manager	Environmental Engineer	GS-13
Planning Branch / Plan Formulator	Economist	GS-14
Design Branch / Design	Civil Engineer	GS-13
Planning Services Team / Economist	Regional Economist	GS-13
Env. Analysis Team / NEPA Coord.	Environ. Specialist	GS-13
Env. Analysis Team / NEPA Coord.	Comun/Env/Coord.	GS-12
Real Estate Office / Real Estate	Real Estate Specialist	GS-12
Proj Mgmt Team / Outreach	Outreach Specialist	GS-12
Contracting / Contracting	Contract Specialist	GS-12
Office of Counsel / Counsel	Counsel	GS-14

4. ROSTER OF THE INDEPENDENT TECHNICAL REVIEW TEAM

A minimum of one GS-13 Regional Technical Specialist (RTS) or equivalent recognized expert in planning procedures and the planning process shall accomplish the independent technical review of these products, and act as the ITR team leader, assigning additional ITR team members as appropriate. All members of the ITR team shall be expected to review the entire document and not just their own functional areas. The review shall ensure that the documents tell a story that is a coherent, whole, the steps of the analyses are consistent and follow logically, the assumptions are convincing and consistent, especially those related to the probable/most likely with and without project futures, and other reviews and project guidance letters (such as VTC guidance) are adequately addressed. The Regional Technical Specialist and ITR team members will be chosen based on the primary purpose of this planning study. A list of ITR team members can be found in the table below.

Organization	Name / Title	Grade
CELRL-PM-P	Program/Project Management	GS-13

5. DOCUMENTS TO BE REVIEWED AND SCHEDULE FOR REVIEW ACTIVITES

a. The products developed during this planning study include the Project Management Plan (PMP) and associated Planning/NEPA/Appendices documents. These products shall be subject to comprehensive Project Delivery Team review, supervisory review, and an independent technical review, respectively. Products will not be released to the public before this review is complete and the Chief of Planning and Policy, Lakes & Rivers Division verifies release of the document prior to Division certification.

b. Major milestones for the planning study are identified below.

Milestone	Completion Date
Detailed Work Plan Start	???
Draft Detailed Work Plan Complete	
ITR of Detailed Work Plan Complete	
Detailed Work Plan	
District Commander Signature	
Feasibility Scoping/Meeting	
Contract Awards	
Existing and Anticipated Without Project Conditions	
Problems, Needs, Objectives	
Alternative Formulation & Briefing	
Assessments/Evaluations/Prioritizations	
Preliminary Draft Report Complete	
Coordination/Comments/Responses/Revisions	
Draft Report Complete	

Coordination/Comments/Responses/(ITR)/Revisions	
Final Report Complete	
Coordination	
Project Close-out	

c. Contracting for some or all of the planning study activities is, normally, not appropriate. Priority will be given to the use of Corps resources and exceptions to this policy will be submitted to the Great Lakes and Ohio River Division, Planning and Policy Division for approval. For products that are developed under contract, the contractor will be responsible for quality control through an independent technical review. The development and execution of a quality control plan for products developed by a contractor shall be the responsibility of the contractor. The responsible planning functional chief at the district shall verify that the contractor has a properly functioning quality control plan in place. Quality assurance of the contractor's quality control will be the responsibility of the district.

6. DEVIATIONS FROM THE APPROVED QUALITY MANAGEMENT PLAN

Any deviations from the approved quality management plan shall be submitted to the Great Lakes and Ohio River Division, Planning and Policy Division for approval. Deviations to the quality management plan approved by the Lakes and Rivers Division has shall be listed in this section of the QCP.

7. COST ESTIMATE FOR QUALITY MANAGEMENT

The total cost for quality management for development of the WLEBS Report , including supervisory review and ITR, is estimated to be \$??,???, which is approximately ??.% of the project cost estimate.

8. PLANNING PHASE CERTIFICATION

The results of the independent technical review in DrChecks shall be included in a memorandum that shall be included with the planning functional chief's certification with a copy provided CELRD-CM-P. The certification shall be bound with the project management plan. An example certification page is below. Lessons Learned should be captured in the appropriate database (presently DQLL, as found in ProjectNet at <https://65.204.17.188/projnet/home/version1/index.cfm?RESETAGENCY=Demo> . The certification shall be bound with both the analysis and the project management plan. An example certification page is attached as the last page of this QCP.

9. DISTRICT PLANNING CHIEF'S APPROVAL OF QCP

This Quality Control Plan has met the requirements for independent technical review as established in the Lakes and Rivers Division Quality Management Plan, CELRDC5-1-1, particularly Appendix A-7, Quality Management of Planning Products. The Chief of

Planning and Policy, Lakes and Rivers Division, shall receive a copy of this QCP and the accompanying Project Management Plan upon certification.

Chief, Planning Branch
Buffalo District

Date

DISTRICT ENGINEER'S QUALITY CONTROL CERTIFICATION
(Products Developed by In-house Forces)

COMPLETION OF QUALITY CONTROL ACTIVITIES

The District has completed the Project Management Plan for the Western Lake Erie Basin Study Report. Certification is hereby given that all quality control activities defined in the Quality Control Plan appropriate to the level of risk and complexity inherent in the product have been completed. Documentation of the quality control process is enclosed.

GENERAL FINDINGS

Compliance with clearly established policy principles and procedures, utilizing clearly justified and valid assumptions, has been verified. This includes assumptions; methods, procedures and materials used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and the reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing Corps policy. The undersigned recommends certification of the quality control process for this product.

Acting Chief, Planning Branch

Date

QUALITY CONTROL CERTIFICATION

As noted above, all issues and concerns resulting from technical review of the product have been resolved. The project may proceed to the project management plan.

District Commander

Date

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

The (A-E) has completed the (report title) of the Western Lake Erie Basin Study Report Notice is hereby given that an Independent Technical Review has been conducted that is appropriate considering the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the Independent Technical Review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analysis; alternatives evaluated, the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing USACE policy.

____/Signature/_____ Date:_____

Design Team Leader

____/Signature/_____ Date:_____

Design Team Members

____/Signature/_____ Date:_____

Independent Technical Review Team Leader

____/Signature/_____ Date:_____

Independent Technical Review Team Members

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows:

Item	Technical Concerns	Possible Impact	Resolutions

As noted above, all concerns resulting from independent technical review of the project have been considered.

____/Signature/_____ Date:_____

PMP APPENDIX G - RISK MANAGEMENT PLAN

Western Lake Erie Basin Study Report

Risk Factor	Event	Probability of Occurrence	Severity of Risk	Overall Project Risk	Risk Response/Control (Ac)-Accept (Av)-Avoid (M)-Mitigate
HEALTH & SAFETY	Minor injury requiring first aid	Seldom	Negligible	Low	(Av) Follow Health & Safety Plan
	Minor injury/accident	Seldom	Marginal	Low	(Av) Follow Health & Safety Plan
	Major accident with permanent partial/temporary total disability >3 months	Unlikely	Critical	Low	(Av) Follow Health & Safety Plan
	Major accident causing death or permanent total disability	Unlikely	Catastrophic	Moderate	(Av) Follow Health & Safety Plan
COST SHORTAGE/ OVERRUN	Insignificant cost increase	Likely	Negligible	Low	(Ac) Update 2101 form monthly
	5-10% cost increase	Seldom	Marginal	Low	(M) Update 2101, reallocate resources
	10-20% cost increase	Unlikely	Critical	Low	(M) Update 2101, reallocate resources
	>20% cost increase	Unlikely	Catastrophic	Moderate	(Av) Revise Scope of Work
SCHEDULE DELAYS	Insignificant schedule slippage	Likely	Negligible	Low	(Ac) Adjust Milestone date
	5-10% schedule slippage	Seldom	Marginal	Low	(M) Adjust Milestone date; Increase progress reporting frequency
	10-20% schedule slippage	Unlikely	Critical	Low	(M) Adjust Milestone date; Increase progress reporting frequency
	>20% schedule slippage	Unlikely	Catastrophic	Moderate	(M) Adjust project completion date
SCOPE OF WORK	Scope change barely noticeable	Seldom	Negligible	Low	(M) Update PMP; Follow Communications Plan
	Minor areas of scope are affected	Seldom	Marginal	Low	(M) Update PMP; Follow Communications Plan
	Scope change unacceptable to customer	Unlikely	Critical	Low	(Av) Review SOW w/Stakeholders
	Project end item is effectively useless	Unlikely	Catastrophic	Moderate	(Av) Review goals & objectives
QUALITY ISSUES	Quality degradation barely noticeable	Seldom	Negligible	Low	(Av) ITR; Follow QCP/QAP
	Quality reduction requires customer approval	Unlikely	Marginal	Low	(Av) ITR; Follow QCP/QAP
	Quality reduction unacceptable to customer	Unlikely	Critical	Low	(Av) ITR; Follow QCP/QAP
	Project end item is effectively useless	Unlikely	Catastrophic	Moderate	(Av) ITR; Follow QCP/QAP

PROJECT SPECIFIC	Annual General Investigation Appropriation less than Corps Capability	Likely	Critical	High	(Av) Understand budgetary needs and communicate capabilities; (M) Scale-back level of effort and adjust funding resource allocations as necessary
	Construction General Adds unreliable	Likely	Marginal	High	(AS) Project non-policy; (Av) Understand and communicate capabilities; (M) utilize other Corps authorities to fill needs
	LRD Failure to repay reprogrammed funds when needed	Likely	Critical	Moderate	(As) LRD will reprogram funds as needed regardless of program strategy; (Av) Communicate critical repayment needs and the project (factors) affected by lack of repayment; (Av) Create and maintain repayment schedule and coordinate with DPM and Programs; (M) Proactively communicate situation and program affects with customer as needed with a positive path forward plan; (M) Pool available resources to try and meet critical needs.
	Scientific scrutiny and criticism of watershed management plan project outputs and recommendations	Likely	Critical	Moderate	(As) Scientific scrutiny is part of regional context, scientific critics exist and are unavoidable; (Av) Utilize peer review processes proactively and throughout project process; (Av) Engage critics through proactive information sharing and utilize strategic communication plan; (M) Listen to critics and weight input.

PMP APPENDIX H(a) - SCOPE OF WORK

WESTERN LAKE ERIE BASIN STUDY

THE WATERSHED PERSPECTIVE

The U.S. Army Corps of Engineers (Corps) has revitalized its approach to water resources management and has formally adopted nine Watershed Principles outlined below. The Corps' Watershed Approach is based on:

1. Seeking sustainable water resources management,
2. Integrating water and related land management,
3. Considering future water demands,
4. Coordinating planning and management,
5. Promoting cooperation among government agencies at all levels,
6. Encouraging public participation,
7. Evaluating monetary and non-monetary trade-offs,
8. Establishing interdisciplinary teams, and
9. Applying adaptive management as changing conditions or objectives warrant.

Unlike the single-purpose, project-driven initiatives that the Corps had been directed to accomplish in the past, the perspective of this new watershed approach is based on multi-purpose, multi-objective management, examining all water needs in the watershed. Within this broader context, watershed partners would collaborate to simultaneously address multiple objectives - environmental quality, social effects, and national and regional economic development. Projects may still be needed, but would be undertaken with the advantages of a clear public understanding of the priorities and a collaborative working environment. New projects, or those already in operation, would be monitored for performance against watershed objectives. Such an approach considers all interests and viewpoints, gives special weight to state and local governments and stakeholders, involves all interested Federal agencies, considers problems and solutions in a broader context, opens up the analysis and problem solving process, encourages innovative solutions, and analyzes the full range of benefits and impacts.

The Corps along with its Partners in the Western Lake Erie Basin will perform the following tasks which define the basic process of developing a comprehensive watershed assessment:

- Define the study area based on hydrologic units.
- Establish a watershed group (partnership) to participate during the planning process.
- Establish a framework for state, local, tribal and Federal level involvement to help identify kinds of activities that should be undertaken in the watershed to address comprehensive water resource issues.

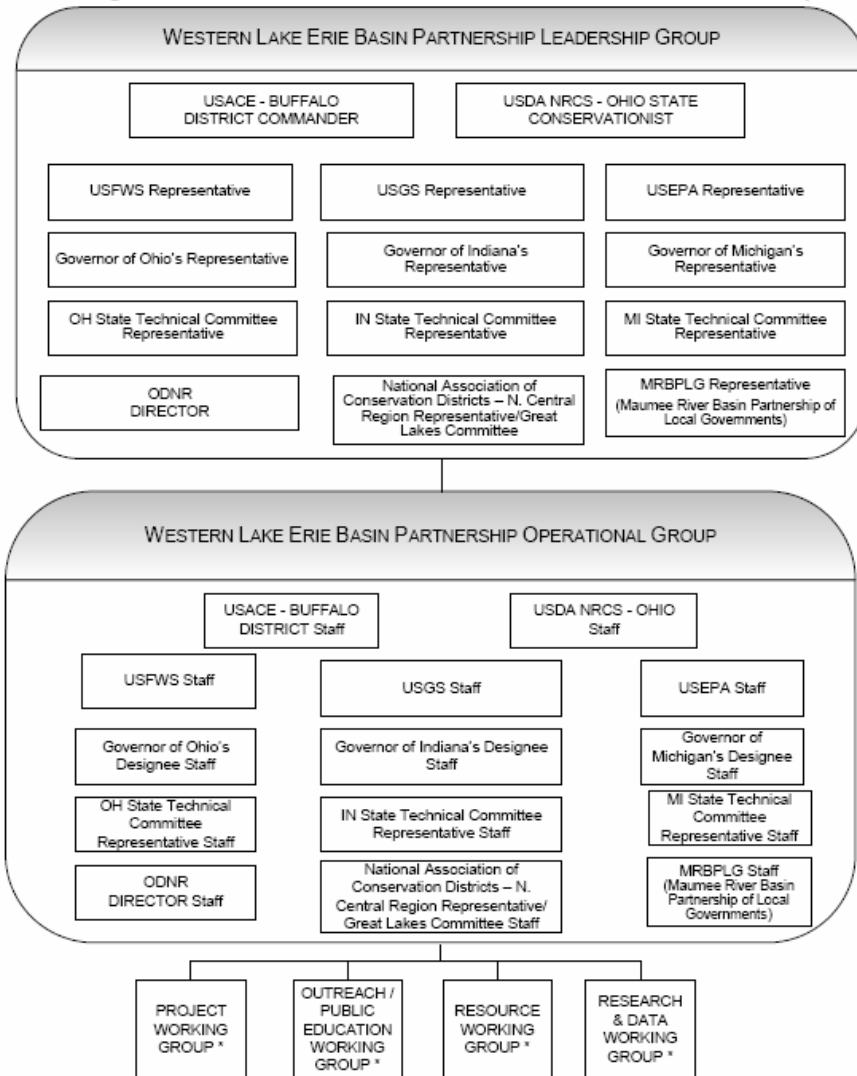
- Investigate the problems, needs, and opportunities of a watershed to include, but not limited to, flood damage reduction, ecosystem restoration, water quality, water supply, drought preparedness, recreation and navigation.
- Develop goals and objectives.
- Develop a scope of work for accomplishing the watershed study tasks.
- Research historic and current conditions and uses of the watershed.
- Identify potential future changes/initiatives in the watershed including the identification of resource uses, needs, and conflicts. Determine the likely future conditions based upon proposed activities and development.
- Qualitatively assess the cumulative effects of various activities in the watershed.
- Evaluate alternative uses of the resources including the positive and negative effects on economic development, the environment, and social well-being based upon factual scientific, social and economic information.
- Prioritize water and land-related resource problems and opportunities.
- Identify and evaluate conflicting uses and monetary and non-monetary trade-offs among conflict uses.
- Work with stakeholders to collectively develop possible project measures for recommended future activities.
- Preliminary assessment of project costs, benefits, and environmental impacts of any recommended activities.
- Work with stakeholders to collectively determine initiatives to recommend in a watershed action plan.
- Use a decision framework and stakeholder involvement to justify recommendations and to explain how recommended activities would systematically improve integrity of the watershed.
- Determine the best schedule for implementing activities, programs or construction activities and identify which agency is best suited for accomplishing such activities.
- Prepare comprehensive watershed plan.
- Pursue any Corps identified projects under normal budget procedures.

This scope explicitly replies to the Maumee River watershed, Ottawa River watershed and Portage River watershed as described in the original study authorization, Section 441 of the Water Resources Development Act (WRDA) of 1999, which directed the Secretary of the Army for Civil Works to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee, Ottawa, and Portage Rivers. In carrying out the study, the Secretary was directed to cooperate with interested Federal, State, and local agencies and non-governmental organizations and consider all relevant programs of the agencies.

What: Development of a Watershed Management Framework

Why: A Watershed Management Framework can be used to define and describe the domain and key component relationships of a system or frame a problem. A management framework will provide insight into the behavior of the Western Lake Erie Basin (WLEB) system and create a leadership structure that will describe and prioritize the relationships among the natural factors and human activities in the basin that impact or influence achievement of the sponsor's and other related stakeholders rehabilitation goals or vision for the WLEB. The management framework with its key structural components, and system drivers will allow the sponsor and other related stakeholders to better understand the context and scope of the processes that affect the ecological integrity of the Maumee, Ottawa and Portage River watersheds in the Western Lake Erie Basin system and make knowledgeable decisions. Another major benefit of a management framework is improved communication and interactions with the related local, state, and Federal agencies and the public. Some examples of the goals of the improved communication structure will include the minimization of duplicated efforts in the basin and the blending of various local, state, and Federal capabilities designed to more effectively achieve the shared vision for the basin.

Figure 1: Western Lake Erie Basin Partnerhsip



* Working Groups will include additional state, local and non-governmental staff.

Who: A USACE Buffalo District team will develop a draft Watershed Management Framework for the Western Lake Erie Basin. A copy of the proposed WLEB Partnership Leadership Group, Operational Group, and related Working Groups is attached as Figure 1. The draft model will be provided to the evolving Western Lake Erie Basin Partnership Leadership Group for review and acceptance.

When: Prior to execution of Detailed Work Plan

How: The Watershed Management Framework will be developed over a series of partnership meetings. The Vision will be developed from a review of past planning activities and documents along with one or more public visioning meetings where the sponsor, Leadership Group, Operational Group, Working Groups and other related stakeholders will have an opportunity to provide input to the developmental process.

Manpower: 2000 hours

Duration: 12 months

Cost: \$180,000

1200 – Programmatic Performance Measures

What: Develop Programmatic Performance Measures for the Western Lake Erie Basin Rehabilitation

Why: Performance Measures are intermediate measuring sticks for determining the status of the WLEB program and its progress toward the WLEB Vision. Where the Vision is the stakeholders and sponsors rehabilitation goals, Performance Measures should be specific to the WLEB strategy and this Vision of a rehabilitated WLEB once it is achieved. Performance Measures will be used to manage the lake rehabilitation program through adjustments to projects and resource allocations.

Who: USACE Buffalo District Operational Group

When: Upon execution of the detailed work plan

How: Performance Measures will be developed based on information collected under the Western Lake Erie Basin Vision task.

Manpower: 400 hours

Duration: months

Cost: \$30,000

1300 – Public Outreach, Involvement and Education

What: Public outreach will be conducted throughout the project as required by the study process and as a proactive two-way communication and educational tool.

Why: Public outreach, involvement and education are imperative to the quality of the WLEB Watershed Management framework.

Who: USACE Outreach Specialist/Contractor

When: Throughout the study

How: Public information and scoping meetings will be held throughout the project. The Outreach Specialist will coordinate to arrange for the public scoping and informational meetings. In addition, watershed communication messages and educational programs

will be developed and implemented for the wide diversity of stakeholders in the watershed including those in agriculture business, urban and suburban residents, and schoolchildren. Some outreach will include natural stream-bank restoration classes, wetland utility workshops, school-age educational programs and meetings that encourage the development and furthering of stakeholder sub-watershed groups throughout the basin.

Manpower: 1700 hours

Duration: Throughout project

Cost: \$150,000

1400 – Toledo Waterways Initiative Long Term Plan - Public Involvement

What: The city of Toledo is conducting a public involvement program as part of the Toledo Waterways Initiative to help facilitate public awareness of water quality problems in the lower Maumee and Ottawa River basins and obtain input regarding proposed solutions which will accomplish two goals- meeting federal and state water quality standards for the Maumee, Portage and Ottawa Rivers and their tributaries and improving the water quality for restoration and aquatic life.

Why: Public outreach is imperative to the quality of the WLEB Watershed Management framework which includes considerations of water quality.

Who: City of Toledo/Contractor

When: Throughout the study

How: The program consists of public meetings, letters, press conferences, website, public surveys and citizen advisory committees.

Manpower: 3000 hours

Duration: Throughout project

Cost: \$200,000

WATERSHED INVENTORY

PHYSICAL SETTING

1500 – Landscape and Soils including Erosion and Sedimentation Problems

What: The historic, existing and forecasted without project conditions over a 50-year period will be examined to identify problems and opportunities within the basin.

1. Foundation map of the watershed, showing

- Topography
- Location of major features with potential to influence water management, such as dams, locks, protected areas, areas of cultural or spiritual value, habitats of rare or endangered species
- Overview of land use (e.g., residential, industrial, open space, forested, agricultural, etc.)
- Location of major point source discharges (e.g., municipal sewage treatment plants, industrial effluent discharges)
- Spatial relationships between potential sources and receiving waters
- Political boundaries

2. Existing data on specific physical, chemical and biological characteristics of the system (from state agencies)

3. Existing data on specific physical, chemical and biological characteristics of pollutant sources (from public or industrial sources)

4. Media reports and public commentary about the key water use impairments and use conflicts currently present in the basin.

Why: Currently, annual dredging volumes in the Maumee River and Maumee Bay at Toledo Harbor range from 800,000-1,000,000 cubic yards of material. The opportunity exists to reduce dredging volumes by approximately 130,000 cubic yards through soil conservation practices in the 3.3 million acres of farmland in the Maumee River watershed. Both the USDA Natural Resources Conservation Service (NRCS) and the U.S. Army Corps of Engineers working together have demonstrated that conservation tillage in the primarily agricultural watershed of the Maumee River can be a major contributor to the effort of reducing soil erosion at the source.

More recently, the NRCS has instituted the Conservation Reserve Enhancement Program (CREP), which establishes waterway buffer strips which further reduces sediment runoff. The buffer strip alternatives include woodland strips and wetlands that are sorely needed in the primarily agricultural Western Basin. The CREP offers opportunities for the Corps, USDA, Fish and Wildlife Service, U.S. Geological Survey, and State agencies, including Ohio Department of Natural Resources and the Michigan Department of Natural Resources to continue to work together for common goals, including soil erosion control, fish and wildlife habitat enhancement, and the Lake Erie Western Basin water quality improvement.

Who: USACE Buffalo District Operational Group

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources.

Manpower: 1000 hours

Duration: 2 months

Cost: \$80,000

1600 – Hydrologic Setting – Surface Water and Ground Water including Flooding Problems

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin. Existing data on the hydrologic setting, to include flooding, will be evaluated and literature sources including newspapers will be used to document hydrologic problems, including flooding, and opportunities within the basin. Information on climate, geology, soils, natural and current drainage conditions, impervious surfaces, groundwater availability and quality (aquifers) including recharge rates, demand and conflicts, water supply sources and withdrawals, runoff and flooding intensity, frequency and potential will be assimilated and analyzed.

Why: Many areas within the watershed have too much water, resulting in concerns about flooding, while others may have significant water needs. Watershed scale parameters of concern for this task include the physical features and landforms on the landscape, the spatial variation of weather and climate, soils infiltration and runoff relationships, and stream flow and ground water interactions. The purpose of this task is to understand the existing hydrologic regime and future trends within the basin. A better understanding of the hydrology including future trends including flooding of the area may help identify and prioritize potential projects involving establishment of wetland floodplains, water storage areas, zoning criteria to manage development, and other alternatives. Information derived from the study will be used to estimate improvements, if any, possible within the basin and the rough order magnitude costs for those improvements.

Who: USACE Buffalo District

When: Upon execution of detailed work plan

How: Existing hydrologic data, including identified and specific risk factors for increased flooding and flood damages will be evaluated. Examples include the ratio and trends in impermeable surfaces in the basin and projections of infrastructure expansion into the floodplains as well as watershed scale geomorphologic assessment.

Manpower: 600 hours

Duration: 3 months

Cost: \$ 60,000

1700 – Toledo Waterways Initiative - System Evaluation*

What: The city of Toledo is conducting sewer system evaluation surveys (SSEs) of the highest priority sub-basins to identify sources of infiltration and inflow to the Lower Maumee and Ottawa River systems as they relate to flood damage reduction in the metropolitan and surrounding areas. Excessive infiltration and inflow contributes to flooding, basement backups and sanitary and combined sewer overflows.

Why: The city of Toledo has experienced storm events that are beyond the management ability of the current infrastructure. Failures of the current infrastructure have led to flood damages. A better understanding of both the infiltration and inflow to these systems is needed to properly address the problem.

Who: City of Toledo/Contractor

When: Throughout the study

How: The evaluations include comprehensive field investigations, sewer modeling, alternative evaluations and recommendations.

Manpower: 6,400 hours

Duration: Throughout project

Cost: \$1,000,000

*** An addendum to this work element has been added at the end of the Scope of Work and can be seen on page 26.**

1800 – Toledo Waterways Initiative - CSO Long Term Control Plan

What: The city of Toledo is preparing a CSO Long Term Control Plan that assesses the costs, effectiveness and water quality benefits of a wide range of alternatives for eliminating combined sewer overflows (CSOs). Other cities in the Western Lake Erie Basin are also required to prepare CSO Long Term Control Plans.

Why: Combined sewer overflows are an area of concern in the Maumee River, Ottawa River, Portage River and other Western Lake Erie Basin tributaries. The city of Toledo's CSO Long Term Control Plan is designed to achieve two primary objectives – meet federal and state water quality standards for local rivers and streams and improve water quality for recreation and aquatic life.

Who: City of Toledo/Contractor

When: Throughout the study

How: The CSO Long Term Control Plan is based on a flow characterization study, water quality study, hydraulic model, water quality model and cost vs. benefit analyses. Control measures recommended in the CSO Long Term Control Plan will undergo further study prior to design and construction. Findings and recommendations will be presented.

Manpower: 700 hours

Duration: Throughout project

Cost: \$200,000

1.1. BIOLOGICAL ENVIRONMENT

2000 – Aquatic Habitat

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to aquatic habitat. Information on assessments of water quality and aquatic habitat will be analyzed including impairments to aquatic life, seasonal trends, and variations. Indices of Biotic Integrity will be assimilated and analyzed for the watershed.

Why: High quality aquatic habitat is a key component to improving the overall integrity of the WLEB. The purpose of this task is to gain an understanding of the existing aquatic habitat problems and future trends within the basin. Information derived from the study will be used to generate potential aquatic habitat improvements within the basin and the approximate costs for such improvements.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources.

Manpower: 200 hours

Duration: 6 months

Cost: \$ 20,000

2100 – Wetland Habitat

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to wetland habitat. Information on assessments of water quality and aquatic habitat will be analyzed including impairments to aquatic life, seasonal trends, and variations. Indices of Biotic Integrity will be assimilated and analyzed for the watershed.

Why: High quality wetland habitat is a key component to improving the overall integrity of the WLEB. Much of the historic wetland habitat within the watershed has been lost or degraded through development and conversion to agriculture. In addition, fragmentation has degraded much of the remaining wetland habitat. The purpose of this task is to gain an understanding of the existing wetland habitat problems and future trends within the basin. Information derived from the study will be used to generate potential wetland habitat improvements within the basin and the approximate costs for such improvements.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources.

Manpower: 250

Duration: 6 months

Cost: \$ 25,000

2200 – Terrestrial Habitat

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to terrestrial wildlife habitat. Information on assessments of terrestrial habitat will be analyzed including impairments to terrestrial wildlife, seasonal trends, and variations. Indices of Biotic Integrity will be assimilated and analyzed for the watershed.

Why: Terrestrial habitat is a key component to improving the overall integrity of the WLEB. The purpose of this task is to gain an understanding of the existing terrestrial wildlife habitat problems and future trends within the basin. Information derived from the study will be used to generate potential wildlife habitat improvements within the basin and the approximate costs for such improvements.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources.

Manpower: 150 hours

Duration: 6 months

Cost: \$ 15,000

2300 – Floodplain Habitat

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to floodplain habitat. Information on assessments of water quality and aquatic habitat will be analyzed including impairments to aquatic life, seasonal trends, and variations. Indices of Biotic Integrity will be assimilated and analyzed for the watershed.

Why: Floodplain habitat is located within riparian corridors and is sometimes also a type of wetland habitat. However, it is unique in that that it is typically subject to more diverse hydrologic regimes than is non-riparian inland wetlands and therefore it may also incorporate terrestrial areas. Floodplain habitat's unique position in the landscape can makes these areas very important for maintaining the quality/function of recreation, fish and wildlife habitat (e.g. migratory bird habitat), floodwater attenuation, historic properties, and water quality. Accordingly, it is a key component to improving the overall integrity of the WLEB. The purpose of this task is to gain an understanding of the existing floodplain habitat problems and future trends within the basin. Information derived from the study will be used to generate potential floodplain habitat improvements within the basin and the approximate costs of such improvements.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources.

Manpower: 250 hours

Duration: 6 months

Cost: \$ 25,000

2400 – Endangered Species

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to endangered species.

Why: Threatened and Endangered species habitat is a crucial component of a balanced and diverse WLEB. The purpose of this task is to identify current and historical occurrences of endangered species and their critical habitat(s) within the basin and to identify opportunities to improve the habitat for these species.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources as well as through coordination with the U.S. Fish & Wildlife Service.

Manpower: 150 hours

Duration: 6 months

Cost: \$ 15,000

2500 – Migratory Birds

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to migratory birds.

Why: The WLEB is an important stopover point for various species of migratory birds. The purpose of this task is to identify the diversity of species that use the basin as a stopover location during migration as well as those habitat types and locations on which

they are most dependent. This information will be used to identify any opportunities for habitat improvement and will be closely linked with the other habitat tasks.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources. In addition, interviews with local experts, including the local Audubon Society will be conducted.

Manpower: 150 hours

Duration: 6 months

Cost: \$ 15,000

2600 – Fish & Wildlife Coordination Act Report

What: Coordination with U.S. Fish & Wildlife Service, Ohio Environmental Protection Agency, Ohio Department of Natural Resources, Michigan Department of Natural Resources and Indiana Department of Natural Resources will be conducted as per Fish and Wildlife Coordination Act requirements (16 USC 661 *et. seq.*)

Why: The U.S. Fish and Wildlife Coordination Act Report is intended to identify fish and wildlife resources within the study area and identify potential impacts associated with the various alternatives proposed during planning and preparation of the Western Lake Erie Basin Study.

Who: U.S. Fish & Wildlife Service

When: Upon execution of the detailed work plan

How: The study will be completed by the U.S. Fish and Wildlife Service through coordination with the Ohio Environmental Protection Agency, Ohio Department of Natural Resources, Michigan Department of Natural Resources and Indiana Department of Natural Resources.

Manpower: 150 hours

Duration: 1 year (e.g. 4 season survey)

Cost: \$ 15,000

1.2. CULTURAL ENVIRONMENT

2700 – Cultural Resources

What: The cultural resources within the watershed will be examined to identify problems and opportunities within the basin related to cultural resource protection.

Why: The WLEB is rich in cultural resources which typically have a strong tendency to be located near current or historic aquatic sites (e.g. Lake Erie shoreline, riparian corridors). Coordination with tribal interests and state historic preservation offices will be conducted to identify specific significant cultural sites and resources within the basin.

Who: USACE Buffalo District through coordination with local tribal interests and State Historic Preservation Offices

When: Upon execution of the detailed work plan

How: The study will be completed through a literature and data search of existing sources. In addition, interviews with tribal interests, local experts and State Historic Preservation Offices will be conducted as appropriate.

Manpower: 200 hours

Duration: 6 months

Cost: \$ 20,000

2800 – Aesthetics

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to environmental aesthetics.

Why: Aesthetics are important to local residents and need to be incorporated in the development of the watershed management plan.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: Because peoples' ideas of acceptable aesthetic conditions is highly variable and even regionally dependent, the study will be conducted through interviews with local government officials and public scoping meetings. Simple visualization models and rating schemes will be used as appropriate if structural restoration measures are proposed.

Manpower: 150 hours

Duration: 6 months

Cost: \$ 15,000

1.3 SOCIAL-ECONOMIC RESOURCES

2900 – Land Use and Activity: Population, Housing, and Education

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify population, housing and education trends impacts on problems and opportunities on water resources within the basin.

Why: Because of their direct affect many components of a watershed, urban sprawl, and changes in land use trends must play an important role in the development of a watershed management plan. Demographic changes as well as economic projections are highly relevant to problem definition and opportunities afforded.

Who: USACE Economist

When: Upon execution of the detailed work plan

How: Literature research and contact with other agencies and governing bodies.

Manpower: 200 hours

Duration: 6 months

Cost: \$20,000

3000 – Land Use and Activity: Business and Industrial Activity

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to business and industrial land use and activity. Employment and earnings by industry and other key information will be assimilated and analyzed.

Why: Because of their direct affect many components of a watershed, urban sprawl, changes in land use and agricultural trends must play an important role in the development of a watershed management plan. Demographic changes as well as economic projections are highly relevant to problem and definition and opportunities afforded. Business and Industrial uses play a key role in water demand, usage, and quality.

Who: USACE Economist

When: Upon execution of the detailed work plan

How: Literature research and contact with other agencies and governing bodies

Manpower: 200 hours

Duration: 6 months

Cost: \$20,000

3100 – Land Use and Activity: Agriculture including crops, livestock and timberlands

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to agriculture and open space.

Why: Because of their direct affect many components of a watershed, changes in land use and agricultural trends must play an important role in the development of a watershed management plan. Agricultural uses play a key role in water demand, usage, and quality. The purpose of this study is to identify these trends and incorporate them into the proposed watershed management for WLEB.

Who: USACE through coordination with local governments, experts and agencies (e.g. U.S. Department of Agriculture)

When: Upon execution of the detailed work plan

How: Agricultural land in the watershed will be examined to determine the amount of active land in production. Areas that are receiving pressure from development (industrial, commercial or residential) and that, if developed, would remove productive agricultural land and decrease open space will be highlighted. The analysis will also include conversion from agriculture to open space, including location and rates of conversion and the likely subsequent impacts on the watershed. Resources for this task will include the Agriculture and Farmland Protection Board and the Agriculture and Farmland Protection Plan. Local development policies will also be included in the

analysis, including the intent and the actual impact (if known) of the policies. Combinations of NRCS payment incentives and projected future fixed costs as well as expected future costs of sediment lost to a farm could have impacts on the demand that the farming industry has for various programs depending on the fiscal climate.

Manpower: 250 hours

Duration: 6 months

Cost: \$ 25,000

3200 – Land Use and Activity: Recreation, Open Space and Public Access

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to Recreation and Public Access.

Why: Recreation and public access to local waterways is a high priority of local residents. The purpose of this task is to identify opportunities to improve and maintain public recreation opportunities within the basin including the “Port to Fort” Greenway Plan.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: Prior studies and reports on recreation and public access will be examined. In addition, interviews with local experts and officials will be conducted.

Manpower: 250 hours

Duration: 6 months

Cost: \$25,000

3300 – Public Health and Safety

What: The historic, existing and forecasted without project conditions over a 50-year project life will be examined to identify problems and opportunities within the basin related to public health and safety.

Why: Public health and safety is a primary concern with any long-term plan. The purpose of this task is to identify opportunities to maintain and enhance public health and safety.

Who: USACE Buffalo District

When: Upon execution of the detailed work plan

How: Literature search and interviews with local government agencies.

Manpower: 100 hours

Duration: 6 months

Cost: \$10,000

3400 - State and Local Government Finance

What: The historic, existing and forecasted conditions over a 50-year project life will be examined to identify trends and opportunities related to local government finance.

Why: The execution and utility of the watershed management framework is dependant on sources of funding to plan, design and construct the recommendations set forth in the study. Identification of local cost-sharing partners is critical to carry out the recommendations presented in the watershed management plan. In order to be proactive, a working group be formed early in the process. This group will be designed to seek out any and all funding opportunities that are relevant to the system so that the wide range of study recommendation and partners in the basin can compliment one another and maximize the potential for project funding.

Who: USACE, Federal, State and local partners

When: Upon execution of the detailed work plan

How: Interviews with local municipalities and not-for-profit organizations.

Manpower: 700 hours

Duration: Throughout project

Cost: \$60,000

WATERSHED ASSESSMENT & POTENTIAL RESTORATION MEASURES

3500 – GIS Data Management

What: Perform data integration of downloaded data to USACE standards.

Why: Provide downloaded data in a usable and familiar format for data analysis and reports.

Who: USACE GIS Data Administrator, NRCS, state and local partners

When: After data acquisition

How: Use existing USACE naming convention and data catalog for template to rename and move acquired data.

Manpower: 3000 hours

Duration: Throughout the study, primarily after the identification of without project conditions.

Cost: \$300,000

3600 – Watershed Restoration Measures

What: A variety of Corps and NRCS (as well as other Federal, state and local partners) relevant assessments will be used to rank sub-basins relative to the degree of functional degradation exhibited. An inter-agency planning team will establish the criteria used for rankings. Watershed management recommendations will be developed to improve the system wide form and function of hydrologic considerations as they relate to habitat, flood damage reduction, water quality, navigation, and recreation, within the list of prioritized watersheds.

Why: The comprehensive restoration of systems functions can led to more effective multipurpose solutions concerning habitat, flood damage reduction, water quality, navigation, and recreation in WLEB. These restoration measures will be formulated to reduce impacts and enhance the coordination and effectiveness of the various local, state and Federal programs that currently exist. Information derived from the study of selected sub-watersheds will be used to estimate improvements possible within the entire watershed and the appropriate programs, partnership agreements, and costs for those improvements.

Who: USACE Technical Manager/Contractor

When: After identification of without project conditions.

How: Adaptive management strategies will be implemented by the inter-agency team which will focus the study on the factors and landscape parameters that are recognized by the partnership as the highest priority. Feedback received from public scoping meetings and review of draft documents will be incorporated into the management feedback loop. Pilot projects that help determine the real impacts of best management practices in the basin will be developed and after action reviews of the results of these projects will be shared throughout the basin to improve the overall health of the system.

Manpower: 500 hours

Duration: 3 months

Cost: \$50,000

3700 – Western Lucas County Wet Prairie complex Protection Project

What: The city of Toledo has entered into a Water Resource Restoration Sponsorship Program (WRRSP) with Ohio EPA, Metropolitan Park District of the Toledo Area (Metroparks) and The Nature Conservancy to acquire, restore, protect and manage wetlands in the Oak Openings Region to preserve the best remaining unprotected wet prairie (wetland) complex in western Lucas County.

Why: The Oak Openings Region has habitat that supports a huge range of biodiversity with a prime aquifer and is a plentiful sand and gravel source. The region harbors more rare species than any other area of similar size in the state of Ohio. The Federally endangered Karner Blue Butterfly was reintroduced to and thrives in the region and in 1999 the region was designated as one of the most important ecosystems in the United States by the Nature Conservancy.

Who: City of Toledo/Contractor

When: Throughout the study

How: The project involves a long-term management plan that includes long term monitoring of the property. The project will serve as a demonstration project for future wetland acquisition in the lower Maumee River Basin.

Manpower: 5,000 hours

Duration: Throughout project

Cost: \$600,000

3800 – Trade-off Analysis, Plan Formulation and Evaluation

What: Evaluations will begin with review and verification of the area by specific location and needs. Review of existing and without-project hydrologic, economic, and environmental data necessary to develop alternatives; review of previous studies to aid in developing potential solutions; and arranging and preparing briefings and presiding over meetings to formulate alternative plans will be accomplished. All data necessary for recommendation development and evaluation will be collected. An array of alternative recommendations for improvement will be developed and evaluated in order to identify the combinations that best meet the needs of the area. Beneficial and adverse impacts will be evaluated and the alternatives refined or reformulated as necessary to maximize beneficial impacts and minimize adverse impacts.

Why: To identify potential actions to address the problems and needs of the WLEB and estimate impacts, costs, and benefits of these potential solutions.

Who: USACE Product Delivery Team

When: Beginning with initiation of project and continuing up to selection of recommendations.

How: Coordinate closely with local sponsor; Federal, state and local agencies; and other associated stakeholders. Utilize Corps planning regulations and guide study team as required.

Manpower: 1,000 hours

Duration: 24 months

Cost: \$ 100,000

3900 – Cost Estimate (rough order magnitude)

What: Rough order of magnitude cost estimates will be formulated for each of the restoration measures developed.

Why: The watershed management plan is intended for use by the local sponsors and stakeholders for decision-making in regards to project funding. Therefore, rough order of magnitude cost estimates are needed to help guide these decisions, which will be based on budget and trade-off analysis.

Who: USACE Cost Engineer

When: Upon completion of Plan Formulation

How: The various alternative plans will be provided to a cost estimator for use in developing rough order of magnitude cost estimates.

Manpower: 800 hours

Duration: 4 months

Cost: \$ 80,000

4000 – Real Estate Plan

What: Preliminary Real Estate plans will be developed for recommendations that will which require real estate or easement acquisition.

Why: Since real estate acquisition and/or easements may be required for some alternatives, preliminary real estate plans need to be developed in order to incorporate these costs into the plan.

Who: Real Estate Specialist

When: Upon completion of Plan Formulation

How: Rough order of magnitude gross appraisals will be developed for alternative plans which involve property or easement acquisition.

Manpower: 250 hours

Duration: 4 months

Cost: \$ 25,000

WESTERN LAKE ERIE BASIN WATERSHED MANAGEMENT RECOMENDATIONS

4100 – Prepare Draft of Modern Historic Conditions, Existing Conditions, and Future Without Project Conditions Report

What: Prepare Draft of Modern Historic Conditions, Existing Conditions, and Future Without Project Conditions Report

Why: To provide a summary of studies and basis for establishing goals and objectives and framework.

Who: USACE Buffalo District

When: Prior to plan formulation, after the completion of task 1200 (Western Lake Erie Basin Vision).

How: By compiling studies being conducted and literature searches.

Manpower: 300 hours

Duration: 6 months

Cost: \$ 30,000

4200 – Preliminary Draft of Watershed Management Recommendations

What: Prepare draft of WLEB watershed management recommendations including text and figures.

Why: To provide a summary of documentation of the study.

Who: USACE Buffalo District

When: After completion of Alternative Formulation Briefing

How: By compiling studies and results of Alternative Formulation Briefing

Manpower: 8,000 hours

Duration: month

Cost: \$ 80,000

4300 – Assemble/Print Preliminary Draft Report

What: The draft WLEB watershed management recommendations (100 copies) will be assembled and printed.

Why: To ensure Draft Report is printed on schedule for District and Division review.

Who: Buffalo District Visual Information shop/Contractor

When: Prior to District office Review

How: The contractor will print and bind 100 copies of the draft report for distribution.

Manpower: 20 hours

Duration: 1 week

Cost: \$6000

4400 – Independent Technical Review

What: An independent technical review team will conduct a technical review of the draft WLEB Watershed Management Recommendations. The team will then prepare the technical review package documentation.

Why: Independent technical review is essential to ensure the integrity of the report.

Who: Independent technical review team with qualifications pertaining to the content of the recommendations.

When: Independent technical reviews will be conducted throughout project, prior to releasing deliverables.

How: An ITR team leader will coordinate with the remainder of the ITR team and deliver ITR documentation to the project manager. All comments will be submitted using DR CHECKS.

Manpower: 600 hours

Duration: 1 month per document

Cost: \$50,000

4500 – WLEB Partnership and CELRD Review

What: The project sponsor and CELRD will review and comment on the draft report.

Why: Review of the draft report is important to ensure that the data and text of the various report elements are correct and consistent.

Who: WLEB Leadership Group

When: After assembling and printing the Draft WLEB Watershed Management Recommendations

How: Copies of the assembled documents will be reviewed by the project sponsor and CELRD over a 60-day comment period.

Manpower: 140 hours

Duration: 2 months

Cost: \$14,000

4600 – Revise/Print Preliminary Draft Report

What: Comments received as a result of the project sponsor/CELRD review will be addressed and incorporated as necessary into the draft WLEB Watershed Management Recommendations.

Why: To incorporate comments from the local sponsor/CELRD review and prepare documents for Headquarters review.

Who: USACE Project Manager/ Contractor

When: After WLEB Leadership Group & CELRD review

How: Draft documents will be revised to reflect local sponsor and CELRD comments and reprinted. Comments will be reviewed by the project manager for consistency and consolidation. Documents will be provided to Headquarters for review in accordance with guidance in ER 1105-2-100.

Manpower: 100 hours

Duration: 1 month

Cost: \$ 20,000

STUDY MANAGEMENT

4700 – Project Management

What: The project manager will carry out the duties of project management, including updating of the project Fact Sheet and web sites, updating of the monthly 2101s, monthly

Project Review Board presentation, conducting monthly PDT meetings, monthly local sponsor reporting requirements, attendance at local watershed meetings, and attendance and presentation at various public scoping and informational meetings. Supervision and review of documents will be conducted by team leaders and branch chiefs as appropriate.

Why: The project manager is necessary to ensure coordinated, efficient execution of the project and supervision & review is imperative to the success project.

Who: USACE Project Manager, Program manager and Appropriate Leadership

When: Throughout the project

How: The PM will conduct monthly requirements on the first business day of the month unless otherwise agreed to by the PDT. Documents and progress will be reviewed prior to final issuance throughout the project

Manpower: 4100 hours

Duration: Throughout study

Cost: \$ 410,000

ADDENDUM

An addendum to the Scope of Work has been added to represent the full cost and in-kind contribution from the City of Toledo under the work element 1700 copied below. Currently only \$1 million of this total is being counted as in-kind services but this work element is actually a \$3 million effort being implemented by the city. These in-kind services have been added to the Scope of Work to account for potential cost overruns on the Federal side that exceeds the current \$2 million for the study. This addendum acknowledges that the additional in-kind services can be used as match, in place of cash, to cost overruns on the Federal side by amending the Agreement.

1700 – Toledo Waterways Initiative - System Evaluation

What: The city of Toledo is conducting sewer system evaluation surveys (SSESs) of the highest priority sub-basins to identify sources of infiltration and inflow to the Lower Maumee and Ottawa River systems as they relate to flood damage reduction in the metropolitan and surrounding areas. Excessive infiltration and inflow contributes to flooding, basement backups and sanitary and combined sewer overflows.

Why: The city of Toledo has experienced storm events that are beyond the management ability of the current infrastructure. Failures of the current infrastructure have led to flood damages. A better understanding of both the infiltration and inflow to these systems is needed to properly address the problem.

Who: City of Toledo/Contractor

When: Throughout the study

How: The evaluations include comprehensive field investigations, sewer modeling, alternative evaluations and recommendations.

Manpower: 19,000 hours

Duration: Throughout project

Cost: \$3,000,000

(DRAFT) PMP APPENDIX H(b) -

AGREEMENT
BETWEEN THE DEPARTMENT OF THE ARMY
AND
CITY OF TOLEDO
FOR A FEASIBILITY STUDY OF THE
WESTERN LAKE ERIE BASIN, OHIO, INDIANA, AND MICHIGAN

THIS AGREEMENT is entered into this XXth day, of April 2006, by and between the Departments of the Army (hereinafter the "Government"), represented by the District Engineer executing this Agreement, and the City of Toledo. (hereinafter the "Sponsor"),

WITNESSETH, that

WHEREAS, the Congress (Senate and/or House Committees) has authorized the U.S. Army Corps of Engineers to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee, Ottawa, and Portage Rivers pursuant to the authority provided by Section 441 of the Water Resources Development Act (WRDA) of 1999; and

WHEREAS, the U.S. Army Corps of Engineers has conducted a reconnaissance study of the Western Lake Erie Basin study area in north-west Ohio, pursuant to this authority, and has determined that further study in the nature of a "Feasibility Phase Study" (hereinafter the "Study") is required to fulfill the intent of the study authority and to assess the extent of the Federal interest in participating in a solution to the identified problem; and

WHEREAS, Section 105 of the Water Resources Development Act of 1986 (Public Law 99-662, as amended) specifies the cost sharing requirements applicable to the Study; and

WHEREAS, the Sponsor has the authority and capability to furnish the cooperation hereinafter set forth and is willing to participate in study cost sharing and financing in accordance with the terms of this Agreement; and

WHEREAS, the Sponsor and the Government understand that entering into this Agreement in no way obligates either party to implement a project and that whether the Government supports a project authorization and budgets it for implementation depends upon, among other things, the outcome of the Study and whether the proposed solution is consistent with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and with the budget priorities of the Administration;

NOW THEREFORE, the parties agree as follows:

ARTICLE I - DEFINITIONS

For the purposes of this Agreement:

A. The term "Study Costs" shall mean all disbursements by the Government pursuant to this

Agreement, from Federal appropriations or from funds made available to the Government by the Sponsor, and all negotiated costs of work performed by the Sponsor pursuant to this Agreement.

Study Costs shall include, but not be limited to: labor charges; direct costs; overhead expenses; supervision and administration costs; the costs of participation in Study Management and Coordination in accordance with Article IV of this Agreement; the costs of contracts with third parties, including termination or suspension charges; and any termination or suspension costs (ordinarily defined as those costs necessary to terminate ongoing contracts or obligations and to properly safeguard the work already accomplished) associated with this Agreement.

B. The term "estimated Study Costs" shall mean the estimated cost of performing the Study as of the effective date of this Agreement, as specified in Article III.A. of this Agreement.

C. The term "excess Study Costs" shall mean Study Costs that exceed the estimated Study Costs and that do not result from mutual agreement of the parties, a change in Federal law that increases the cost of the Study, or a change in the scope of the Study requested by the Sponsor.

D. The term "study period" shall mean the time period for conducting the Study, commencing with the release to the U.S. Army Corps of Engineers Buffalo District of initial Federal feasibility funds following the execution of this Agreement and ending when the Assistant Secretary of the Army (Civil Works) submits the feasibility report to the Office of Management and Budget (OMB) for review for consistency with the policies and programs of the President.

E. The term "PMP" shall mean the Project Management Plan, which is attached to this Agreement and which shall not be considered binding on either party and is subject to change by the Government, in consultation with the Sponsor.

F. The term "negotiated costs" shall mean the costs of in-kind services to be provided by the Sponsor in accordance with the PMP.

G. The term "fiscal year" shall mean one fiscal year of the Government. The Government fiscal year begins on October 1 and ends on September 30.

ARTICLE II - OBLIGATIONS OF PARTIES

A. The Government, using funds and in-kind services provided by the Sponsor and funds appropriated by the Congress of the United States, shall expeditiously prosecute and complete the Study, in accordance with the provisions of this Agreement and Federal laws, regulations, and policies.

B. In accordance with this Article and Article III.A., III.B. and III.C. of this Agreement, the Sponsor shall contribute cash and in-kind services equal to fifty (50) percent of Study Costs other than excess Study Costs. The Sponsor may, consistent with applicable law and regulations, contribute up to 50 percent of Study Costs through the provision of in-kind services. The in-kind services to be provided by the Sponsor, the estimated negotiated costs for those services, and the estimated schedule under which those services are to be provided are specified in the PMP. Negotiated costs shall be subject to an audit by the Government to determine reasonableness, allocability, and allowability.

C. The Sponsor shall pay a fifty (50) percent share of excess Study Costs in accordance with Article III.D. of this Agreement.

D. The Sponsor understands that the schedule of work may require the Sponsor to provide cash or in-kind services at a rate that may result in the Sponsor temporarily diverging from the obligations concerning cash and in-kind services specified in paragraph B. of this Article. Such temporary divergences shall be identified in the quarterly reports provided for in Article III.A. of this Agreement and shall not alter the obligations concerning costs and services specified in paragraph B. of this Article or the obligations concerning payment specified in Article III of this Agreement.

E. If, upon the award of any contract or the performance of any in-house work for the Study by the Government or the Sponsor, cumulative financial obligations of the Government and the Sponsor would result in excess Study Costs, the Government and the Sponsor agree to defer award of that and all subsequent contracts, and performance of that and all subsequent in-house work, for the Study until the Government and the Sponsor agree to proceed. Should the Government and the sponsor require time to arrive at a decision, the Agreement will be suspended in accordance with Article X., for a period of not to exceed six months. In the event the Government and the sponsor have not reached an agreement to proceed by the end of their 6 month period, the Agreement may be subject to termination in accordance with Article X.

F. No Federal funds may be used to meet the Sponsor's share of Study Costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute.

G. The award and management of any contract with a third party in furtherance of this Agreement which obligates Federal appropriations shall be exclusively within the control of the Government. The award and management of any contract by the Sponsor with a third party in furtherance of this Agreement which obligates funds of the Sponsor and does not obligate Federal appropriations shall be exclusively within the control of the Sponsor, but shall be subject to applicable Federal laws and regulations.

ARTICLE III - METHOD OF PAYMENT

A. The Government shall maintain current records of contributions provided by the parties, current projections of Study Costs, current projections of each party's share of Study Costs, and current projections of the amount of Study Costs that will result in excess Study Costs. At least quarterly, the Government shall provide the Sponsor a report setting forth this information. As of the effective date of this Agreement, estimated Study Costs are \$4,000,000 and the Sponsor's share of estimated Study Costs is \$2,000,000. In order to meet the Sponsor's cash payment requirements for its share of estimated Study Costs, the Sponsor must provide a cash contribution currently estimated to be \$0. The dollar amounts set forth in this Article are based upon the Government's best estimates, which reflect the scope of the study described in the PMP, projected costs, price-level changes, and anticipated inflation. Such cost estimates are subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Sponsor.

B. The Sponsor shall provide its cash contribution required under Article II.B. of this Agreement in accordance with the following provisions:

1. For purposes of budget planning, the Government shall notify the Sponsor by 01 November of each year of the estimated funds that will be required from the Sponsor to meet the Sponsor's share of Study Costs for the upcoming fiscal year.

2. No later than 60 calendar days prior to the scheduled date for the Government's issuance of the solicitation for the first contract for the Study or for the Government's anticipated first significant in-house expenditure for the Study, the Government shall notify the Sponsor in writing of the funds the Government determines to be required from the Sponsor to meet its required share of Study Costs for the first fiscal year of the Study. No later than 30 calendar days thereafter, the Sponsor shall present to the Government an irrevocable letter of credit acceptable to the Government for the required funds.

3. For the second and subsequent fiscal years of the Study, the Government shall, no later than 60 calendar days prior to the beginning of the fiscal year, notify the Sponsor in writing of the funds the Government determines to be required from the Sponsor to meet its required share of Study Costs for that fiscal year, taking into account any temporary divergences identified under Article II.D of this Agreement. No later than 30 calendar days prior to the beginning of the fiscal year, the Sponsor shall make the full amount of the required funds available to the Government through the funding mechanism specified in paragraph B.2. of this Article.

4. The Government shall draw from the letter of credit provided by the Sponsor such sums as the Government deems necessary to cover the Sponsor's share of contractual and in-house fiscal obligations attributable to the Study as they are incurred.

5. In the event the Government determines that the Sponsor must provide additional funds to meet its share of Study Costs, the Government shall so notify the Sponsor in writing. No later than 60 calendar days after receipt of such notice, the Sponsor shall make the full amount of the additional required funds available through the funding mechanism specified in paragraph B.2. of this Article.

C. Within ninety (90) days after the conclusion of the Study Period or termination of this Agreement, the Government shall conduct a final accounting of Study Costs, including disbursements by the Government of Federal funds, cash contributions by the Sponsor, the amount of any excess Study Costs, and credits for the negotiated costs of the Sponsor, and shall furnish the Sponsor with the results of this accounting. Within thirty (30) days thereafter, the Government, subject to the availability of funds, shall reimburse the Sponsor for the excess, if any, of cash contributions and credits given over its required share of Study Costs, other than excess Study Costs, or the Sponsor shall provide the Government any cash contributions required for the Sponsor to meet its required share of Study Costs other than excess Study Costs.

D. The Sponsor shall provide its cash contribution for excess Study Costs as required under Article II.C. of this Agreement by delivering a check payable to "FAO, USAED, Buffalo District" to the District Engineer as follows:

1. After the project that is the subject of this Study has been authorized for construction, no later than the date on which a Project Cooperation Agreement is entered into for the project; or

2. In the event the project that is the subject of this Study is not authorized for construction by a date that is no later than 5 years of the date of the final report of the Chief of Engineers concerning the project, or by a date that is no later than 2 years after the date of the termination of the study, the Sponsor shall pay its share of excess costs on that date (5 years after the date of the Chief of Engineers or 2 year after the date of the termination of the study).

ARTICLE IV - STUDY MANAGEMENT AND COORDINATION

A. To provide for consistent and effective communication, the Sponsor and the Government shall appoint named senior representatives to an Executive Committee. Members of the Executive Committee shall include:

Christine Brayman, Chief, Planning Branch, Buffalo District
William Garber- Administrator Department of Public Utilities, City of Toledo

Thereafter, the Executive Committee shall meet regularly until the end of the Study Period.

B. Until the end of the Study Period, the Executive Committee shall generally oversee the Study consistently with the PMP.

C. The Executive Committee may make recommendations that it deems warranted to the District Engineer on matters that it oversees, including suggestions to avoid potential sources of dispute. The Government in good faith shall consider such recommendations. The Government has the discretion to accept, reject, or modify the Executive Committee's recommendations.

D. The Executive Committee shall appoint representatives to serve on a Study Management Team. The Study Management Team shall keep the Executive Committee informed of the progress of the Study and of significant pending issues and actions, and shall prepare periodic reports on the progress of all work items identified in the PMP.

E. The costs of participation in the Executive Committee (including the cost to serve on the Study Management Team) shall be included in total project costs and cost shared in accordance with the provisions of this Agreement.

ARTICLE V - DISPUTES

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to both parties. The parties shall each pay 50 percent of any costs for the services provided by such a third party as such costs are incurred. Such costs shall not be included in Study Costs. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

ARTICLE VI - MAINTENANCE OF RECORDS

A. Within 60 days of the effective date of this Agreement, the Government and the Sponsor shall develop procedures for keeping books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to this Agreement to the extent and in such detail as will properly reflect total Study Costs. These procedures shall incorporate, and apply as appropriate, the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to state and local governments at 32 C.F.R. Section 33.20. The Government and the Sponsor shall maintain such books, records, documents, and other evidence in accordance with these procedures for a minimum of three years after completion of the Study and resolution of all relevant claims arising therefrom. To the extent permitted under applicable Federal laws and regulations, the Government and the Sponsor shall each allow the other to inspect such books, documents, records, and other evidence.

B. In accordance with 31 U.S.C. Section 7503, the Government may conduct audits in addition to any audit that the Sponsor is required to conduct under the Single Audit Act of 1984, 31 U.S.C. Sections 7501-7507. Any such Government audits shall be conducted in accordance with Government Auditing Standards and the cost principles in OMB Circular No. A-87 and other applicable cost principles and regulations. The costs of Government audits shall be included in total Study Costs and shared in accordance with the provisions of this Agreement.

ARTICLE VII - RELATIONSHIP OF PARTIES

The Government and the Sponsor act in independent capacities in the performance of their respective rights and obligations under this Agreement, and neither is to be considered the officer, agent, or employee of the other.

ARTICLE VIII - OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, nor any resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE IX - FEDERAL AND STATE LAWS

In the exercise of the Sponsor's rights and obligations under this Agreement, the Sponsor agrees to comply with all applicable Federal and State laws and regulations, including Section 601 of Title VI of the Civil Rights Act of 1964 (Public Law 88-352) and Department of Defense Directive 5500.11 issued pursuant thereto and published in 32 C.F.R. Part 195, as well as Army Regulations 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army".

ARTICLE X - TERMINATION OR SUSPENSION

A. This Agreement shall terminate at the conclusion of the Study Period, and neither the Government nor the Sponsor shall have any further obligations hereunder, except as provided in Article III.C.; provided, that prior to such time and upon thirty (30) days written notice, either party may terminate or suspend this Agreement. In addition, the Government shall terminate this Agreement immediately upon any failure of the parties to agree to extend the study under Article II.E. of this agreement, or upon the failure of the sponsor to fulfill its obligation under Article III. of this Agreement. In the event that either party elects to terminate this Agreement, both parties shall conclude their activities relating to the Study and proceed to a final accounting in accordance with Article III.C. and III.D. of this Agreement. Upon termination of this Agreement, all data and information generated as part of the Study shall be made available to both parties.

B. Any termination of this Agreement shall not relieve the parties of liability for any obligations previously incurred, including the costs of closing out or transferring any existing contracts.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the District Engineer for the U.S. Army Corps of Engineers, Buffalo District.

DEPARTMENT OF THE ARMY

CITY OF TOLEDO

BY _____
Lieutenant Colonel, Corps of Engineers
District Engineer

BY _____
City of Toledo

(Date)

(Date)

**WESTERN LAKE
ERIE BASIN
STUDY/REPORT**

**(DRAFT) PMP
APPENDIX I –
PROJECT
RELATIONSHIPS**

*Note: The WLEB
Partnership Project
and Outreach
Committees are
developing a more
detailed listing of
Project
Interdependencies that
will replace this
appendix.*

*Western Lake Erie Basin Study (GI)	USACE	Regional/Local
*Great Lakes Remedial Action Plan - Maumee River (GI)	USEPA/OEPA/Local	Regional/Local
*Ottawa River – Navigation (CG)	USACE	Local
*Ottawa River – Environmental Restoration (CG-CA 204)	USACE	Local
*Ottawa River - Shoreland Drive (CG-CA 14)	USACE	Local

Prior reports relating to the Western Lake Erie Basin and Watersheds are too numerous to list.

(WLEBS Other Ongoing Projects)

Completed or on-going

WLEBS projects include:

	<u>Lead Agencies</u>	<u>Location</u>	<u>Priority Status</u> <u>Current Funding</u>
*USEPA/State Point Source Regulatory	USEPA/OEPA	Regional/Local	
*USEPA/State Water Body Assessments	USEPA/OEPA/ODNR	Regional/Local	
*USDA-NRCS Best Management Practices	USDA-NRCS	Regional/Local	
*USDA-NRCS Conservation Reserve Enhancement Program	USDA-NRCS	Regional/Local	
*FEMA Flood Plain Management	FEMA/Local	Regional/Local	
*Toledo Waterways Initiative Long Term Plan (including sewer system evaluation surveys)	TACG ?/Local	Regional/Local	
*Western Lucas County Wet Prairie Complex Protection Project	USFWS/ODNR?/Local	Regional/Local	

*Toledo Harbor – Maumee Bay Maintenance Dredging (O&M)	USACE	Local
*Toledo Harbor – Island 18 Reutilization (O&M)	USACE	Local
*Toledo Harbor – Environmental Activities (O&M)	USACE	Local
*Auglaize River - Sediment Transport Model (O&M 516e)	USACE	Local
*Port Clinton Waterfront (CG-CA 107)	USACE	Local

Completed or on-going WLEBS projects include:

*Ohio Environmental Infrastructure Imp. (CG 594)
 *Toledo Harbor LTMP/DMMP (O&M) (Reduced Sedimentation, Dredging/ Disposal, CDF Management, Beneficial Use of Dredged Material, New CDFs)
 Maumee Bay Habitat Restoration (CG-CA 204)
 *Wynn Road BUDM CDF (CG-CA 204)
 *Oregon BUDM CDF (CG-CA 1135)
 *Toledo Harbor – Project Condition Surveys (O&M)
 *Toledo Harbor – Maumee River Maintenance Dredging (O&M)

Lead Agencies

USACE

USACE

USACE

USACE

USACE

USACE

Location

Local

Local

Local

Local

Local

Local

Priority Status
Current Funding

WESTERN LAKE ERIE BASIN STUDY/REPORT

(DRAFT) PMP APPENDIX J – (INSERT) FIGURES

REFERENCE PDF FIGURES

FIGURE 1

FIGURE 2

FIGURE 3

FIGURE 4



Western Lake Erie Basin Congressional Districts



MICHIGAN

ONTARIO

LAKE
ERIE

Monroe

Hillsdale

Lenawee

Branch

Lucas

Fulton

Ottawa

Steuben

Williams

Sandusky

DeKalb

Henry

Wood

Defiance

Noble

Paulding

Putnam

Hancock

Seneca

Allen

Wyandot

Wells

Van Wert

Allen

Hardin

Adams

Mercer

Auglaize

Shelby

INDIANA

OHIO

Western Lake Erie Basin County Boundaries



MICHIGAN

ONTARIO

LAKE
ERIE

Ottawa

Tiffin

St. Joseph

Lower Maumee

Portage

Upper Maumee

Blanchard

Auglaize

St. Marys

INDIANA

OHIO

Western Lake Erie Basin Major Watersheds



MICHIGAN

ONTARIO

LAKE
ERIE

Toledo, OH-MI

Port Clinton, OH

Oak Harbor, OH

Swanton, OH

Delta, OH

Whitehouse, OH

Montpelier, OH

Archbold, OH

Wauseon, OH

Bryan, OH

Napoleon, OH

Bowling Green, OH

Butter, IN

Auburn, IN

Hicksville, OH

Defiance, OH

North Baltimore, OH

Eastopa, OH

Fort Wayne, IN

Paulding, OH

Findlay, OH

Ottawa, OH

Bluffton, OH

Ossian, IN

Van Wert, OH

Delphos, OH

Ada, OH

Decatur, IN

Lima, OH

Kenton, OH

Berme, IN

Wapakoneta, OH

Celina, OH

St. Marys, OH

INDIANA

OHIO

New Bremen, OH

Minster, OH

Western Lake Erie Basin Urban Areas

WESTERN LAKE ERIE BASIN STUDY

(Draft) PMP APPENDIX – K

**REVISED EXPANDED RECONNAISSANCE STUDY
SECTION 905(b) ANALYSIS (WRDA 86)
Revised June 2003**

Posted At the following page:

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**US Army Corps
of Engineers**

**Peer Review Plan
Appendix L**

**Western Lake Erie Basin
Feasibility Study**

DRAFT

April 2007



**US Army Corps
of Engineers**

Peer Review Plan Western Lake Erie Basin Feasibility Study

Introduction

The study area is located in the western basin of Lake Erie encompassing watershed areas primarily in the State of Ohio with significant portions in the States of Indiana and Michigan. This current study effort focuses on the watersheds of the Maumee and adjacent Portage, and Ottawa Rivers. The lake portion of the study area is characterized by shallow littoral waters generally less than 25 feet deep.

Authority for the Western Lake Erie Basin (WLEB) Study was given by Section 441 of the Water Resources Development Act (WRDA) of 1999, which directed the Assistant Secretary of the Army for Civil Works to conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee and adjacent Ottawa, and Portage Rivers. In carrying out the study, the Secretary was directed to cooperate with interested Federal, State, and local agencies and non-governmental organizations and consider all relevant programs of the agencies.

The WLEB 905(b) analysis was signed and approved by the Buffalo District Commander in October 2001 and recommended that a Project Management Plan be developed for a Feasibility Study along with a Feasibility Cost Sharing Agreement to be 100% federally funded for an additional \$300,000. HQUSACE approved the Expanded Reconnaissance Study as a basis for preparation of a PMP(s) and FCSA for detailed watershed studies on December 9, 2003. In May 2006, the Feasibility Cost Share Agreement (FCSA) with the city of Toledo was signed. FY07 funding provides funding to begin the *Western Lake Erie Basin Feasibility Study* report.

The peer review plan (PRP) presented below is a collaborative product of the project delivery team (PDT) and the USACE Flood Damage Reduction Planning Center of Expertise (FDRPCX). The FDRPCX shall manage the PRP, which for this study includes only an Independent Technical Review (ITR) and not an External Peer Review (EPR).

The Peer Review Plan

The following paragraphs correspond to paragraph 6.a. to 6.j. of Engineering Circular 1105-2-408.

a. A number of decision documents are possible. The first decision document shall be the *Western Lake Erie Basin Feasibility Study*. This report shall present measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the Western Lake Erie Basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee and adjacent Ottawa, and Portage Rivers. To learn specifics of the plan, inquiries may be made to the following team members and designated points of contact from the responsible District and PCX:

The project manager for the reevaluation report is:

Tony Friona
CELRB-PM-PL
1776 Niagara Street
Buffalo, NY 14207-3199
Ph. (716) 879-4215 **Fax:** (716) 879-4355
E-mail: Anthony.M.Friona@usace.army.mil

The WLEB program manager is:

Craig Forget
CELRB-PM-PM
1776 Niagara Street
Buffalo, NY 14207-3199
Ph. (716) 879-4187 **Fax:** (716) 879-4355
E-mail: Craig.M.Forget@usace.army.mil

The peer review manager is:

Roger Setters
CELRL-PM-P
US Army Corps of Engineers, Louisville District
600 Martin Luther King Jr. Place
Room 173
Louisville, KY 40202
Ph: (502) 315-6891
E-mail: Roger.D.Setters@usace.army.mil

b. The *Western Lake Erie Basin Feasibility Study* that the Corps will be distributing shall be based on existing information used in identifying needs and opportunities within the study area. It is not likely to create new influential scientific information or be a highly scientific assessment. The risk and magnitude of this project are NOT such that a critical examination by a qualified team outside of the Corps not involved in the day-to-day production of a technical product is necessary. At this time it is not anticipated that this study effort will result in a direct

recommendation to congress for a specifically authorized new start construction project. If in the future it would appear this report will identify costly, complex or controversial structural measures for implementation, the need for an EPR will be reconsidered. The identified goal of this study is a inventory of problems and opportunities in the WLEB watershed and where appropriate identification of the need for follow on detailed project authorization feasibility studies. For these reasons, the interim reevaluation report shall be subjected to only an ITR, and not an EPR.

c. Individual members of the ITR team shall review technical products as they are completed, submitting comments to the PDT, receiving responses, and resolving and certifying individual products, including the draft *Western Lake Erie Basin Feasibility Study* report. This ITR review is planned for FY08, subject to availability of funds. Otherwise, ITR will be deferred until funds become available for the project.

d. As indicated in the paragraph “b” above, an EPR shall not be conducted on the *Western Lake Erie Basin Feasibility Study* report.

e. There are several mechanisms in place for Public input and review. During the development of the *Western Lake Erie Basin Feasibility Study* report, the study team shall have an initial meeting with other Federal agencies, state agencies and interested stakeholders. During the development of the report, the study team has quarterly meetings with other Federal agencies, state agencies and interested stakeholders. As currently planned, a series of public meetings would be held after the draft *Western Lake Erie Basin Feasibility Study* report is available for public review and comment.

f. During the public review period of the draft *Western Lake Erie Basin Feasibility Study* report, comments will be provided to the ITR team as available.

g. The ITR team is anticipated to be comprised of six technical experts.

h. The ITR team is comprised of individuals with experience in hydraulics and hydrology modeling, real estate, economics, basic civil engineering, NEPA/ecosystem restoration and an ITR Team flood damage reduction plan formulation.

i. As indicated in the paragraph “b” above, an EPR shall not be conducted on the *Western Lake Erie Basin Feasibility Study* report.

j. As indicated in the paragraph “b” above, an EPR shall not be conducted on the *Western Lake Erie Basin Feasibility Study* report.