REVIEW PLAN

PROCTOR CREEK
CITY OF ATLANTA, GEORGIA
ECOSYSTEM RESTORATION FEASIBILITY STUDY

MOBILE DISTRICT

ECO-PCX Endorsement Date: 15 July 2016
MSC Approval Date:
Last Revision Date: 23 September 2016

US Army Corps
of Engineers ®

REVIEW PLAN

PROCTOR CREEK, CITY OF ATLANTA, GEORGIA
ECOSYSTEM RESTORATION FEASIBILITY STUDY

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1. PURPOSE AND REQUIREMENTS

a. Purpose. This document outlines the peer review plan for the Proctor Creek Watershed Feasibility Study. This Review Plan (RP) is a component of the Proctor Creek Watershed Feasibility Study Project Management Plan (PMP) as amended April 2016. This Feasibility Study is being conducted under the authority of House Resolution 2445 on September 28, 1994. The Committee on Public Works and Transportation of the U.S. House of Representatives, 103rd Congress, adopted a Resolution titled Atlanta Watershed, Georgia, authorizing the U.S. Army Corps of Engineers (USACE) to conduct studies in the interest of environmental quality, water quality, water supply, flood damage risk reduction and other purposed, associated with stormwater runoff in watersheds in Fulton and DeKalb County area.

b. References

1) Engineer Circular (EC) 1165-2-214, Civil Works Review Policy, 15 Dec 2012
2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
3) Engineer Regulation (ER) 1110-1-12, Quality Management, 21 Jul 2006
4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

c. Requirements. This plan follows EC 1165-2-214, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all projects from initial planning through design, construction, operation, maintenance, repair, rehabilitation and replacement. The EC outlines four levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition, decision documents are subject to cost engineering review and certification (per EC 1165-2-214) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

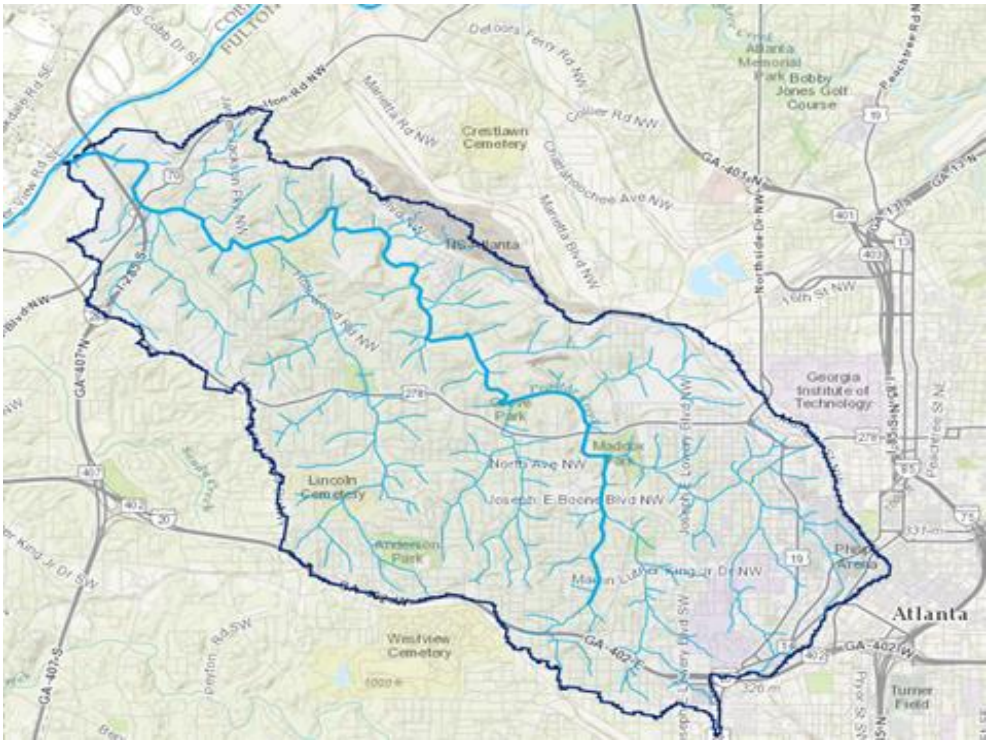
The RMO manages the overall peer review effort described in this plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the document. The RMO for the peer review effort described in this plan is the National Ecosystem Restoration Planning Center of Expertise (ECO-PCX). The RMO will coordinate with the Cost Engineering and Agency Technical Review Mandatory Center of Expertise (MCX/TX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules, and contingencies.

3. STUDY INFORMATION

a. Decision Document. The decision document will present the results of a feasibility study undertaken to support restoration and resolution of water resources problems in the Proctor Creek Watershed, Fulton County, Georgia. The study is cost shared with the non-Federal Sponsor, City of Atlanta. This will be an Integrated Feasibility

Report (FR)/Environmental Assessment (EA). The document will provide planning, engineering, and implementation details of a recommended plan to allow final design and construction to proceed subsequent to the approval of the plan. Approval of the plan is required by the Administration and Congress prior to implementation.

b. Study Area/Project Description. The Proctor Creek Watershed includes approximately 12 miles of urban stream draining approximately 16 square miles. This creek drains northwesterly and joins the Chattahoochee River. It is an Environmental Protection Agency (EPA) Priority One watershed and is one of the 19 watersheds nationwide selected to the Urban Waters Federal Partnership for a comprehensive study. The creek lies in an urbanized area and there is a need for an ecosystem restoration program to enhance aquatic and ecological functions lost or degraded during urbanization.



c. Factors Affecting the Scope and Level of Review.

- This study is not expected to contain influential scientific information nor be a highly influential scientific assessment.
- The study is unlikely to involve novel methods, present complex challenges to interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing ecosystem restoration practices.
- The final FR/EA and supporting documentation will contain standard engineering, economic, and environmental analyses and information.

- The study will have interagency interest and require close coordination with State Historic Preservation Office (SHPO) and Native American Tribes.
- The study will include public and stakeholder involvement.
- The expected total project cost will be approximately between $7 million and $30 million.

d. Life Safety. In accordance with EC 1165-2-214, a Type I IEPR is required for any project where potential hazards pose a significant threat to human life (public safety); the Federal action is justified by life safety; or the failure of the project would pose a significant threat to human life, (i.e. when life safety issues exist). The project will not pose a threat to life and safety.

e. In-Kind Contributions. Products and analyses provided by the non-Federal sponsor as work in-kind services are subject to DQC and ATR.

4. DISTRICT QUALITY CONTROL

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. This is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. The Mobile District shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and MSC.

a. Documentation of DQC. Non-Project Delivery Team (PDT) members and/or supervisory staff will conduct DQC for major draft and final products, including products provided by the non-Federal sponsor as in-kind services, after PDT review of those products. A Quality Control Plan (QCP) addressing DQC is included in the study PMP.

The conclusions/agreements reached should be documented, with copies retained by each participant and distributed to the ATR Leader and the PDT Leader. The documentation shall become part of the project technical review file.

The review team member shall prepare the memorandum that shall become part of the review team's records. Specific issues raised in the review shall be documented in a comment, response, discussion, action required, action taken and, if appropriate, lessons learned format. Unresolved differences between the PDT and review team members shall be documented, along with the basis for the functional Chief's decision on the issue. The software system DrChecks^{TM} will be used for DQC. These reviews shall be completed prior ATR and major planning decision points so that the technical results can be relied upon in setting the course for further study activities.

b. Products to Undergo DQC. All products are subject to DQC. The draft and final FR/EA (decision document), including feasibility level design of the recommended plan and all technical appendices, will undergo DQC prior to release from the District

for external review (i.e. ATR and Public and Policy Review). Technical products subject to ATR prior to use in the study were identified at the Alternative Milestone. DQC will be complete and closed out before external reviews are initiated.

c. Required DQC Expertise. Required expertise for DQC will include senior experienced staff from Plan Formulation, Economics, Hydrology and Hydraulics, Environmental and Cultural Resources, Cost Engineering, Geotechnical and Soils Engineering (if needed), Civil Design (if needed), Real Estate, and Office of Counsel. A goal will be the establishment of an informed review team with full accountability to maintain objectivity. To ensure this objectivity, the members of the DQC review team must be independent from those who perform the work. DQC reviewers will need to have expertise similar to that outlined for the ATR team in Table 1.

5. AGENCY TECHNICAL REVIEW

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR Lead will be from outside the home MSC.

a. Products to Undergo ATR. All products used in this study will undergo ATR. ATR will be conducted seamlessly, and the ATR team will be engaged at the beginning of the study during the Charette. Initial study documents include the report synopsis, risk register, and decision management plan. Later documents include the draft report and including NEPA documents and supporting technical appendices or memoranda. Where practicable, technical products that support subsequent analyses will be reviewed prior to being used in the study and may include: hydrology and hydraulics, geotechnical investigations, economic, environmental, cultural, and social inventories, annual damage and benefit estimates, cost estimates, etc.

b. Required ATR Team Expertise. The team will be formed of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT. The team may consist of as many as 11 reviewers (Table 1). Reviewers should be experienced in reviewing products resulting from risk-informed decision making in the SMART Planning process. Not all reviewers will be needed for every review stage. For instance, review of a Real Estate product will not be needed for the without-project documentation. ATR team members will be included in Attachment 1. All Engineering and Construction reviewers are required to be listed in the Corps of Engineers Reviewer Certification and Access Program (CERCAP) Database per ECB 2013-28, Use of Certified Engineering and

Construction (E&C) Community of Practice (CoP) Members for Agency Technical Reviews (ATRs) on Civil Works Projects.

Table 1: Agency Technical Review Team

Discipline	Expertise Needed for Review
ATR Lead	The ATR lead shall be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should have the skills and experience to lead a virtual team through the ATR process. The ATR lead should also be a senior water resources planner with experience in formulation, evaluation, and selection of alternatives for ER projects.
Plan Formulation	The planning reviewer shall be a senior water resources planner with experience in ecosystem restoration planning. Experience with habitat connectivity is desired.
Environmental Resources	The reviewer shall have extensive experience with environmental evaluation and compliance requirements using the "Procedures for Implementing NEPA" (ER 200-2-2), national environmental laws, applicable Executive Orders, and other Federal planning requirements for Civil Works projects. Specific experience is needed in urban ecosystem restoration. Familiarity with development and application of ecosystem benefits models.
Cultural Resources	This reviewer (i.e., Archaeologist) shall have extensive experience with the Southeast, cultural resource survey methodology, area of potential effects, Section 106 of the National Historic Preservation Act, and state and Federal laws/Executive Orders pertaining to American Indian Tribes.
Hydrology and Hydraulics	The reviewer shall be proficient with river hydraulics (urban experience preferred), HEC-GeoRAS, HEC-RAS, HEC-HMS and associated one and/or two-dimensional models, floodplain delineation, hydrologic statistics, sediment transport analysis, channel stability analysis, risk and uncertainty analysis, and other closely associated technical subjects.
Geotechnical Engineering and Soils	The Geotechnical reviewer shall be familiar with sampling and laboratory testing, channel/embankment stability and seepage analyses, planning analysis, and a number of other closely associated technical subjects.

Table 1 (continued): Agency Technical Review Team

Discipline	Expertise Needed for Review
Economics	This reviewer shall have experience with analysis of demographics, land use, and ecosystem benefit assessments using IWR-PLAN; use of RECONS model to address regional economic development associated with a project; discussion of other social effects (OSE) associated with ecosystem restoration; and economic justification of ER projects in accordance with current USACE policy.
Civil Design	The reviewer shall have experience in designing ER measures and alternatives.
Cost Engineering[1]	The Cost MCX/TX will identify this reviewer. They shall have SMART Planning cost estimating experience using required software; working knowledge of ER construction; capable of making professional determinations using experience.
Real Estate/Lands	The Real Estate reviewer shall have experience in development of SMART Planning Real Estate Plans and have experience in real estate fee/easement acquisition and residential/business relocations for Federal and/or Federally-Assisted Programs as needed for implementation of Civil Works projects.
Risk Analysis	The Risk Analysis reviewer shall be an interdisciplinary team member who can ensure that the decision document includes appropriate identification, analysis and written communication of risk and uncertainty.

[1]Coordination with the MCX/TX at Walla Walla District will occur in accord with EC 1165-2-214.

c. Documentation of ATR. DrChecks™ review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

1) The review concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;

2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;

3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and

4) The probable specific action needed to resolve the concern – identify the action(s) that project delivery team staff must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, commenters may seek clarification to then assess whether further specific concerns may exist.

ATR documentation in DrChecks™ will include the text of each concern, the PDT response, a brief summary of the pertinent any discussion points, including any vertical team coordination, and the agreed upon resolution. If a concern cannot be satisfactorily resolved between the ATR Team and the PDT, it will be elevated to the Vertical Team (VT) for further resolution using the policy issue resolution process described in EC 1165-2-214. Unresolved concerns can be closed in DrChecks™ with a notation that the concern has been elevated for resolution.

At the conclusion of each ATR, the ATR Team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including disparate and dissenting views.

ATR may be certified when all ATR concerns are resolved or referred to the VT for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR Team have been resolved (or elevated to the vertical team) for the Draft and Final FR/EA. A sample Statement of Technical Review is included in Attachment 2.

d. Role of ATR Lead. In addition to facilitating ATR of individual study products, the ATR Lead will be involved throughout the study process. The ATR Lead will review all key study management documents (e.g., risk register, decision management plan, RP, etc.); participate in all In-Progress Reviews (IPRs) and milestone meetings; advise the PDT on Ecosystem Restoration planning policy; and recommend if/when to conduct ATR of products other than those included in the draft decision document.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. It is the most independent level of review and is applied in cases meeting certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a

qualified team outside of USACE is warranted. A risk-informed decision, described in EC 1165-2-214, is made as to whether IEPR is appropriate. Panel members are selected using the National Academies of Science policy for selecting reviewers. IEPR panels consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- Type I IEPR. Type I reviews are managed outside the USACE and are conducted on project studies. Panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analyses, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, and any models used in the evaluation of environmental impacts of proposed projects. Type I IEPR covers the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214.
- Type II IEPR. Safety Assurance Review is managed outside the USACE and is conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Panels will review design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. Reviews shall consider the adequacy, appropriateness, and acceptability of design and construction actions in assuring public health, safety and welfare.

a. Decision on IEPR. EC 1165-2-214 criteria were used to assess the risk of not conducting IEPR. Each criteria is assessed below:

- The project is not likely to involve significant threat to human life;
- The NEPA document will be an EA;
- The total project cost (including mitigation) is not likely to be greater than $30 million;
- The Governor of Georgia has not requested peer review by independent experts; and
- It is not anticipated that the public, including scientific or professional societies, will be asked to nominate potential external peer reviewers.

On 20 September 2016, the HQUSACE Model Certification/IEPR Review Panel endorsed Mobile District's request for exclusion from the requirement to conduct Type 1 IEPR. The District anticipates HQUSACE approval of the IEPR exclusion request.

b. Products to Undergo Type I IEPR. Not applicable

c. Required Type I IEPR Panel Expertise. Not applicable

d. Documentation of Type I IEPR. Not applicable

e. Type II IEPR (SAR). Not applicable

7. POLICY AND LEGAL COMPLIANCE REVIEW

Decision documents will be reviewed throughout the study for legal and policy compliance. ER 1105-2-100 Appendix H provides guidance for policy and legal reviews. These reviews culminate in determinations that report recommendations and supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

8. COST ENGINEERING REVIEW

All decision documents shall be coordinated with the MCX/TX at Walla Walla District. The MCX/TX will assist in determining ATR Team expertise, and in developing the review charge(s). The center will provide the Cost Engineering ATR certification. The RMO is responsible for coordination with the MCX/TX.

9. MODEL REVIEW AND APPROVAL

EC 1105-2-412 mandates using certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are defined in the EC as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC and ATR.

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use in studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC and ATR.

a. Planning Models. The following models may be used to develop the decision document:

Table 2: Planning Models

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
IWR-Planning Suite	This software assists with alternative plan formulation and comparison. While IWR-PLAN was initially developed to assist with environmental restoration and watershed planning studies, the program can be useful in studies addressing a wide variety of problems. IWR-PLAN assists with plan formulation by combining solutions to problems and calculating the additive effects of each combination, or "plan." IWR-PLAN assists with plan comparison by conducting cost effectiveness and incremental cost analyses, identifying the plans which are the best financial investments and displaying the effects of each on a range of decision variables.	Certified
RECONS (Regional ECONomic System)	This is a Corps model developed to assess the Regional Economic Development (RED) project impacts. The model will be used to support discussion of the RED benefits associated with project implementation. The model will estimate the impacts to the local economy, in terms of income, employment and tax revenues, resulting from project construction.	Certified
Proctor Creek Ecosystem Model	The PDT is developing a model for initial screening of stream reaches to produce quantitative and qualitative habitat outputs for alternatives analysis.	Certification Needed

b. Engineering Models. The following models may be used to develop the decision document:

Table 3: Engineering Models

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-HMS (Hydrologic Modeling System)	This system simulates the complete hydrologic processes of dendritic watersheds. It includes many traditional hydrologic analysis procedures such as event infiltration, unit hydrographs, and hydrologic routing. It includes procedures for continuous simulation including evapo-transpiration, snowmelt, and soil moisture accounting. Advanced capabilities are provided for gridded runoff simulation using the linear quasi-distributed runoff transform (ModClark). Supplemental analysis tools are provided for parameter estimation, depth-area analysis, flow forecasting, erosion and sediment transport, and nutrient water quality.	H&H Community of Practice (CoP) Preferred Model

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-RAS (River Analysis System)	This program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without and with-project conditions along the PC.	H&H CoP Preferred Model
HEC-GeoRAS	This is a set of procedures, tools, and utilities to processing geospatial data in ArcGIS using a graphical user interface	H&H CoP Preferred Model
Seep/W (if needed)	Seep/W is a finite difference seepage modeling tool. It extimates exit seepage gradients due to channel loading and estimates pore pressures used in the seepage analysis. Tool inputs include cross section geometry and hydraulic boundary conditions, as well as soil layer hydraulic conductivity (including anisotropic ratios, and material property orientation).	Geotechnical CoP Recommended
Slope/W (if needed)	Slope/W calculates slope stability factors of safety using limit equilibrium methods. Cross section geometry, soil engineering properties and pore water pressures (calculated from Seep/W) are required inputs. The program uses an iterative approach to evaluate 1,0000s of potential slip surfaces that meet input criteria. It reports the surface with the lowest factors of safety.	Geotechnical CoP Recommended
MCACES/ Mii	Mii is a detailed software application used to estimate costs of alternatives and recommended plans.	Enterprise model

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. ATR will be conducted seamlessly throughout the study. After review of the Draft Report, following the Tentatively Selected Plan milestone scheduled for JUN 2017, the ATR Lead will prepare the ATR Review Report. The tentative feasibility study schedule is shown in Table 4 below. The ATR schedule is presented in Table 5. The current estimate for ATR is $50,000. The cost will be determined with the PCX and ATR Team.

Table 4: Milestone Schedule

Milestone	Timing
Tentatively Selected Plan (CW262)	22 JUN 2017
Agency Decision Milestone (CW263)	5 SEP 2017
Division Commander's Transmittal (CW260)	18 APR 2018
Civil Works Review Board (CW245)	17 JUN 2018
Chief's Report (CW270)	17 SEP 2018

Table 5: Schedule and Cost for Agency Technical Review

Task	Date	Cost
ATR of draft FR/EA Prior to Agency Decision Milestone (ADM)	JUN 2017	$25,000
ATR of final FR/EA (After ADM and Feasibility Level Design)	MAR 2018	$25,000

b. Model Certification/Approval Schedule and Cost. At this time, the Proctor Creek Ecosystem Model will be undergoing Planning Model Approval for use. A separate model review plan is being developed for review of this model. Coordination with the ECO-PCX during the model development process is ongoing. The model is being developed in two phases. Phase 1 was used for the initial screening of reaches and an informal cost effective incremental cost analysis. Phase 2 will have more refined metrics to develop habitat output in both terms of quantity and quality.

11. PUBLIC PARTICIPATION

The public is invited to comment directly to the PDT through informal and formal public scoping meetings, workshops/open houses, and public review comment periods. This includes a public review of the draft FR/EA. Public review occurs concurrently with ATR, IEPR, and HQUSACE policy reviews. Workshops will be held during the public and agency review period. Formal State and Agency review occurs after a Civil Works Review Board. Upon completion of the review period, comments will be consolidated in a matrix and addressed. A summary of comments and resolutions will be included in a Public Involvement Appendix. This RP will be posted to the District web site after MSC Commander approval.

12. REVIEW PLAN APPROVAL AND UPDATES

The South Atlantic Division Commander has authority to approve this plan. Commander approval reflects vertical team input (District, MSC, RMO, and HQUSACE) as to the appropriate scope and level of review for the decision document. The RP is a living document and may change as the study progresses. The Mobile District is responsible for keeping the RP up-to-date. Minor changes to the RP after MSC Commander approval will be documented using Attachment 3. Significant changes to the RP (such as scope changes and/or level of review) shall be re-approved by the MSC Commander following the process used for initially approving the RP. The latest version of the RP, along with the Commander's approval memorandum, will be posted on the District's webpage and provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

Questions and/or comments on this RP can be directed to the following points of contact:

- Mobile District: Senior Planner, (251) 690-2608
- South Atlantic Division: Senior Plan Formulator, South Atlantic Division, (404) 562-5226
- Ecosystem Restoration Planning Center of Expertise: Operating Director (504) 862-2310

ATTACHMENT 1: TEAM ROSTERS

PROJECT DELIVERY TEAM

Name	Discipline	Phone	Email
Cheryl Hrabovsky	Project Manager	251-694-3717	Cheryl.l.hrabovsky @usace.army.mil
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Todd Boatman	Federal Integrator	251-690-3143	Todd.h.boatman@usace.army.mil
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Justin McDonald	Engineering Technical Lead	251-690-3314	Justin.s.mcdonald@usace.army.mil
Niklas Hallberg	Hydrology & Hydraulics	251-690-3381	Niklas.u.hallberg@usace.army.mil
Christopher Graham (SAW)	Economics	910-251-4745	Christopher.a.graham@usace.army.mil
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Michael Fedoroff	Cultural Resources	251-690-3215	Michael.P.Fedoroff@usace.army.mil
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Michael Creswell	Office of Counsel	251-690-3340	Michael.w.creswell@usace.army.mil
Dr. Kyle McKay (ERDC)	Environmental Engineer	601-415-7160	Kyle.McKay@usace.army.mil
Dr. Bruce Pruitt (ERDC)	Research Ecologist	706-355-8121	Bruce.Pruitt@usace.army.mil

AGENCY TECHNICAL REVIEW TEAM

Name	Discipline	Phone	Email
TBD	ATR Lead		
TBD	Plan Formulation		
TBD	Environmental Resources		
TBD	Cultural Resources		
TBD	Hydrology & Hydraulics		
TBD	Geotechnical Engineering		
TBD	Economics		
TBD	Civil Design		
TBD	Cost Engineering MCX		
TBD	Real Estate/Lands		

VERTICAL TEAM

Name	Discipline	Phone	Email
David Bauman	Regional Environmental Specialist, South Atlantic Division	404-562-5202	David.J.Bauman@usace.army.mil
Patrick O'Donnell	Senior Plan Formulator, South Atlantic Division	404-562-5226	Patrick.E.O'Donnell@usace.army.mil
Jeff Lin	South Atlantic Division Regional Integration Team, HQUSACE	202-761-4552	Jeffrey.P.Lin@usace.army.mil

ATTACHMENT 2

SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECSION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *<type of product>* for *<project name and location>*. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209 and, subsequently, EC 1165-2-214. During the ATR, 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 analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing U.S. Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks[sm].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

SIGNATURE _____ _____

Name Date
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ _____

Name Date
Review Management Office
Representative
Office Symbol

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division
Office Symbol

[1] Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

ATR	Agency Technical Review
DQC	District Quality Control
EA	Environmental Assessment
EC	Engineer Circular
ECO-PCX	National Ecosystem Restoration Planning Center of Expertise
ER	Engineer Regulation or Ecosystem Restoration
FR	Feasibility Report
HQUSACE	Headquarters, U.S. Army Corps of Engineers
IEPR	Independent External Peer Review
IPR	In-Progress Review
MCX	Mandatory Center of Expertise
MSC	Major Subordinate Command
NEPA	National Environmental Policy Act
PCX	Planning Center of Expertise
PDT	Project Delivery Team
PMP	Project Management Plan
QA	Quality Assurance
QCP	Quality Control Plan
RED	Regional Economic Development
RMC	Risk Management Center
RMO	Review Management Organization
RP	Review Plan
SAR	Safety Assurance Review
SET	Scientific and Engineering Technology
USACE	U.S. Army Corps of Engineers
VT	Vertical Team