U.S. Army Corps of Engineers

Civil Works Planner Capability

TASK FORCE REPORT (Training and Development)

9 January 2001

Civil Works Planning Capability

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Summary of Recommendations

Planning Capability Task Force
(Training and Development)

Planners' Curriculum

1) That the planners' "Training and Development Guide" of training courses and workshops, and development activities as presented in this Task Force Report be adopted. This guide is designed to assist the commanders in serving as a roadmap for planner development during various stages of their career, and to provide a common body of knowledge and experience for all engaged in the technical planning function.

   Approved_____ Disapproved_____ Discuss_____

Plan Formulation Workshop

2) That the plan formulation workshop concept design presented in this Task Force Report be developed and delivered to the field on a rapid response basis starting in FY 01.

   Approved_____ Disapproved_____ Discuss_____

Planners' Web-Site

3) That a "Planners' Resource" web-site be developed by HQUSACE/IWR based on the design concept and implementation plan presented in this Task Force Report, and that this web-site have required funds and manpower committed at HQUSACE to its ongoing update and maintenance. This resource web-site is to be placed on a central HQ or other appropriate web.

   Approved_____ Disapproved_____ Discuss_____

Planners' "Core" Curriculum

4) That the Planners' core curriculum be composed of the following courses and workshops:

   - Civil Works Orientation;
   - Introduction to Planning;
   - Planning, Principles and Procedures;
   - Plan Formulation Workshop;
   - Economic Analysis for Water Resources Planning;
   - Environmental Analysis for Water Resources Planning;

- Hydrologic Engineering for Planners;
- Consensus Building for Water Resources Planning;

And that beginning in FY01 the development and delivery of these courses and workshops will be on a rapid response basis as described in this Task Force Report.

Approved_____ Disapproved_____ Discuss_____

Novice Orientation Plan

5) That the "Novice Orientation Plan," as detailed in this Task Force Report, be generally adopted for Corps wide implementation in FY 01 for all novice planners. Commanders will assure district support of the Novice Orientation Plan and that this Plan is included in Individual Development Plans (IDPs), as applicable. All formal training required by this plan will be centrally funded.

Approved_____ Disapproved_____ Discuss_____

Planner Assistantship/Expert Planner Development Program

6) That the Expert Planner Development Program, as detailed in this Task Force Report, be centrally funded and pilot tested in FY 02. Based on an evaluation of the pilot program's effectiveness in meeting stated objectives and after making required adjustments to the program, as necessary, initiate full implementation of the Program in FY03.

Approved_____ Disapproved_____ Discuss_____

Planners' Training and Development Proponent

7) That a planners' "Training and Development" proponent be formally identified on HQUSACE staff. This proponent will be responsible for planning training and development advocacy, program administration, course development and delivery, and sustainment of overall program. Responsibilities are to include, in coordination with MSC counterparts, ensuring the freshness of all course/ workshop materials.

Approved_____ Disapproved_____ Discuss_____

Central Funding of Training and Development

8) That the proposed planner's training and development be centrally funded for: a) the core curriculum course development and updates; b) rapid response delivery of core curriculum courses; and c) the development and

implementation of the Planner Assistantship/Expert Planner Development Program as detailed in this Task Force Report. Estimated program funding requirements for FY01 through FY04 are as detailed in this Task Force Report. These funds are to be reprogrammed at HQUSACE from available funding sources in FY 01 and FY 02, and budgeted for as part of the Corps Civil Works appropriations in subsequent years.

Approved_____ Disapproved_____ Discuss_____

Training and Education Partnership

9) That a formal partnership with the Universities Council on Water Resources (UCOWR) be established for the purpose of addressing, in part, "Need Based" training requirements and opportunities; developing a water resources planning degree and/or certification program; establishing an academic advisory committee; promoting and expanding Corps Co-op program; and sharing of resource information through web-site linkages, etc….

   And that a Corps Training and Development Advisory Board for Planning (including members from HQUSACE, IWR, and MSC's) be formed by the HQUSACE Chief of Planning to facilitate further coordination with UCOWR in exploring and developing training and development opportunities…

   And that a Partnering Agreement, as included in this report, be executed between the Corps and UCOWR.

   Approved_____ Disapproved_____ Discuss_____

Policy Roadshow

10) That the HQUSACE re-institute the "Policy Roadshow," to be presented annually to each MSC.

   Approved_____ Disapproved_____ Discuss_____

Funding Strategy for Use of FY00 Carryover Funds

11) That the Rapid Response Funding Strategy for use of available FY 00 carryover funds, as presented in this report, be adopted for immediate execution to address short-term training and development needs in FY01.

Approved_____ Disapproved_____ Discuss_____

GS-13, Technical Specialists

12) That HQUSACE develop standard GS-13, non-supervisory, technical specialist job descriptions for key planning function positions, to include plan formulation, economics, and environmental, for district planning staff.

Approved_____ Disapproved_____ Discuss_____

Co-op Program

13) That HQUSACE develop an informational pamphlet on the student Co-op Program for distribution to supervisors, universities, and interested students.

Approved_____ Disapproved_____ Discuss_____

Executive Oversight Committee

14) That the HQUSACE Chief of Planning create an Oversight Committee (including members from HQUSACE, IWR, MSCs, and Districts) to provide an annual follow-up assessment to HQUSACE executive staff and MSC Planning Chiefs, for at least the next three years, on the progress being made on implementation of the above Task Force recommendations.

Approved_____ Disapproved_____ Discuss_____

Acknowledgements

The task force acknowledges the following individuals for their assistance with task force efforts:

-Corps Planning Chiefs for devoting significant time in providing their views to the task force.
-Messrs. Harry Kitch, HQUSACE; Ken Orth, CESPD; Curtis Flakes, CESAM; and Wilbert Paynes, CESAM for their numerous suggestions and input.
-Mr. Jim Comiskey, IWR, for analysis of planning chief views.
-Mr. Rich Whittington, IWR for development of the planners web survey.

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Executive Summary

This report of the Civil Works Planning Capability Task Force, established by the Principle Assistant for Civil Works to examine planning capability issues, is submitted in response to the task force's 7 July 2000, charter. The primary focus of the task force has been to develop recommendations on the training and development of planners. While the task force was encouraged to look at a broad range of factors that might impact on planning capability, it was directed by the task force Steering Committee to focus on three specific items relating to training and development: development of a Planner's curriculum; development of a Basic Plan Formulation Course; and development of a Planner's Resource Library Web-site. In addition to these specific items, the task force has developed a detailed, overall strategy, including funding proposals, to enhance Civil Works planning capabilities through restructuring it's training and development programs to be more cost effective, timely, and deliverable locally.

The Task Force Co-Chairs were Mr. Larry Donovan, CESWD, and Dr. Mark Dunning, IWR. The field level Team included: Robert Mooney, CESPD; Martin Hudson, CENWP; Teresa Kincaid, CEMVR; Raymond Gesling, CELRD; Roger Setters, CELRL; Carl Borash, CEPOA; Larry Cocchieri, CENAD; Frank McGovern, CESAD; Mark Gmitro, IWR; and Russ Rangos, CECW-PD. The task force recommendations are presented and discussed in Chapter 6 of the report.

A summary of the field team's observations are discussed below.

The Corps of Engineers is the steward of the nation's water resources. The demands on these resources are many and varied, and we must be capable of addressing these demands in an orderly and professional manner. This is an activity that can not be effectively "contracted out", but must be led and managed by a highly skilled professional work force. At the heart of that work force is the "planner", a person who is well versed in the problem solving arena and is capable of creating solutions to water resources problems that meet the test of Federal interest while satisfying the needs of our local partners. Despite the importance of planning, the Corps is losing its planning capability. Planning expertise is vested in an alarmingly small number of people within Civil Works, and a significant fraction of our remaining experienced, senior planners will reach retirement age in the next five years.

In addition, although not specifically addressed by the task force, some districts' planning function have been weakened through reorganization, as well as through the loss of planning expertise to other functional elements and organizations within the districts. Many Districts do not have solid career paths for planners within the planning function. Grade levels for senior planners are not on a par with those in other technical specialties. Districts are finding it increasingly difficult to attract and keep new planners.

As such, we are inadvertently positioning ourselves to be unable to sustain a quality planning process into the future. Unless action is taken, and quickly, our planning capability is likely to reach a point where we will be unable to remain responsive to our nation's water resources challenges. The consequences of inaction for the Corps and for attending to the Nation's water resources needs would be grave.

Improving planning capability requires focused attention in several key areas: hiring new planners; providing enhanced training and mentoring; building a solid career ladder for planners; creating grade parity for planners with Project Management and other technical functions; and improving our planning processes and procedures. This report lays out a comprehensive set of measures that, when implemented, will provide a key part of a sound foundation for assuring that the Corps is capable of fulfilling its water resources responsibilities for years to come.

The task force has identified several opportunities and management measures that can be implemented to address (1) immediate training and development, and other capability improvement needs; and (2) the development of a long - term training and development strategy. It is our recommendation that these measures be approved, and implemented as quickly as possible.

Larry W. Donovan, P.E.
Chief, Planning and Policy Division
Southwestern Division

Dr. Mark Dunning
Chief, Program Analysis Division, Institute for Water Resources

CHAPTER 1

Introduction

Purpose and Scope

This report presents the findings and recommendations of the Civil Works Planning Capability Task Force. This task force was established by the Principal Assistant for Civil Works on 7 July 2000. As described in its charter (Appendix A), the task force was formed in response to a growing concern among Civil Works leaders that Corps planning talent is diminishing, and that a continuation of this trend will impair the Corps' ability to meet its water resource responsibilities.

While the task force was encouraged to consider a broad range of factors that might impact on planning capability, it was directed to focus primarily on the training and development of Civil Works planners. Two primary types of recommendations were directed by the charter:

- Near term improvements in training and development, and other capability improvement actions that can be accomplished in FY 01 and 02, and

- A long-term training and development strategy focused on curriculum, delivery mechanisms, and resource requirements.

Task Force Structure

The planning capability task force consists of a field level team and a steering committee (see Appendix D for membership). The field level team is responsible for developing information and recommendations. The steering committee has focused task force efforts and identified priorities among recommendations for further development.

Task Force Activities

The task force has undertaken the following activities to develop the recommendations presented in this report:

- **Late June '00:** Formation of task force; initial field level team conference call to discuss mission and scope.
- **July '00:** Survey of all Civil Work planning MSC and district chiefs.

- **August 2-3, '00:** Field level team meeting #1, Chicago, Illinois. Reviewed past studies on planning capability; EIG report; results of planning chief surveys. Formed sub-teams.
- **August '00:** Initiated web survey of Civil Works planners to obtain views about planning capability issues and training needs.
- **August 31, '00:** Steering committee meeting held in conjunction with the MSC planning chief meeting, Hood River, Oregon. Task Force received guidance to focus efforts on three high priority areas: planners' curriculum, basic plan formulation short course, planners' resource web-site.
- **September 28, '00:** Met with representatives from the Universities Council on Water Resources (UCOWR), Alexander, Virginia, to discuss potential for partnering with this group.
- **October 3-4, '00:** Field level team meeting #2, Portland, Oregon. Review of high priority materials produced and further assignments to sub-teams.
- **November 11, '00:** Met with UCOWR Board of Directors, San Antonio, Texas, to discuss partnering opportunities.
- **November 28-29, '00:** Field level team meeting #3, Dallas, Texas. Developed final task force recommendations and reviewed sub-team products.
- **December '00:** Review of task force report by steering committee.

Information Sources

In preparing its recommendations the task force relied on the following sources of information:

- EIG Report on Planning for Civil Programs, July '00. This report focused on the organization of the planning function, as well as career paths, training and other career enhancement opportunities for planners. This report's recommendations are provided in Appendix B.

- Planning Chief Surveys: Civil Works' Planning Chiefs were asked to respond to a series of 13 questions focused on their perceptions about Corps' planning capability, and the needs of the planning workforce. A summary of responses, as well as verbatim responses is presented in Appendix E.

- Planners' Web Survey: Civil Works planners were invited to provide their views on Corps' planning capability, and training and development needs. A total of 421 planners responded to the survey. Summary responses are presented in Appendix F.

- 1983 Civil Works Planners Training – Division Planning Representatives' Task Force Report. This report presents findings of a

planning improvement initiative to recommend training to support Corps' mission requirements at that time.

- Other Material. In the course of its research the task force found similar efforts underway in other federal agencies, and organizations. It is apparent that there is a widespread anticipation of imminent loss of organizational capability as significant fractions of the workforce prepare to retire. There is also increasing recognition that aggressive hiring, and training and development strategies will be needed to fill this void. Appendix P cites material from other agencies concerned with this problem.

Other Related Efforts within the Corps of Engineers

There are a number of on-going efforts that touch on assessing and/or improving the technical capability of the Corps workforce. These efforts include:

- Capable workforce pilot, NWD: This pilot study was established by the HQUSACE Capable Workforce Team to focus attention on developing strategies to ensure that the Corps has the workforce with the right skills for future Corps missions. NWD is serving as the test bed to develop the approach.

- CP 18 ACTEDS Update: Work has begun to update the now out-of-date 1980's era ACTEDS plan for Engineers and Scientists. Military Programs Directorate is managing the effort.

- Project Management Business Process Curriculum: A comprehensive training and development strategy is being developed by a task force under joint Military Programs and CW leadership. The intent is to provide the entire Corps workforce with the appropriate knowledge, skills and abilities to work in the PMBP. One member of the Planning Capability Task Force also serves on the PMBP task force.

- USACE Learning Advisory Board: Newly formed executive board with the mission to develop a "learning culture" within USACE.

Structure of the Task Force Report

Chapter 2 of the report presents background information on planning and planning functions. Chapter 3 presents findings about critical CW planning training and development problems, needs and opportunities. Chapter 4 presents guiding principles and other considerations that the task force employed to help develop potential ways of addressing the problems and needs. The range of potential actions considered by the Task Force is described in Chapter 5, while Chapter 6 presents and discusses the task force recommendations.

Chapter 7 addresses the relationship of Task Force recommendations to “key” planning initiatives. Chapter 8 summarizes the Task Force products, while Chapter 9 concludes with the strategy and funding requirements for implementing the recommendations.

CHAPTER 2

Background Information

In accordance with the Task Force Charter (Appendix A), it is noted that "the ability of our Civil Works program to continue to make meaningful contributions to satisfying our Nation's unmet water resources needs depends on having critical planning capability and specifically a highly capable cadre of water resources planners. Field Planning Chiefs have expressed concern that the U.S. Army Corps of Engineers plan formulation capability is diminishing as experienced planners retire or leave the planning function. There is increasing recognition that the problem will become more serious as a significant portion of our experienced planners reach retirement age in the next five years, while it has become increasingly difficult to attract and retain new planners."

Because planning capability is essential to a healthy Civil Works program, the Task Force was established to examine planning capability issues.

What is Planning?

- Planning offers a structured, rational approach to solving problems.

- For the Civil Works program, everything begins with planning. Planning is the start of the "pipeline" for addressing water resources needs. Without fruitful planning, creative, cost-effective solutions to these needs cannot be found. All projects start with planners answering the questions: "Can we?" and "Should we?" Planners help decision-makers identify water resources problems, conceive solutions to them, and compare the importance of the inevitable conflicting values inherent in any solution.

- Planning is a creative process requiring unequal measures of experience, analysis, intuition and inspiration. The more the process is used the better one gets at solving complex problems. Planning typically involves a very broad knowledge base and operates in a creative, dynamic manner.

- Planning is not a solitary pursuit. Planning is best done by an interdisciplinary team. Good planning involves the knowledge, skills and insights of professionals from many of the natural, social and engineering sciences.

- Planning requires men and women with knowledge, imagination, and skills, and a commitment to critically examine and act on objectives concerned with the improvement of the human condition. Planners must respond to complex and interrelated processes of social, economic, cultural, environmental and political change at every scale from the local to the global. Their specialized expertise derives from their ability to relate scientific and technical knowledge to action in the public domain. No one discipline prepares a person to be a planner. Planning is intrinsically an interdisciplinary process.

- Planning is not report writing or the technical work done by experts working on a planning study. Great hydrology, great economics, great biology, or a great anything is not planning. Great planning weaves these inputs into a successful solution.

- Planning comprises all the work associated with the six-step planning process:
  - Specify Problems and Opportunities
  - Inventory and Forecast Conditions
  - Formulate Alternative Plans
  - Evaluate Effects of Alternative Plans
  - Compare Alternative Plans
  - Select Recommended Plan

Planning Functions

In trying to develop a strategy to maintain the Corps' planning capability and technical expertise, it is important to first identify those functions and knowledge, skills and abilities (KSAs) that are essentially unique to the Planning process and are important to maintaining the Corps' planning competency. A general summary of the functions of the traditional planning elements of plan formulation, economics, environmental resources and public involvement are shown in the following list. More details on the key planning KSAs that form the foundation for the technical planning function are presented in Appendix G.

<u>Plan Formulation</u>

- Lead Planning Process
- Set Planning objectives
- Define existing condition
- Define future with and without project conditions
- Problem identification

- Development of alternatives
- Trade off analysis
- Cost Sharing
- Project Authorization Document, Division Commanders Notice, Chief of Engineer's Report
- Technical Integration (integrating the various technical products into a report and project)
- Facilitate review process and issue resolution.

Economics

- Risk Analysis
- Optimization
- NED Analysis
- Cost Allocation
- Regional Economic Analysis
- Financial Capability
- Damage Assessment
- Social Impact Analysis
- Project Accomplishments (benefits)

Environmental

- Environmental Analysis (EA)
- Environmental Impact Analysis (EIS)
- Finding of No Significant Impact (FONSI)
- Record of Decision (ROD)
- Endangered Species Act, Section 7 Consultation
- HEP Analysis
- Cultural Resource (SHPO, etc.)
- Native American Support
- Government to Government consultations with Native Americans
- Research (fish, etc.)
- USFW Coordination Act
- Compliance and Documentation required by State laws.

Public Involvement

- Consensus Building

- Coordination with public, resource groups and other agencies
- Conduct of public meetings and workshops
- Strategic Communications
- Information Brochures
- News Releases

Maintaining Planning Capabilities

Maintaining, as well as strengthening the Corps' planning capability requires building the planning career field so the Corps can attract good young talented recruits, train them and develop them, and then hold on to them as they gain the experience to really help the Corps address the unmet water resource needs of the nation. It is crucial that we invigorate our Civil Works planning efforts. This would involve enhancement of the role of plan formulation in the Project Delivery Team Process. Further, it involves ensuring that we maintain technical capabilities in all the planning functional areas.

Bottomline… it is important that the people who are in planning know how to plan.

CHAPTER 3

Problems, Needs, and Opportunities

Chief sources for identifying problems, needs and opportunities that impact on planning capability included the EIG report on planning (Appendix B), the planning chief survey (Appendix E), and the planner's web survey (Appendix F). Planning capability was defined by the task force as ***the ability to formulate solutions to water resources problems in accordance with authorities, regulations, and guidance and to prepare the appropriate reports and documents to secure authorization and funding for resultant water resources projects.*** Below is a brief discussion of the key problems, needs and opportunities that impact on planning capability considered by the task force.

- **Erosion of planning talent base due to retirements and migration to project management (and other functional elements) by planners.**

Planners are in overwhelming agreement that our planning capability has gotten worse. Three of four web survey respondents voice this view, as did 22 of 29 planning chiefs responding to our survey. The primary causes voiced for the decline of capability are the retirement of experienced planners and the migration of experienced planners out of the planning function to other parts of the Corps – primarily project management – to obtain higher grade levels. The top technical grade for planners is most often GS-12, while it is possible to become a GS-13 project manager in all districts. It would also appear that planners' concerns about loss of experienced personnel to retirement are well founded. The planners web survey results suggest that almost one in three planners is over 50 years of age, and could thus potentially retire within the next five years. In the web survey, 42 percent of those rating themselves as "expert" planners could retire within five years. When looking only at Corps divisions the figure is even higher. Over 60 percent of those rating themselves as expert planners could retire within five years. If immediate action is not taken to accelerate the development of apprentice and journey level planners, a major gap in high level planning expertise will exist in the coming years.

Planning chiefs believe that plan formulation capability is the one technical skill area that is in most need of attention. They point out that plan formulation requires the ability to creatively find solutions to pressing water resources problems and needs through the skillful combination of knowledge of policy options, technical analysis, and public consensus building activities. Unless actions are taken to build up this capability significantly, our ability to address national water resources needs will likely be severely constrained. Other planning function technical capabilities that were widely viewed as needing

attention included economic analysis, environmental analysis, and consensus building.

- **Reduced recognition of planning's importance in the project development process.**

Planners were concerned that the critical importance of their function in the project development process is not well understood by others on the project development team (PDT) or by district executives. Lack of understanding may translate into lack of support for planning points of view, and ultimately a reduction in the quality of planning products and loss of experienced planners out of frustration. There is concern that with increased emphasis on more rapid project delivery the planners' role in plan formulation of helping to define a Federal interest and looking out for the taxpayer is at odds with other emphases on rapid project delivery and pleasing the local sponsor. While these often competing objectives have always been part of the project development process, their successful management and integration depend on having a common base of understanding of the validity and importance of all objectives by executive leadership and all on the PDT.

It was pointed out by several survey respondents that district leadership and PMs may not have had much background in civil works, or in the planning function. Without this background, and without some sort of systematic exposure to key concepts such as the Federal interest in water resources development, and the Principles and Guidelines evaluation methodology, it becomes difficult for leadership to balance among the competing national and local perspectives that is required in project development.

Another aspect of this problem often noted is a confusion of roles and responsibilities between plan formulators and project managers. Plan formulation is itself a technical discipline similar to geo-tech, H&H, or other engineering, economic or environmental work. However, PMs have sometimes taken on the role of project formulator as part of their duties. Planners maintain that a PM cannot successfully deal with his/her role of overall integrator and this added significant responsibility. Secondly, many PMs have not been trained to have the technical understanding of the plan formulation function, and do not give adequate attention to Principles and Guidelines analysis, and NED evaluation requirements.

- **Difficulties in obtaining needed training in a timely and cost effective fashion.**

Planning chiefs believed that development of critical planning skills needed to be provided faster, cheaper and locally. Training needs to occur on a just-in-time basis and be relevant to a person's current duties and project responsibilities.

Since most training is paid for out of district overhead funds planning chiefs were most interested that training be done locally to be as cost effective as possible.

While most planning chiefs supported the concept of the Planning Associates program as a means of building advanced plan formulation capability, most believed that trying to bring back such a program would be too expensive. They would generally support a more abbreviated program that addresses the specific needs of their districts or regions. Planning chiefs and those responding to the planners web survey also believed that on-the-job training and mentoring were the most effective ways of enhancing skill development.

- **Uncertainties about the viability of a planning career.**

In the past planners had a well developed career path. A planner started as a novice, and could strive to become Chief of the planning function at a district, MSC or Headquarters. A general development plan was laid out for the planner in the Army Career Program 18 (Engineers and Scientists, Resources and Construction) Army Civilian Training, Education and Development System (ACTEDS) plan. However, today the picture is less clear. Several districts have selected leaders as planning chiefs who had little or no planning experience. This has blocked career progression for planners in those organizations, and communicated a message that planning experience was not critical to directing planning work. Some districts no longer have identifiable planning organizations. In addition, the last ACTEDS plan for CP-18 was completed in the early 1980's, and is out of date.

- **Difficulties in accessing needed planning resources – ERs, PGLs, reference materials, new policy guidance, example reports, etc.**

Planners expressed concern that it was too difficult to access needed technical planning materials. It was noted that while such materials could be found on various headquarters, FOA, MSC and district web pages, materials sometimes conflicted with one another (e.g. different versions of the same ER). In addition, it was pointed out that more inexperienced planners needed help in knowing what questions to ask to be able to find the right resource.

CHAPTER 4

GUIDING PRINCIPLES AND CONSIDERATIONS

Principles / Objectives

The principles set forth in this report reflect the task force analysis of planning problems and needs, as well as suggestions and recommendations made in various sources of information consulted. These sources incluse the findings and recommendations of the EIG Report cited in Appendix B, the results of interviews and other input from District, MSC, and HQ planners, and the Chief's statements of his principles. The following principles were used to formulate the recommended measures.

- Training and development are priority investments which need to be started early and continue throughout the career of the planner.

- Training and development must be available to any member of the planning function who desires it.

- Training and development must be delivered in a manner that challenges, encourages, and motivates planning staff to want it.

- Once in the training and development support system, the planner should not be stymied or kept from advancing because of lack of agency resources or higher priority work.

- Training and development must be available and delivered when and where needed in the most effective manner, with minimal delay and inconvenience.

- Training and development will be provided to a professionally and culturally diverse planning staff in a manner that respects and celebrates such diversity.

- Training and development must be delivered in a flexible manner that serves both the needs of the new planner as well as the longer term needs of the seasoned planner whose goal is a career in the planning function.

- The training, development for the planning function must be able to forecast future directions and evolve and effect change quickly to respond to immediate needs to avoid or minimize crisis.

Methodologies

The recommendations made in this report were formulated using problem identification, formulation, and evaluation principles and procedures common to those used in making water resource investment decisions. Cost effectiveness of initiatives requiring significant investments was of prime concern in formulating and evaluating the recommendations. The task force also recognizes that the current situation and the urgent need for rapid short-term start up costs of implementing some of the recommendations will involve a larger investment at the outset, with more cost effective measures coming on line in the future.

Planner Development Levels

- General. There are 4 levels of planner development addressed in this report: novice, apprentice, journeyman, and expert. These progressive levels mark the professional status and progress of a planner as he/she gains training and experience. These levels do not have discrete, well-defined boundaries determined solely by grade and length of service; rather, these terms are subjective descriptors defined by the knowledge, skills, and abilities of the individual planner.

- Novice Level Planner. The novice is a new member of the organization, inexperienced and untrained.

- Apprentice Level Planner. The apprentice planner is learning a craft under a skilled worker, not quite a beginner, but still requiring close supervision, decreasing in intensity over time.

- Journeyman Level Planner. The journeyman planner is an experienced, competent, and reliable employee who works increasingly independently, but is still under direct supervision. The experienced journeyman is considered to be a fully functioning planner.

- Expert Level Planner. The expert is a highly skilled professional widely recognized for his or her mastery of a particular subject matter area or technical skill. The expert level planner may be a supervisor or work independently with little direct supervision, but is nonetheless viewed and acts as a leader and mentor.

CHAPTER 5

Actions Considered

The task force considered a range of actions to address the key planner capability problems and needs identified. Actions developed were evaluated against the following criteria to determine whether they should be carried forward for further development and recommendation by the task force:

- Cost effectiveness: actions should represent a wise use of resources;
- Practicality: actions should represent the most practical way of achieving a desired outcome, with the least potential for creating unnecessary organizational conflict;
- Within task force mission: actions should target problems within the purview of the task force mission.

The table below presents the actions considered by the task force and their disposition with respect to the above evaluation criteria.

TABLE 5 – 1

Disposition of Task Force (TF) Actions Considered in Response to "Key" Problems / Needs

Summary of Actions Considered	Disposition of Action
Problem: Erosion of plng talent base due to retirements and migration to PM and other functional elements of most experienced planners	
-Develop technical GS-13 planner job descriptions	Outside of TF mission, but carried forward as TF recommendation (#12)
-Develop planners' training and development guide	Addressed by TF (Recommendation #1)
-Develop planners' "core curriculum"	Addressed by TF (Recommendation #4)
-Assign planners training and development proponent responsibilities	Addressed by TF (Recommendations #7 and #14)
-Develop plan formulation workshop	Addressed by TF (Recommendation #2)
-Reinvent Planner Associate Program	Not cost effective, but alternative (expert planner program) concept developed, (Recommendation #6)

Summary of Actions Considered	Disposition of Action
-Develop planner certification program	Practicality problems limit short term do-ability, but will continue to pursue under long term initiative (Recommendation #9)
-Create academic degree program for water resources planners	Practicality problems limit short term do-ability, but will continue to pursue under long term initiative (Recommendation #9)
-Obtain central funding for planners training and development	Addressed by TF (Recommendation #8 and #11)
-Improve recruiting/hiring process and procedures	Outside of TF mission
-Publicize the co-op program	Addressed by TF (Recommendation #13)
-Establish novice development plan	Addressed by TF (Included as part of Recommendations #1 and #5)
Problem: Reduced recognition of planning's importance in project development process.	
-Develop awareness level training for executives, and other PDT members, project sponsors, etc.	Materials already available. Information to be made available to districts and divisions via the Planners' resource web-site (Recommendation #3).
-Clarify roles and responsibilities of PM and planning functions within PDT	Outside of TF mission
-Develop seminar for PDT	Outside of TF mission
Problem: Difficulties in obtaining needed training in a timely and cost effective fashion.	
-Rapid response training delivery – local, just in time	Addressed by TF (Recommendation #4)
-Web-based training modules	Included in development of website, (Recommendation #3)
-Train the trainer approaches for local training	Included in recommendation #4
Problem: Uncertainties about the viability of a planning career path.	
-Update ACTEDS	Planners curriculum, recommendation #1, will be input to this process
-Establish functional planning organization in all districts, MSCs	Outside of TF mission

Summary of Actions Considered	Disposition of Action
Problem: Difficulties in obtaining needed planning resources – ERs, PGLs, reference materials, new policy guidance, models of good reports, etc.	
-Develop planners' resource website	Addressed by TF (Recommendation #3)
-Re-institute policy roadshow	Addressed by TF (Recommendation #9)

CHAPTER 6

Task Force Recommendations

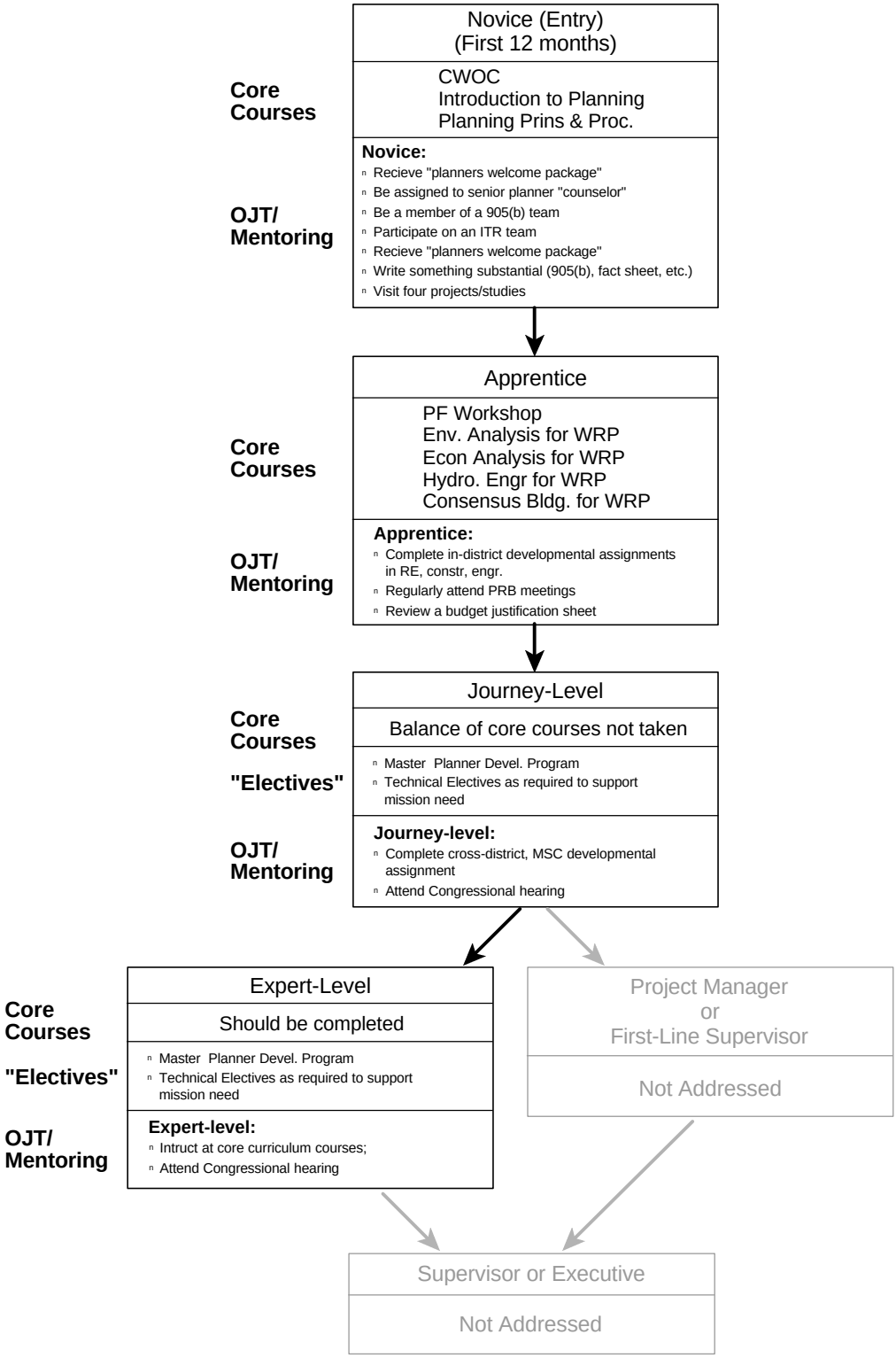
Recommendation (1): Planners' Curriculum

That the planners' "Training and Development Guide" of training courses and workshops, and development activities as presented in this Task Force Report be adopted. This guide is designed to assist the commanders in serving as a roadmap for planner development during various stages of a planner's career, and to provide a common body of knowledge and experience for all engaged in the technical planning function.

Discussion: Future requested civil works projects are likely to be more complex, and involve multiple partners and stakeholders and issues. Experienced, trained planners are required to assess the potential of requested projects and assist our customers and partners in looking beyond the immediate problem to identify the multitude of opportunities, and guiding them through the study initiation process. The planning of water resource projects is not immediately intuitive, and typically is a skill that takes several years to develop. A key component of the development of these skills is the appropriate training at the appropriate time. A core curriculum must be provided for the beginning (novice) and the relatively new (apprentice) planner to provide a basic knowledge of Civil Works planning principles, policies and procedures. In addition, it is equally important that training and development be provided for the more experienced (journeyman and expert) planners to further their training in a specific technical area or planning function.

The purposes of the recommended "Training and Development Guide" are to sustain a high level planning expertise within the Corps of Engineers. The ultimate objectives are to continually improve the ability of the Corps to work efficiently and effectively and thereby continue to serve our customers and partners in meeting the unmet water resource needs of the Nation. This training and development guide supports better service to the Army and Nation in traditional Corps mission areas and provides the foundation for the Corps to be able to better meet new emerging missions and project purposes. It will assure that a cadre of future water resource planners, with a consistent knowledge base in planning principles and procedures, trained in the state-of-the-art planning techniques, is available to support the Corps Project Delivery Process. It will enhance the planners understanding of and improve their contributions to the project delivery process. The training and development guide is shown representationally in Figure 6-1. Appendix G presents a more detailed description of the core curriculum and other recommended training and development activities.

Figure 6-1: Civil Works Planners Training and Development Career Progression Model



Recommendation (2) - Plan Formulation Workshop

That the plan formulation workshop concept design presented in this Task Force Report be developed and delivered to the field on a rapid response basis starting in FY 01.

Discussion: There is widespread concern that Corps planning talent, particularly in the plan formulation function is diminished, and that continuation of this trend will impair the Corps' ability to meet its national resource development responsibilities. There also is increasing recognition that the problem will grow as a significant fraction of our remaining experienced planners will reach retirement age in the next five years.

Plan formulation expertise, which includes an in-depth knowledge of civil works authorities and policies and the ability to apply them responsively to water resources problems, is an essential function and core planning capability. This skill, however, is currently invested in an alarmingly small number of people within the Corps. Therefore, there is an immediate need to capture the skills, knowledge, and experience of our senior planning staff, before they retire, to provide training in plan formulation techniques, to provide insights to lessons learned, and to identify innovative ways to solve problems.

The shortage of skilled lead planners / plan formulators is clearly the most significant challenge for improving the Corps water resources planning capability. The plan formulation workshop addresses this critical problem. It will provide training in the complete plan formulation process, and enable those attending to complete the plan formulation activity for high priority mission areas. Appendix J provides the workshop summary.

Recommendation (3) – Planners' Web-site

That a "Planners' Resource" web-site be developed by HQUSACE/IWR based on the design concept and implementation plan presented in this Task Force Report, and that this web-site have required funds and manpower committed at HQUSACE to its ongoing update and maintenance. This resource web-site is to be placed on a central HQ or other appropriate web.

Discussion: This recommendation provides a "one stop" location to obtain the latest information and planning resources. It responds to planners' concerns that information was hard to find and sometimes inconsistent from source to source. The planners web-site development concept is provided in Appendix I. It includes both the plan for developing the site, as well as a plan and cost for the site's update and maintenance.

Recommendation (4) – Planners' "Core" Curriculum

That the Planners' core curriculum be composed of the following courses and workshops:

- Introduction to Planning;
- Civil Works Orientation;
- Planning - Principles and Procedures;
- Plan Formulation Workshop;
- Economic Analysis for Water Resources Planning;
- Environmental Analysis for Water Resources Planning;
- Hydrologic Engineering for Planners;
- Consensus Building for Water Resources Planning;

And that beginning in FY01 the development and delivery of these courses and workshops will be on a rapid response basis as described in this Task Force Report.

Discussion: The task force strongly believes that a core body of knowledge is necessary for the technical planning function. The primary objective of the core curriculum is to provide for the basic training needed for entry level planners to move to the journeyman level stage of development. The eight workshops and courses forming this core provide exposure to all the critical planning function Knowledge, Skills, and Abilities (KSA) – and broadly relate to the four competencies of the fully functional planner: formulation, economic evaluation, environmental evaluation, and consensus building (see Appendix K). The task force also believes that it is essential that all planners take the core courses, and that this training occur early in a planner's career. It is essential to build capability of the planning workforce quickly because a large fraction of our experienced planners are likely to retire over the next five years. For this reason the task force advocates the use of a rapid response delivery approach described in Appendix K for FY 01 through FY 04. Under this approach each of the core curriculum workshops and courses would be offered at each MSC such that a planner could complete the eight course curriculum within two and one-half to three years without traveling outside MSC boundaries.

Recommendation (5) - Novice Orientation Plan

That the "Novice Orientation Plan," as detailed in this Task Force Report, be generally adopted for Corps wide implementation in FY 01 for all novice planners. Commanders will assure district support of the Novice Orientation Plan and will include the plan in Individual Development Plans (IDPs), as applicable. All formal training required by this plan will be centrally funded.

Discussion: The task force believes that novice planners will benefit from a common, structured developmental experience. The novice orientation plan (see Appendix H) provides a series of experiences that will provide broad exposure to and grounding in key planning KSAs. The plan also provides for systematic mentoring of novice planners by experienced planners.

Recommendation (6) - Planner Assistantship / Expert Planner Development Program

That the "Expert Planner Development Program," as detailed in this Task Force Report, be centrally funded and pilot tested in FY 02. Based on an evaluation of the pilot program's effectiveness in meeting stated objectives and after making required adjustments to the program, as necessary, initiate full implementation of the Program in FY03.

Discussion: The Corps is fast reaching a crisis in its ability to effectively plan projects to meet the water resource needs of the nation. Hiring, training and retention of skilled planners are essential to maintaining this capability. While there are numerous courses that are available through Federal and private sources that are capable of contributing to the development of the planner, none of these specific courses are structured to create a "complete" planner.

The Planning Associates Program that was conducted at the Board of Engineers for Rivers and Harbors (BERH) was designed to imbue the journeyman planner with the skills to become an expert in the field and a leader among other planners. However, this program was terminated in 1995.

The objective of the Expert Planner Development Program is to move journey-level planners to the expert planner stage of development. The program will provide the participant with an intense environment rich in challenge and technical and interpersonal skills development. The program preserves what are widely believed to have been the most useful aspects of the Planner Associates program - extended networking opportunity; exposure to Washington-level processes; and mentoring with senior planners – at less than one quarter the per-student cost, and at a much reduced personal time commitment. Appendix L describes the proposed program and pilot test approach.

Recommendation (7) – Planners' Training and Development Proponent

That a planners' "Training and Development" proponent be formally identified on HQUSACE staff. This proponent will be responsible for planning training and development advocacy, program administration, course development and delivery, and sustainment of overall program. Responsibilities are to include, in coordination with MSC counterparts, ensuring the freshness materials.

Discussion: This recommendation "pins the rose" on a senior planning manager within Civil Works Planning and Policy Division for planners training and development advocacy. The task force believes it essential that there be someone with the explicit responsibility to lobby for and ensure that planning training and development needs are kept as a priority area of concern and action.

Recommendation (8) - Central Funding of Training and Development

That the proposed planner's training and development be centrally funded for: a) the core curriculum course development and updates; b) rapid response delivery of core curriculum courses; and c) the development and implementation of the Planner Assistanceship/ Expert Planner Development Program as detailed in this Task Force Report. Estimated program funding requirements for FY01 through FY04 are as detailed in this Task Force Report. These funds are to be reprogrammed at HQUSACE from available funding sources in FY 01 and FY 02, and budgeted for as part of the Corps Civil Works appropriations in subsequent years.

Discussion: Planners training and development are investments in the Corps' and the nation's future. Unfortunately funding for training and development is a local responsibility. Since the sources of Civil Works funding in the districts are study and project appropriations, training and development are often severely restricted or are the first items to be sacrificed based on the desire to keep district overhead rates low, and to demonstrate to project sponsors that cost shared funds are being used prudently. Central funding for core curriculum development and delivery, as well as the Expert Planner Development Program clearly places these vital training and development activities as corporate priorities central to the Corps' capability to meet the nation's water resources needs. As described elsewhere in this report, the task force has taken care to ensure that the training and development activities to be centrally funded are provided in a very cost effective manner.

Recommendation (9) - Training and Education Partnership

That a formal partnership with the Universities Council on Water Resources (UCOWR) be established for the purpose of addressing, in part, "Need Based" training requirements and opportunities; developing a water resources planning degree and/or certification program; establishing an academic advisory committee; promoting and expanding Corps Co-op program; and sharing of resource information through web-site linkages, etc….

And that a Corps Steering Committee (including members from HQUSACE, IWR, and MSC's) be formed by the HQUSACE Chief of Planning to facilitate further

coordination with UCOWR in exploring and developing training and development opportunities…

And that a Partnering Agreement , as included in this report, be executed between the Corps and UCOWR.

Discussion: This recommendation advocates building linkages to the academic community to assist in both short and long term strategies for addressing planning training and development needs. Our conversations with representatives from UCOWR thus far convince us that further collaboration with academic institutions will be beneficial to all parties. The resolution passed by the UCOWR Board of Directors (Appendix M) shows this organization's willingness to serve a facilitator role to assist the Corps in interacting with the academic community. Similarly, the draft partnering agreement lays out several promising key areas for cooperative action that the task force believes will provide a great deal of value-added to the development of planning talent that the Corps will require in the years ahead.

Recommendation (10) - Policy Roadshow

That the HQUSACE re-institute the "Policy Roadshow," to be presented annually to each MSC.

Discussion: The notification, as well as the clarification, of policy changes and other changes to Corps planning guidance and regulations needs to be increased. As Water Resources Development Acts are enacted, and implementation guidance is developed by HQUSACE and ASA(CW), such changes must be effectively communicated, in a timely manner, to the districts and divisions. Re-institution of the annual Policy Roadshow would help facilitate better presentation and discussion of these changes and issues with the field to assure a clearer understanding of guidance and direction being given.

Recommendation (11) - Funding Strategy for Use of FY 00 Carryover Funds

That the funding strategy for use of available FY 00 carryover funds, as presented in this report, be adopted for immediate execution to address short-term training and development needs in FY 01.

Discussion: The task force was able to obtain carry over GI funds to support planning training and development actions. Such funds provide the capability for initiating key training and development initiatives put forward by the task force while additional funding and central funding to sustain the effort are being arranged. The task force has laid out what it believes are priorities for action, as described in Appendix O.

Recommendation (12) - GS-13, Technical Specialists

That HQUSACE develop standard GS-13, non-supervisory, technical specialist job descriptions for key planning function positions, to include plan formulation, economics, and environmental analysis, for district planning staff.

Discussion: The Corps of Engineers must make water resource planning a career option for those so inclined. Without a clearly visible career path, compatible with other technical/functional organizations within the District, the planning function will continue to suffer the loss of experienced planners to other functions, while concurrently not providing the incentive for new employees to enter the planning field. We cannot hire people with the knowledge, skills, abilities, and experience we need for planning. Therefore, we must grow them and then hold on to them and nurture them. We can hire people to train and develop, but not to fulfill our pressing needs at this point and not for the foreseeable future. Planning, in general, and plan formulation, in particular, rely heavily on technical training, experience, and specific knowledge of a geographical area and/or type of problem. Training in the planning process and experience working the process and leading interdisciplinary teams also play a key role in providing high quality studies and projects to meet our customer needs. Training is important, but it is equally important to be able to retain trained and experienced planners. One key to retaining highly qualified staff is providing that staff with a clearly defined career path or career ladder within planning, particularly to the GS-13 level. Doing so will help convince talented and qualified personnel that there is a future for them in the planning field and will help to retain those individuals. In addition, by better defining career paths and, of necessity, clearly defining required training for each level, it will provide assistance in maintaining our planning capability and will assist personnel in career and training decision making.

Recommendation (13) - Co-op Program

That HQUSACE develop an informational pamphlet on the student Co-op Program for distribution to supervisors, universities, and interested students.

Discussion: In its work the task force learned that the student coop program can be an important tool in hiring planners. However, the program is not well understood. This recommendation provides for a simple information pamphlet that would explain the program for planning supervisors, students, and university administrators.

Recommendation (14) - Executive Oversight Committee

That the HQUSACE Chief of Planning create an Oversight Committee (including members from HQUSACE, IWR, MSCs, and Districts) to provide an annual follow-up assessment to HQUSACE executive staff and MSC Planning Chiefs, for at least the next three years, on the progress being made on implementation of the above Task Force recommendations.

Discussion: It is important that a Corps corporate strategy on training and development of planners be developed and successfully implemented to revitalize and sustain the planning function and capability. This recommendation provides for the continued focus and emphasis that is necessary to ensure that progress is made. The Executive Oversight Committee should provide oversight and guidance in the development of implementation plans for the Task Force recommendations and monitor progress of actions taken. The committee would provide periodic feedback to the HQUSACE executive staff and MSC Planning Chiefs on progress being made, and would allow for mid-course corrections from corporate leadership.

CHAPTER 7

Relationship of Task Force Recommendations To Key Planning Capability Initiatives

The work of the task force was shaped by three primary documents: the task force charter; the EIG report on planning; and the "Hood River Initiatives" developed at the MSC Planning Chiefs conference in August 2000. Each of these documents sets forth a number of focus areas and/or recommended actions to improve planning capability. While the task force's mission is narrower than the scope of the entire set of focus areas and recommended actions, the task force recommendations do address, either fully or partially, a good number of the focus areas/recommended actions proposed by the task force charter, the EIG report, and the Hood River Initiatives. Table 7-1 shows how the task force recommendations address the task force charter taskings. Table 7-2 presents the relationship between task force recommendations and the EIG recommendations relevant to the task force mission (i.e., those focused on "Planning as a Career Path"). Finally, table 7-3 shows how the task force recommendations address the six Hood River Initiatives.

TABLE 7 - 1

CIVIL WORKS PLANNING CAPABILITY TASK FORCE TASKINGS vs. RECOMMENDATIONS

TASK FORCE RECOMMENDATIONS	CECW-PD PLANNING CAPABILITY TASK FORCE CHARTER TASKINGS							
	#1 FY 01/02 Trng & Developm't	#2 FY 01/02 Other Improvements	#3 Long-Term T&D Strategy	#4 Use of Internal Resources	#5 Use of External Resources	#6 Corporate Oversight	#7 Resource Reqm'ts	#8 Implementation Schedule
1. Training & Development Guide	X	X	X	X	X	X		
2. Plan Formulation Workshop	X			X	X		X	X
3. Planner's Resource Web-site		X		X	X		X	X
4. Planner's "Core" Curriculum	X		X	X	X		X	X
5. CW Novice Planner Orientation Plan	X		X	X			X	X
6. CW Expert Planner Development Program	X		X	X	X		X	X
7. Planner's T&D Proponent			X	X		X		
8. Central Funding T&D	X	X	X			X	X	X
9. Training & Education Partnership (UCOWR)	X	X	X		X			
10. Policy Roadshow	X		X	X				
11. Rapid Response Funding Strategy	X	X					X	X
12. Tech Spec. GS-13 Job Description		X				X		
13. Co-op Program Information Pamphlet		X				X		
14. Executive Oversight Committee	X	X	X	X	X	X	X	X

TABLE 7 - 2

EIG INSPECTION REPORT ON PLANNING FOR CIVIL WORKS PROGRAM vs. RECOMMENDATIONS

TASK FORCE RECOMMENDATIONS	EIG INSPECTION REPORT RECOMMENDATIONS			
	#5 Assess Organizations to Assure Equal Career Opportunities for Planners	#6 Develop & Enforce Training & Develop[ment Program for Planners	#7 HQ Chief, Planning Produce Recommended Training Package	#8 HQ Chief, Planning Study Feasibility of Developing Long-Term Trng Program
1. Training & Development Guide	X	X	X	
2. Plan Formulation Workshop		X	X	
3. Planner's Resource Web-site			X	
4. Planner's "Core" Curriculum		X	X	
5. CW Novice Planner Orientation Plan		X	X	
6. CW Expert Planner Development Program			X	X
7. Planner's T&D Proponent		X	X	X
8. Central Funding T&D		X	X	X
9. Training & Education Partnership (UCOWR)		X		X
10. Policy Roadshow			X	
11. Rapid Response Funding Strategy		X		
12. Tech Spec, GS-13 Job Description	X			
13. Co-op Program Information Pamphlet		X		
14. Executive Oversight Committee	X	X	X	X

TABLE 7 - 3

HQ & MSC PLANNING AND POLICY CHIEFS' HOOD RIVER INITIATIVES ADDRESSED BY RECOMMENDATIONS

TASK FORCE RECOMMENDATIONS	HOOD RIVER INITIATIVES					
	#1 Hire, Train, Retain Planning Capability	#2 Build Planning Leadership	#3 Establish Consistent Plng Responsibilities	#4 Improve Ecosystem Eval Procedures	#5 Implement "Turnkey" WRDA Process	#6 Achieve Envr. Sustainable CW Projects
1. Training & Development Guide	X	X	X			
2. Plan Formulation Workshop	X			X		X
3. Planner's Resource Web-site	X	X	X	X	X	X
4. Planner's "Core" Curriculum	X		X			
5. CW Novice Planner Orientation Plan	X		X			
6. CW Expert Planner Development Program	X	X	X	X	X	X
7. Planner's T&D Proponent	X	X	X	X	X	X
8. Central Funding T&D	X	X	X			
9. Training & Education Partnership (UCOWR)	X	X				
10. Policy Roadshow	X				X	
11. Rapid Response Funding Strategy	X					
12. Tech Spec. GS-13 Job Description	X	X				
13. Co-op Program Information Pamphlet	X	X				
14. Executive Oversight Committee	X	X		X	X	X

CHAPTER 8

SUMMARY OF TASK FORCE PRODUCTS

- Training and Development Guide (Appendix G)
- Novice Orientation Plan (Appendix H)
- Planner's Resource Web-site Development Plan/ Scope of Work (Appendix I)
- Course Outline / Scope of Work for Developing and Delivery of Plan Formulation Course (Appendix J)
- Planner's "Core" Curriculum (Appendix K)
- Planner Assistantship / Expert Planner Development Program (Appendix L)
- Partnership Agreement with Universities Council on Water Resources (Appendix M)
- Strategy for Use of FY 00 Carry-over Funds (Appendix 0)

CHAPTER 9

Implementation Plan

As we move into the 21st century, and as many of our senior planners of the "baby boomer" generation begin to retire, we must position the Corps to be able to sustain its planning skills and expertise. The plans and programs recommended in this Task Force report are critical to maintaining the Corps' planning capability, credibility and professionalism, as well as a viable Civil Works program that is responsive to the water resource needs of our partners and customers. The implementation of these recommendations should lead to substantial improvements in planning productivity and performance, in a manner that is both cost-effective and financially efficient.

However, for this plan to be successful there are several "key" elements that must be given priority. As the first order of business, a senior level planner (GS-15) in HQUSACE must be positioned to be planning's Training and Development proponent. This will be a full time job involving being the training advocate for planning, the program administrator overseeing course development and delivery, and providing the sustainment of the overall training and development program.

Second, central funding for the proposed training is a must, both for the "Core" curriculum and Expert Planner Development Program. Without central funding we are doomed from the start. We cannot continue to burden our partners in using cost shared study money to train our district planning staffs, especially with the intensity in which these proposals need to be pursued over the next several years. Immediately, we need to start reprogramming available funds to address the Task Force recommendations and to budget for out-year funding to keep us moving forward in addressing capability issues.

Third, we need to look at new ways of delivering our training. Much of our training has become too expensive and is not responsive to the immediate needs of our planners in a time of change. Training must be cost effective, it must be available when needed, and it must be deliverable locally at the MSC and District offices, as needed. And finally, we need to make the "Core" curriculum for our new planners, mandatory training such that all acquire a common, basic knowledge of planning principles and procedures as quickly as possible.

Tables 9-1 through 9-3 provide details on funding requirements to implement the Task Force Recommendations. Table 9-1 is a summary of the central funding requirements to implement the task force recommendations. The task force members unanimously support this recommended level of funding. As the table shows the recommendations require an investment of $1.23 Million in FY 01, $2.41 Million in FY 02, $3.02 Million in FY 03, and $2.66 Million in FY 04 to address the critical planning training and development needs that have been identified. Table 9-2 breaks these totals down by recommendation. Finally, Table 9-3 provides three alternative central

funding levels. Level 1 could be considered an absolute minimum funding level for developing the resources to address the most critical needs related to the training and development of novice and apprentice stage planners. Level 2 adds resources for the Expert Planner Development Program to address the critical need of moving journey-level planners to expert levels. Level 3 funding provides the resources to centrally fund planners attendance at core curriculum courses and workshops, and removes the burden of funding such participation from district overhead.

The reader may have wondered why there is a graphic on the cover of this report of a person planting a tree. It occurred to the task force that it was engaged in something equivalent to what is pictured. Our hope is that the sapling we are planting grows into the mighty oak representing the vibrant and healthy planning function represented in Figure 9-1. Such an outcome depends on the care and nurturing we are willing to provide.

It is the strong recommendation of the task force that Level 3 funding be provided.

"Planner's Tree of Knowledge"
Advanced Plan Formulation Seminars
Environmental Specialty Courses
Economic Specialty Courses
Expert Planner Program
Novice Orientation Program

Figure 9-1

TABLE 9 - 1

Summary – Estimate Central Funding Requirements

Item	FY01	FY02	FY03	FY04
Planners' Resource Web-site	$120,000	$15,000	$15,000	$15,000
"Core" Curriculum Training Development and Delivery	381,000	286,000	293,000	143,000
Expert Planner Development Program	100,000	421,000	787,000	1,519,000
Miscellaneous Capability Needs	158,000	120,000	120,000	120,000
Subtotal	$759,000	$842,000	$1,215,000	$1,797,000
Student Participation in "Core" Curriculum	520,000	1,347,000	1,534,000	622,000
Subtotal	$1,279,000	$2,189,000	$2,749,000	$2,419,000
Contingency (10%)	128,000	219,000	275,000	242,000
FY00 Carry-over, Rapid Response Funds	180,000	---	---	---
Additional Funds Needed (To Be Reprogrammed or Budgeted for)	$1,227,000	$2,408,000	$3,024,000	$2,661,000

TABLE 9 - 2

Implementation Matrix
(Estimated Funding Requirements)

Task Force Recommendation	Action / Funding Required			
	FY 01	**FY02**	**FY03**	**FY04**
1. Planners Curriculum (Training and Development Guide)	Develop & Print Brochure	Review & Update Curriculum	Review & Update Curriculum	Review & Update Curriculum
	$20,000 *	$10,000	$10,000	$10,000
2. Plan Formulation Workshop (Course Outline / Scope of Work)	Develop, Train-the-Trainer, Deliver to 4 MSCs	Deliver to 4 MSCs	Deliver to 4 MSCs, Update Course Material	Deliver to 4 MSCs,
	$137,000 *	$62,500	$40,000	$35,000
	Student Participation	Student Participation	Student Participation	Student Participation
	$354,000	$354,000	$228,000	$228,000
3. Planner's Web-site (Development Plan / Scope of Work)	Develop and Launch	Maintenance	Maintenance	Maintenance
	$120,000	$15,000	$15,000	$15,000
4. Planner's "Core" Curriculum				
• Introduction to Planning	Develop, Train-the-Trainer	Maintenance	Maintenance	Maintenance
	$35,000	$5,000	$5,000	$5,000
• Civil Works Orientation	Train-the-Trainer, Deliver to 4 MSCs	Deliver to 4MSCs Update Course Material	Deliver to 4MSCs Update Course Material	Deliver to 4MSCs Update Course Material
	$55,000	$48,000	$48,000	$48,000
	Student Participation	Student Participation	Student Participation	Student Participation
	$166,000	$166,000	$166,000	$166,000

TABLE 9 - 2 (cont'd)

Implementation Matrix
(Estimated Funding Requirements)

Task Force Recommendation	Action / Funding Required			
	FY 01	FY02	FY03	FY04
• Planning Principles & Procedures	Update Material, Train-the-Trainer	Delivery to Each MSC	Maintenance	Maintenance
	$18,000	$99,000	$5,000	$5,000
	---	Student Participation	---	---
	---	$456,000	---	---
• Plan Formulation	--- See Recommendation # 2 ---			
• Economic Analysis	Update Material, Train-the-Trainer	Maintenance	Delivery to Each MSC	Maintenance
	$32,000	$5,000	$70,000	$5,000
	---	---	Student Participation	---
	---	---	$456,000	---
• Environmental Analysis	Develop, Train-the-Trainer	Maintenance	Update Mat'l, Deliver to 4 MSCs	Update Mat'l, Deliver to 4 MSCs
	$42,000	$5,000	$40,000	$40,000
	---	---	Student Participation	Student Participation
	---	---	$228,000	$228,000

TABLE 9 - 2 (cont'd)

Implementation Matrix
(Estimated Funding Requirements)

Task Force Recommendation	Action / Funding Required			
	FY 01	**FY02**	**FY03**	**FY04**
• Hydrologic Engineering for Planners	Course Revisions by HEC	---	Delivery to Each MSC	---
	$20,000	---	$80,000	---
	---	---	Student Participation	---
	---	---	$456,000	---
• Consensus Building for Water Resource Planning	Develop, Train-the-Trainer	Delivery to Each MSC	Maintenance	Maintenance
	$42,000	$62,000	$5,000	$5,000
	---	Student Participation	---	---
	---	$371,000	---	---
5. Novice Orientation Plan	Develop "Orientation CD"	Mandatory Training (Intro to Plng, CW Orientation, Plng Principles & Procedures)		
	$15,000	Funded under "Core" Curriculum		
6. Expert Planner Development Program	Development	Launch Pilot	Partial Implementa-tion	Full Implementa-tion
	$100,000	$421,000	$787,000	$1,519,000
7. Planner's Training and Development Proponent	Administration	Administration	Administration	Administration
	$100,000	$100,000	$100,000	$100,000
8. Central Funding Training and Development	See Table 9 -1 for Summary of Funding Requirements			

TABLE 9 - 2 (cont'd)

Implementation Matrix
(Estimated Funding Requirements)

Task Force Recommendation	Action / Funding Required			
	FY 01	FY02	FY03	FY04
9. Training & Education Partnership	Coordination with UCOWR	Coordination with UCOWR	Coordination with UCOWR	Coordination with UCOWR
	$10,000 *	$10,000	$10,000	$10,000
10. Policy Road Show	Conduct in Each MSC	Conduct in Each MSC	Conduct in Each MSC	Conduct in Each MSC
	Existing HQ GE Funding	Existing HQ GE Funding	Existing HQ GE Funding	Existing HQ GE Funding
11. Funding Strategy for FY00 Carryover Funds ($180,000)	Funding * items included in FY00 Rapid Response (RR) Funds			
12. GS-13, Technical Specialist - Job Description	Develop job descriptions	---	---	---
	Existing HQ GE Funding	---	---	---
13. Co-op Program	Develop Brochure on Co-op Program	---	---	---
	$13,000 *	---	---	---
14. Executive Oversight Committee	Stand-up Committe No Addt'l Costs	--- ---	--- ---	--- ---
TOTAL	**$1,279,000**	**$2,189,000**	**$2,749,000**	**$2,419,000**

TABLE 9 - 3

Alternative Central Funding Levels[1]

Funding Alternatives	FY01	FY02	FY03	FY04
Level 1[2]	$501,000	$301,000	$308,000	$158,000
Level 2[3]	759,000	842,000	1,215,000	1,797,000
Level 3[4]	1,279,000	2,189,000	2,749,000	2,419,000
Recommended	$1,279,000	$2,189,000	$2,749,000	$2,419,000

Notes:

1. Several task force members objected to the idea of displaying alternative central funding levels. They believed that the planner training and development problems being addressed by the task force are so critical that showing lower alternative funding levels gives a false impression that anything other than the approach recommended by the task force is workable. The task force unanimously supports Level 3 funding.
2. Level 1 includes funds for development and delivery of "Core" Curriculum and development, launch and maintenance of Planner's web-site.
3. Level 2 includes Level 1 items plus additional costs for Expert Planner Development Program and miscellaneous capability needs.
4. Level 3 includes Level 2 items plus cost for travel, per diem and labor for planners attending "Core" curriculum courses and workshops.

Civil Works
Planning Capability

TASK FORCE REPORT
(Training and Development)

APPENDICES

9 January 2002

Appendix A

Task Force Charter

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

7 JUL 2000

CECW-PD

Memorandum for Commanders, Major Subordinate Commands

Subject: Civil Works Planning Capability Task Force

1. The ability of our Civil Works program to continue to make meaningful contributions to satisfying our Nation's unmet water resources needs depends on having critical planning capability and specifically a highly capable cadre of water resources planners. Field Planning Chiefs have expressed concern that the U. S. Army Corps of Engineers plan formulation capability is diminishing as experienced planners retire or leave the planning function. There is increasing recognition that the problem will become more serious as a significant portion of our experienced planners reach retirement age in the next five years, while it has become increasingly difficult to attract and retain new planners.

2. Because planning capability is essential to a healthy Civil Works program, I have established a task force to examine planning capability issues. The primary focus of the task force will be to develop recommendations on the training and development of planners. In accomplishing this objective, the task force is expected to take into account the full range of factors, such as hiring, training and developing, retaining and supplementing planning skills, which are pertinent to ensuring the development of planning capability.

3. The task force is expected to complete its work within a six month timeframe. They will report to Dr. Jim Johnson, the Chief of Planning. The task force will require MSC and district participation from planners and planning chiefs as shown on the attached overview. This is a high priority effort, and I am sure I can count on your support. Questions about the task force should be directed to Mr. Harry Kitch, Chief of Formulation and Evaluation Branch, CECW-PD, at 202-761-1969.

FOR THE COMMANDER:

Atch

JOHN P. D'ANIELLO, P.E.
Principal Assistant for Civil Works

Overview of Planning Capability Task Force

Problem: There is widespread concern that Corps planning talent (plan formulation, economic evaluation, environmental evaluation and compliance and public involvement capability) is diminished, and that continuation of this trend will impair Corps' ability to meet its national water resource development responsibilities.

Task Force Mission: Assess the situation, define requirements, and recommend a training and development strategy for building the appropriate planning talent; assess the full range of factors that led to reduced planning capability (e.g. structural, career path, project management business process, etc.).

Task Force Products:

(1) FY 01 and 02 training and development, and other capability improvement actions;

(2) Long term training and development strategy, use of internal and academic resources, corporate oversight and sustainment plan, resource requirements and implementation schedule.

Task Force Composition: (Proposed) The task force consists of a field-level team assembled by Mr. Larry Donovan and a steering committee. The task force will report to Dr. Jim Johnson, Chief of Planning, Office of Deputy Commanding General for Civil Works.

(1) Task Force Chairs: (Proposed) Mr. Larry Donovan, SWD; Dr. Mark Dunning, IWR

(2) Field-Level Team: (Proposed) Larry Donovan, CESWD-ETP; Robert (Robin) Mooney, CESPD-ET-P; Martin Hudson, CENWP-PM-F; Teresa Kincaid, CEMVR-PM-M; Raymond Gesling, CELRD-PM; Roger Setters, CELRL-PM-P; Carl Borash, CEPOA-EN-CW-PF; Larry Cocchieri, CENAD-ET-P; Frank McGovern, CESAD-ET-PL; and Mark Gmitro, IWR assisted by analytic support from IWR.

(3) Steering Committee: (Proposed) MSC planning chiefs: Larry Donovan, CESWD-ETP and Ken Orth CESPD-ET-P; HQ Planning: Harry Kitch, CECW-PD; District planning chiefs: Curtis Flakes, CWSAM-PD and Mona King, CENWS-PM-PL; HQ HR: Jerry Liebes, CEHR-D; IWR: Mark Dunning

Task Force Duration: The task force is chartered for a period of six months beginning from the date of signing of this charter.

CECW-PD
SUBJECT: Civil Works Planning Capability Task Force

DISTRIBUTION

COMMANDER
North Atlantic Division
South Atlantic Division
Great Lakes/Ohio River
Northwestern Division
Pacific Ocean Division
South Pacific Division
Southwestern Division
Mississippi Valley Division

Appendix B

EIG Report Recommendations

US Army Corps
of Engineers®

U.S. Army Corps of Engineers
Engineer Inspector General
Inspection Report

Planning for Civil Works Programs

July 2000

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SUMMARY OF RECOMMENDATIONS

Organization and Capabilities of Planning

1. That Deputies for Programs and Project Management (DPMs) at all levels ensure that teams clearly define the roles, responsibilities, and processes within the study phase in accordance with the project management business process (PMBP).

APPROVED_✓_ DISAPPROVED_____ DISCUSS_____

2. That district commanders project their future workloads and develop a plan to properly staff (or contract) to meet those workloads and to produce quality studies.

APPROVED_✓_ DISAPPROVED_____ DISCUSS_____

3. That district commanders maximize the use of existing technologies (especially GIS) to enhance the quality and efficiency of planning.

APPROVED_✓_ DISAPPROVED_____ DISCUSS_____

4. That division commanders, in accordance with the Regional Business Center concept, actively encourage more use of sister districts for independent technical reviews.

APPROVED_✓_ DISAPPROVED_____ DISCUSS_____

Planning as a Career Path

5. That commanders assess their organizations to ensure planners have equal career opportunities for advancement as other disciplines within their commands.

APPROVED_✓_ DISAPPROVED_____ DISCUSS_____

6. That commanders develop and enforce a training and development program for planners to include mentoring and resourcing individual development plans.

APPROVED_✓_ DISAPPROVED_____ DISCUSS_____

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7. That the HQUSACE Chief of Planning assist the commanders by producing a recommended training package that all planners should have in the various stages of their career.

APPROVED_____ DISAPPROVED_____ DISCUSS_____

8. That the HQUSACE Chief of Planning, in coordination with other HQUSACE staffs, studies the feasibility of developing a long-term training program for planners.

APPROVED_____ DISAPPROVED_____ DISCUSS_____

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Appendix C

HQ/MSC Planning Chiefs' Hood River Initiatives

MEMORANDUM TO: MG Van Winkle
DATE: 19 September 00
SUBJECT: MSC Planning and Policy Chiefs Meeting

Purpose.

The purpose of this memorandum is to provide you a status report on initiatives underway by the Headquarters and MSC Planning and Policy Chiefs, and to present the results of our most recent meeting on 29 August – 1 September 2000. Specifically, MSC Planning and Policy Chiefs and I have jointly developed six priority initiatives, which I believe are essential to the future of the Corps of Engineers civil works program.

Background.

Over the past two years, HQUSACE and MSC Planning Divisions (and now Planning and Policy Divisions) have focused on addressing issues critical to maintaining and strengthening the Corps of Engineers Civil Works program. In focusing our efforts on high priority problems and concerns, we achieved several immediate, high-impact results, including process improvements that substantially simplified and shortened the planning process and a major overhaul of ER 1105-2-100 to clarify and simplify Civil Works planning guidance. HQUSACE/ MSC Planning Chiefs have focused on people, process, and program issues to assure we comprehensively identify and address opportunities for continued improvements.

In a summary briefing for you at our August 1999 meeting, we identified people, process and program improvements underway; and recommended that others be initiated. Improvements underway included the draft planning guidance and the draft continuing authorities regulation. Improvements to be initiated included addressing the severely eroded planning capability, aligning planning to work more effectively with PM as part of the PMBP, and working to establish effective planning organizations. In addition, planning chiefs identified specific civil works proposals dealing with areas of water supply, watersheds, and water-related urban revitalization. *The request for an EIG audit of Corps planning capability was one direct result of the August 1999 meeting.*

Mr. D'Aniello attended the February 2000 meeting. In a summary briefing for him, we identified a broad list of initiatives underway separately at MSCs to address planner hiring, training and retention; this resulted in a cooperative MSC effort to circulate information on their respective initiatives. Process improvements also were initiated to review current economic evaluation procedures for inland navigation, deep draft navigation, and flood protection to determine whether they captured all available benefits. Finally, several program initiatives including urban watersheds, water supply, agricultural water supply, and urban waterfront redevelopment were identified as proposals for WRDA 2000. *HQUSACE formally established a national hire, train, retain (HTR) task force to address planner capability as a direct result of the February 2000 meeting and the EIG audit report.*

August 2000 MSC Planning and Policy Chiefs Meeting.

The MSC Planning and Policy Chiefs met August 29- September 1 to review progress on continuing initiatives, and to establish future priorities. The following six initiatives were discussed and agreed upon as addressing our highest priorities; these initiatives also encompass the three critical categories of people, process and program. Accordingly and subject to your approval, I intend to focus on these six initiatives as my highest priorities, and to provide you progress reports every six months.

Issue 1: Hire, Train and Retain Planning Capability (People).

Issue. The hiring, training and retention of planning capability is reaching critical stage in many districts, and this is underscored by discussions in our most recent planning chief meetings, in the recent EIG report, and in the national panel recently established to address this action.

Discussion. The state of planning capability has seriously deteriorated to a point where execution of the civil works program is in danger of being compromised. Nationwide, the loss of basic plan formulation, environmental and economic capability is impacting our ability to initiate and produce quality feasibility reports. This was identified as our highest priority for the next year.

Initiative #1. The vehicle for addressing these issues will be the recently established HTR Task Force as described above. The Task Force will complete a preliminary report in January 2001, and will present the results to Planning and Policy Chiefs at the Winter 2001 Meeting. Preliminary report items include an update of Planning ACTEDS (due in October), Web site development, development of a basic plan formulation course, and initial contact with the University Council on Water Resources (UCOWR) to discuss partnership opportunities. In addition, NWD will set up a web site to collect GS-13 non-supervisory job descriptions. Finally, HQUSACE and MSCs will assess the full performance planning capability for each MSC and district, to provide a sound basis for future actions.

Issue 2: Build Planning Leadership (People).

Issue. Strong planning leadership is essential to building and maintaining a strong Civil Works program. This includes having effective, empowered and properly graded planning chief positions throughout USACE, and filling these positions with effective planning leaders. Unfortunately, the Corps planning leadership is being diminished over time and there has been increasing difficulty in replacing that capability nationwide.

Discussion. Providing planning leadership capability involves three components: the planning chief position, the candidate pool, and the recruitment process. Each of these components may contribute to the problem, i.e., some senior planning positions are not attracting a wide array of capable candidates; the pool of planning leadership candidates may be diminished; and the recruitment process may not effectively match the planning leadership positions with qualified candidates.

Initiative #2. Regarding the planning chief position, HQUSACE and MSCs will (a) review planning leadership positions, including their structure, function, and organizational relationships; (b) identify the characteristics of optimal planning leadership models; and (c) develop a profile of current planning leaders. This will allow us to assess current and future planning leadership capabilities and needs. In addition, we will develop a standardized planning chief job description, which will be provided to MSCs and Districts for their use and consideration. Regarding the candidate pool, we propose to implement a Planning ACTEDS, identify criteria for a candidate pool (e.g., ACTEDS, EDP, LDP, etc.), develop planning leadership mentoring programs, and develop an employee-friendly planner exchange program. Regarding the recruitment process, we propose to address inconsistencies in CPOCs and to prepare an article for *Planning Ahead* to guide planners through Resumix.

Issue 3: Establish Consistent Planning and Policy Responsibilities (Process).

Issue. Planning organizations lack consistency in structure, roles and responsibilities throughout USACE. In some instances, this has led to significant under-utilization of planning capability in developing and executing the Civil Works program.

Discussion. Planning organizations vary widely throughout the Corps, and several Corps offices have no distinct planning organizations. No other part of USACE is more vital to its future Civil Works mission, but this vital role is not well understood across the Corps; and no other function has been subjected to such widespread, often destructive reorganization. Although it is not the intent to discourage innovative organizational designs, certain core, fundamental planning units and responsibilities are necessary in any office intending to carry out Civil Works reconnaissance and feasibility studies.

Initiative #3. With MSC and HQUSACE input, Planning and Policy Division will identify and propose a consistent set of nationwide responsibilities for planning chiefs and planning functions, to include responsibilities for plan formulation, economics, environmental assessment, public involvement, and water resources policy.

Issue 4: Improve Ecosystem Restoration Evaluation Procedures (Process).

Issue. The success of the Corps' ecosystem restoration mission could be affected by how well we can measure project benefits and costs, and define the value of these projects on a comparable basis with other projects. We need an evaluation procedure that is scientifically sound and useful to decision-makers; yet is also capable of reflecting the broad range of ecosystem restoration opportunities available to the Corps.

Discussion. The Corps of Engineers does not have an effective set of procedures for evaluating ecosystem restoration benefits and costs. Currently, we use various methods such as habitat evaluation units and quantities of ecosystems (e.g., stream miles of aquatic habitat) improved, but these do not allow us to compare the value of beneficial ecosystem outputs of different projects, in a way that we use dollars to measure economic outputs. As a result, future projects that include substantial ecosystem restoration features could be handicapped when compared with projects that produce primarily economic outputs.

Initiative #4. A program of long-term and short-term efforts will be carried out to develop ecosystem restoration evaluation procedures. As a long-term approach, we will form a multi-level agency team to work with Federal and State partners in developing a scientifically sound procedure and comparative measurement unit. This should be interconnected with other actions including R&D and an ongoing National Academy of Science study. As a short-term approach, we will seek to develop a simple environmental measurement unit (such as a wetland equivalent unit) for a 3-year test. This would not replace other ecosystem evaluation measures, but would provide a supplemental measure for rough comparison of ecosystem outputs across geographically and environmentally diverse projects. Action on the short-term effort will begin within sixty days.

Issue 5: Implement "Turnkey" WRDA Process (Process/Program).

Issue. The WRDA 2000 proposal developed by USACE reflected an exceptional job by Headquarters, Divisions and Districts; the product was excellent. However, our goal was defined more in completing the draft proposal and not in the WRDA 2000 authorization.

Discussion. USACE efforts on WRDA effectively stopped short of the finish line. Future WRDAs should be developed with a more comprehensive focus, from the beginning right through authorization -- and then beyond to appropriation. The future WRDA process must be more structured, integrated, and involve affected interests from its beginning through authorization. In addition, the authorization and appropriation bills should be coordinated to assure consistency.

Initiative #5. With MSC input, HQUSACE will develop formal guidance on the development of WRDAs. This action will begin immediately after the 106th Congress adjourns. The guidance will establish a formal set of actions from early MSC and district involvement through Congressional authorization. It will also provide for enhancing the linkage between authorization and appropriation processes and bills. Other informal guidance also will be prepared to address stakeholder and water resource user issues.

Issue 6: Achieve Environmentally Sustainable Civil Works Projects (Program).

Issue. If our Civil Works program is to survive into the future, our projects must become more attractive to our customers, partners and -- especially -- to the public. Our projects cannot be attractive to one segment of interests and repugnant to the rest. We need to plan, design and construct projects that effectively balance economic and environmental outputs, consistent with our guiding laws and regulations.

Discussion. It is in the long-term interest of the Nation that the Corps of Engineers plan, design, and construct environmentally sustainable projects that achieve higher levels of ecosystem restoration outputs; i.e., flood protection and navigation projects/systems that truly sustain or improve the environment. This is essential to serving the interests of the American public. The environmental components of Corps projects must be fully integrated into our project formulation and design, and not thought of as a separate project purpose. We must redirect USACE resources to achieve these outputs, with project management, planning, engineering, construction, operations and R&D involvement.

Initiative #6. Initially, we propose to form a HQUSACE/ MSC Task Force to develop a preliminary plan of action to achieve environmentally sustainable projects throughout our Civil Works program. Planning and Policy Division will take the lead for this initiative, in coordination with other Civil Works divisions and the Research & Development office. It is my expectation that our preliminary plan of action would be completed in January 2001, and would provide the basis for achieving environmentally sustainable projects.

Summary.

This memorandum describes the status of HQUSACE and MSC Planning and Policy Chief initiatives and presents the results of our most recent meeting on August 29- September 1 2000. Specifically, I have identified six priority initiatives which I believe are essential to the future of the Corps of Engineers Civil Works program and which we will address corporately. Initiatives 1-3 will lead directly to improved USACE planning capability, consistent with the recent EIG report. Initiatives 4-6 will strengthen the Civil Works program, while putting the environment and economic development in balance. All six initiatives will support a strong, healthy future for the Civil Works program.

James F. Johnson
Chief, Planning and Policy Division

APPENDIX D

Planning Capability Task Force

The Task Force reported to Dr. Jim Johnson, Chief of Planning and Policy, Office of Director of Civil Works.

Task Force Team Leaders

Larry Donovan	CESWD-ETP	Mark Dunning	IWR

Field-Level Team

Robert (Robin) Mooney	CESPD-ET-P
Martin Hudson	CENWP-PM-F
Teresa Kincaid	CEMVR-PM-M
Raymond Gesling	CELRD-PM
Roger Setters	CELRL-PM-P
Carl Borash	CEPOA-EN-CW-PF
Larry Cocchieri	CENAD-ET-P
Frank McGovern	CESAD-ET-PL
Mark Gmitro	IWR
Russ Rangos	CECW-PD

Steering Committee

MSC Planning Chiefs:	Larry Donovan	CESWD-ETP
	Ken Orth	CESPD-ET-P
HQ Planning:	Harry Kitch	CECW-PD
District Planning Chiefs:	Curtis Flakes	CWSAM-PD
	Mona King	CENWS-PM-PL
HQ Human Resources:	Jerry Liebes	CEHR-D
Institute for Water Resources:	Mark Dunning	IWR

Appendix E

Planning Chiefs Views about Civil Works Planning Capability

During the summer of 2000, the Institute for Water Resources conducted a survey of Corps District and Division chiefs of planning. A series of 13 questions inquiring about the state of planning capability, training and development needs, and other issues was posed to the chiefs. A total of 29 chiefs responded. Their summary responses are reported below for questions 1 – 10 of the survey. Questions 11 – 13 did not yield much information and have been eliminated from this appendix to reduce the bulk of the document. Verbatim responses for questions 1 – 10 are provided in the section following the summary.

Question 1 asked planning chiefs about their views on the state of Corps planning capability. Twenty-two of the 29 responding (76%) indicated that Corps planning capability was getting worse, while seven believed capability to be about the same or to have both positive and negative qualities. One indicated that planning capability was improving. Several factors were repeatedly cited as being contributors to the perceived decline in capability: migration of top planners to Project Management; retirements; problems in the recruiting system; and decline in interesting and challenging planning work.

Question 2 asked planning chiefs about the kinds of planning work they thought their organizations would be performing in the near future. Respondees thought that the following areas would require considerable planning expertise in the near future: basin-wide water studies; ecosystem restoration; dredged material placement; flood damage reduction; navigation; environmental infrastructure; water supply planning; and recreation.

Question 3 asked about the planning skills that would be needed to meet mission requirements. Planning chiefs cited the following areas most frequently: general plan formulation; advanced plan formulation; economic evaluation; and environmental evaluation. Other skills frequently mentioned included conflict resolution; public involvement; communication/facilitation; and working in interagency settings.

Question 4 noted that there may be many ways to improve planning capability, and asked chiefs what ways were most important. Among the most frequently mentioned were: hiring more planners; improving planning grade structures to keep top planners; providing enhanced training and development; providing a planner career path; and enhancing executive understanding and support for the planning function.

Question 5 asked planning chiefs if there might be some low hanging fruit that could be picked that could make a big improvement with relatively little expenditure of resources. Many focused on providing workshops and other streamlined training to districts as one key way to improve capability. Other suggestions included targeting local colleges for recruitment of planners; establishing a central planners web resource to trade good ideas and information; holding annual planners conferences; improving the recruiting process; and providing regional lists of AE and professional consultants.

Question 6 asked about critical training needs for planners. Chiefs mentioned the following most frequently: basic plan formulation training; authorities and policies; planning principles and procedures; ecosystem restoration; project management tools; negotiation and conflict resolution; contract management.

Question 7 asked for views on the most effective ways of providing training and development for planners. The most frequently mentioned ways included: providing mentoring by senior planners; providing on-the-job training; rotational assignments; providing local training via workshops or other custom training. Other, less frequently mentioned ways of providing training and development included PROSPECT courses, long term training, and conferences.

Question 8 asked for planning chiefs' views about re-instituting some form of an updated Planning Associates course. The majority of planning chiefs (23 of 27) either supported an updated version of the program, with emphasis on making it shorter in duration, or indicated that they would be open to the idea of some form of re-instituted program. Four of 27 opposed the idea of any form of a Planner Associates program.

Question 9 asked for one recommendation on improving planning capability. The majority of responses recommended: creating a separate planning organization, or otherwise emphasizing planning's importance for Civil Works; increasing the funding for the GI program and creating a stable, vibrant planning program; creating an appropriate grade structure for planners, and a planning career path; fixing the recruiting process; investing in hiring more planners; and providing more local training opportunities for planners.

Question 10 asked for recommendations as to how planning capability improvements should be resourced. Responses provided included: employ central funding; provide GE funds for districts; increase direct hire authority; use an RMB approach to broker resources among districts; employ creative cost effective approaches such as within-MSC training, rotational assignments, partner and share costs with sponsors and other agencies.

- Verbatim Planning Chief Responses -

This interview seeks your candid views about Corps Civil Works planning capability. By planning capability we mean the ability to formulate solutions to water resources problems in accordance with authorities, regulations, and guidance and to prepare the appropriate reports and documents to secure authorization and funding for resultant water resources projects.

1. What are your views about the Corps' planning capability (is it getting better or worse; what's causing it to increase or decrease)?

Positives: The atmosphere for comprehensive, multi-objective planning is improving and has local support. Benefits for national ecosystem restoration as well as national economic development add flexibility to the planning process and lead to better solutions. Corps processes and policies are more supportive of efficient and effective planning. Corps planning process is more open to integration with State and local planning initiatives. The PMBP is good for planning. Pressure to reduce time and cost is good as long as it is not done contrary to an effective planning strategy, which establishes a sound foundation for implementation.

Negatives: Despite extensive work with States and communities in identifying planning needs within the District, there has been little support from the Administration and Congress. Not enough funding capability at all levels of planning – Planning Assistance to States, Continuing Authorities Program, and watershed studies from the small to the very large. Without a continuum of planning initiatives, we are at risk of losing our knowledge base, i.e. the ability to have senior planners mentor and coach less experienced planners – we have about a five-year window.

The Corps planning capability seems to be getting worse. We continue to lose people to other disciplines due to lack of grades. We are also losing people to retirement who are replaced with inexperienced people.

A. Seems as if planning capability is decreasing. This may be due to a number of factors such as hiring freezes, planners finding opportunities for advancement outside of the planning arena, reorganizations and realignments that are moving people into or out of planning due to RIFs.

A. Generally, I believe the Corps' planning capacity, and therefore capability, is decreasing. I believe this is due to a variety of factors. One factor is the elimination of the Planning Associate program. This, coupled with an apparent apathy on the part of HQ in recruiting young engineers (i.e. termination of the DA Intern program) will impact the overall technical growth of the Corps, not just in the Planning arena. In addition, the national economy presently is so healthy that attracting experienced planners to such areas as Alaska is very difficult. There is little incentive to relocate. These factors combine with the implementation of PMBP—as the management responsibilities of the Study Managers are realigned to PM, PM positions are generally become a grade higher, and experienced planners are attracted away from technical positions to management positions. Lack of career paths in the technical arena sends a message to engineers and scientists that they aren't important. Senior planners should be classified as GS-13.

A. The Planning capability is getting worse nationwide and absolutely worse in the district. Reasons: continual downsizing of organizations minimizes the influx of new professionals, especially from the universities. Reorganizations have resulted in many planners moving to PPM, the Division where they usually have better opportunities for promotion, higher status or both. Here in the district, the expansion of the Division and higher grades has robbed three long-term planners from the district within the last year.

I think our planning capability is decreasing. Especially within MVD, our emphasis on overall Project Management has probably tended to detract somewhat from the attention on the Planning process, and some of our best people have gravitated away from managing planning phase work to managing post authorization stage work. However, one <u>improved</u> aspect of planning is our increased attention to sponsor expectations and financial capabilities and our better management of project schedules and budgets.

CEXXX planning capability is eroded from a personnel perspective due to retirements and laterals to CEMVD. In addition, from a programmatic standpoint, lack of budgetary emphasis by both the Administration and Congress on both new specifically authorized planning starts and the Continuing Authorities Program reduces available work for training planners.

Capability is about constant. We have lost some staff, but "younger" employees are coming on board, eager to learn.

Planning capability is stable in terms of the number of individuals that can do planning. The effect of having Planning and PM combined in one organization, however, demands that these individuals be PMs first, and planning is falling behind. Most of the staff time is spent addressing requirements of the PM "stovepipe".

Capability is decreasing. Individuals have retired, left as a result of downsizing to meet contracting goals, moved to other organizations and to the private sector. Increased salary, less stress and easier commutes are reasons given by those leaving. Individuals are reassigned out of planning to cover other organizational needs. These reassignments, especially those that are against the wishes of the individual are very disruptive.

Planning capability is getting worse. Traditional work is decreasing and the capability to do it is also decreasing. Developing capability to address the newer types of work is even more difficult because the work is more complex than traditional work.

We are continuing to lose good people and the number of capable planners and mentors for the younger planners is greatly decreasing. One of the reasons for this loss is that they are not doing those things that are consistent with their career goals. There is also a lack of mentoring, coaching and training by the supervisors to teach the new employees to do their jobs and people are going to organizations where this is

provided. The uncertainties regarding the roles and responsibilities of the PM and the planner are a cause of frustration – the I.G. report is right on track. People are leaving faster than they can be replaced and we need to break the code on the recruiting system.

Capability is getting worse. The number of planners is decreasing as people are attracted out and "driven out". Other alternatives to the Corps are attracting experienced planners – contractors, other agencies, retirement. Senior, full performance planners are leaving and being replaced by a less qualified, less experienced workforce. The workforce of the future will be one which may average ten years with the Corps.

I think it is somewhat worse in some Districts. PM divisions are in many cases assuming or absorbing the roles of the Planning discipline. In many cases, the persons in PM leadership have minimal or no understanding of the laws and regulations governing planning actions. In many cases, they rely on planning expertise that is fast leaving the Corps. Because many in the planning disciplines are not labeled as "project managers", or in those organizations, they are seeing no advancement or promotion potential. That is not currently as much a problem in my district as it is in others, but the trend is not comforting. Districts are not being encouraged in my view to maintain viable economic analysis expertise and staff.

We have significantly lost our planning capability. This has taken place due to several reason. One of the most important is the murky relationship between PM's and "Study Managers". Also, the great study managers have migrated to PM for the grade.

NWX Planning capabilities are improving…..during FY 92 - 99 Planning was de-emphasized and lost people, resulting in loss of program process knowledge and technical skills. Recent assignment of high District propriety, training, on-the-job learning and new hiring has greatly increased capabilities.

Getting worse, due to Corps de-emphasis on planning and due to high turnover caused by changes in the career development system and their adverse effects on morale

It must evolve to meet changing missions.

The Corps' planning capability is decreasing. The primary reasons are: diffusion of planning talent within the organization, caused mainly by higher grades in PPMD; loss of talent to the private sector, mainly because post-1984 employees under FERS do not lose retirement benefits by leaving; increasing demands on senior, experienced planning staff to deal with issues resulting from the loss of talent described previously; reduction of time spent on planning to deal with increasing tangential items, such as 98% expenditure targets, AE targets, business process issues, personnel issues, etc.

IT'S GETTING WORSE MOSTLY DUE TO THE BEST PLANNERS GOING TO PPMD.

The Corps' planning capability is decreasing because:

a. Today's work force is more mobile, quicker to move on to new non-planning positions, and more apt to work part time. These combine to reduce the experience level of planners.

b. Some of the best planners have moved to Project Management positions where their planning skills are not utilized.

c. District planners do not have the benefit of interacting with experienced Division and HQUSACE planners except on an infrequent basis such as during policy issue discussions.
d. Environmental restoration studies do not typically fit a standard plan formulation process. This means each study can differ in approach and lessen the degree of planning capability gained by repeating similar work.

Due to greatly increased employee to supervisor ratios and reduced staff at Division offices, mentoring by experienced higher graded leaders has lessened significantly. District staff is empowered more while having less experience than necessary for good planning capability.

Getting worse. A number of factors including confusion (at all levels) about where and how Planning fits into the PM and PMBP world; misunderstanding of the Planning function and process by COE leadership – civilian and military at the District, Division, and HQ levels; lack of affordable training for planners; lack of career ladders – good folks can get a non-supervisory GS-13 in PPMD or working for another agency.

It is not as good as it was but I believe it is starting to recover.

We have lost a lot of capability through retirements during the last 5 years. We shall lose even more capability as experienced planners retire in the next 3 years

The Corps' planning capability has seen a decrease in recent years. Loss of experienced planners to higher graded jobs, and a lack of clear planning career path has been detrimental. Planning is not perceived as a exciting and interesting field.

It is getting worse for two reasons: (a) the retirement of experienced Planning personnel, and (b) higher grade opportunities in other organizational elements, eg, Project Management.

Getting worse due to retirements, misguided dissolution/downgrading of planning organizations to enhance project management, difficulty of dealing with the personnel system in hiring replacement personnel, and difficulties in obtaining appropriate training for new hires.

Getting worse due to retirement of experienced planners; the loss of planning as significant organizations in the district structure; and separation of the necessary planning disciplines from each other (ie Environmental Analysis in Engineering Division, while the rest of Planning is in Project Management).

capability getting worse, loss of senior planners to PM.

2. What are your thoughts on the kind of planning work you will be performing in the near future (say one to five years out)? (What will you be doing more of, less of, what will be your key mission areas?) {Interviewer instructions – show Table 1 to respondent as an aid to discussion}

Potential for more of: flood damage reduction, ecosystem restoration, multi-purpose/multi-objective planning (watershed studies and comprehensive planning), water supply planning, dam safety/project renovation for non-Corps facilities, dredged material management plans/disposal facilities, recreation, reevaluation of completed projects, urban stream corridor redevelopment, brownfields. There is a strong demand for Corps participation on inter-agency, inter-government planning teams and for Planning Assistance to States. Realization of this potential is another thing.

I expect that we will be doing more environmental restoration and watershed work, although this could change with a change in administrations. Depending on how the UMR situation turns out, we could be doing more inland navigation work. I see us doing fewer new projects, but an increase in rehab. of existing projects.

A. From a MSC Div perspective, there seems to be more work coming up in the areas of commercial navigation, coastal protection, flood damage reduction, ecosystem restoration, watershed studies, dredge material management plans/disposal facilities, and Brownfields. Less work in the areas of comprehensive planning, water supply planning, dam safety, recreation, and hydropower due to low administration priority.

A. In Alaska, coastal navigation will remain a healthy program. Erosion protection should also remain a key need, assuming funding continues, as well as ecosystem restoration. Watershed studies have potential to grow. PAS will continue to be in demand, although I doubt this program will result in many "hard" projects for the Corps. There is great potential for growth in Environmental Infrastructure (EI), but lack of Administration support for Corps involvement may euthanize this program. It may continue through SFO, but without Corps funding, an extraordinary marketing effort will be required to convince other agencies that Corps involvement (without funding participation) can add value in this non-traditional work. The effort needed to assemble multi-agency cooperative agreements for small EI projects can exhaust resources, with little payback. Comprehensive community planning capability is a prerequisite to Corps involvement in Environmental Infrastructure.

I also believe small hydropower has great potential in rural areas of Alaska, but authority and funding are necessary for Corps involvement.

I also believe that if the current trend continues (i.e. preoccupation with management and process, and lack of focus on execution and quality), I believe the Corps' technical capabilities may not be marketable in 5 years.

A. We will continue to perform planning work from initial feasibility (CAP) and recons to final feasibilities. The areas are principally in the areas of deep draft navigation, flood damage reduction, and ecosystem restoration.

We will not perform dam safety, water supply planning, recreation, hydropower since there are policy issues inhibiting Corps participation. We will never do inland navigation.

We may do more of Brownfields, major rehabs, and watershed studies, depending on the needs expressed by sponsors and operations personnel.

I think we'll be doing more of the following: Ecosystem restoration, watershed studies, reevaluations of completed projects, environmental infrastructure and brownfields (the latter two assumes Congressional willingness to authorize). I think we'll be doing less flood damage reduction projects (except in the sense of reevaluating and reconstructing completed flood control projects).

Expect our traditional missions of flood damage reduction and inland navigation to remain level. Anticipate increase ecosystem restoration mission to perhaps also overlap at least one comprehensive watershed study.

stable flood damage reduction, increasing in ecosystem restoration and watershed planning, dredged material placement will be constant, Brownfields could go up if it becomes Corps mission and if $ are made available, major rehabs will increase, inland navigation will stay constant as we implement large study

Watershed studies and comprehensive planning for multi-objective projects (including water supply) are the areas that are expected to expand. There will be less straight flood control. Expected growth in single purpose ecosystem restoration is not occurring because of limited local sponsorship.

Traditional deep draft navigation and flood control will continue to exist but at lesser levels. There will also be continued involvement with dredged material management in San Francisco Bay but at lesser levels than in the past. Work in ecosystem restoration will continue to increase. The biggest growth area will be in watershed planning and in multi-purpose projects that include ecosystem restoration. Many of these projects could be characterized as urban stream corridor redevelopment. The reevaluation of constructed projects is increasing, with multiple purposes being considered. Dam removal for ecosystem restoration is a potential new area. The context in which the Corps conducts its planning activities is changing. The Corps is being asked to participate as a member of the community, often in a continuing or long-term capacity.

There will be some, but less deep draft navigation. Flood control should be stable. Coastal protection could grow with new California initiatives. Ecosystem restoration is on the upswing. The most growth is in watershed studies that

include comprehensive planning and multi-purpose projects, most of which include ecosystem restoration. Many of these could be considered urban stream corridor redevelopment. Environmental infrastructure is presently decreasing, but you never know.

There is a major shift to ecosystem restoration. At a recent briefing of 64 projects in the CAP program, 60% are for ecosystem restoration. It reflects what the new employees want to do. The other big growth area is a result of comprehensive watershed studies for the central California basin which will provide the basis for many multipurpose flood control/water conveyance/ecosystem restoration feasibility studies (10-15) as well as additional CAP studies.

The categories are not mutually exclusive. Navigation and straight flood control will be less, but multipurpose studies with both flood control and ecosystem restoration will increase. There is a big demand for coastal work but a lack of administration support; and the same is true for potential water supply. There will be more ecosystem restoration. Watershed or comprehensive planning is the wave of the future. Environmental infrastructure and abandoned mines are probably non-starters. There is a potential Corps role in urban waterfront redevelopment but the benefits are primarily RED.

NWX key mission areas are flood damage reduction, dam safety, reevaluations of completed projects (flood control), ecosystem restoration, watershed studies, water supply planning.

This is a good question...there is evidence from this years authorization & appropriations committees that the Corps should go back to our "traditional" missions...ie...FDC, NAV. However, I think demand will have us involved with basin wide actions. Especially in the Northwest with the new "4d" rules on Endangered Species. I forsee a significant amount of ecosystem restoration on a watershed basis.

Most sponsors/partners want projects that have environmental improvement measures …….whether the projects are Section 206, 1135, 205 or GI. Hard (concrete) solutions are not often desired by customers.

Key mission areas will be coastal protection, ecosystem restoration, and urban stream corridor redevelopment

Mission areas will be expanding. See Table 1.

We will continue to have a diverse program, which will be somewhat controlled by the desires/budgets of our partners and the weather. In general, our ecosystem restoration program will likely grow. Our flood control and coastal program will remain stable, or will slowly shrink. Our navigation planning program will shrink dramatically (our construction program will increase dramatically).

WE WILL BE DOING MORE DEEP DRAFT NAVIGATION, WATER SUPPLY AND DAM SAFETY WHILE CONTINUING WITH FLOOD DAMAGE REDUCTION, COASTAL PROTECTION,

ECOSYSTEM RESTORATION, WATERSHED STUDIES, DREDGE MATERIAL MGMT AND URBAN STREAM CORRIDOR REDEV.

> *More of ecosystem restoration, water supply planning, dredge material management plans, environmental infrastructure, and modification of existing projects.*
> *Less of deep draft navigation and flood damage reduction.*

The key mission areas will be related to urban and non-urban environmental improvements and future water supply.

Table 1. Potential planing work over the next five years. What will you be doing more of? Less of? What will be your key mission areas?

a. Deep draft navigation **Less of.**
b. Inland navigation **Same**
c. Flood damage reduction **More if we do non-structural such as outlined in Challenge XXI not much more for traditional floodwalls and levees.**
d. Coastal protection **More.**
e. Ecosystem restoration **More**
f. Watershed studies **More**
g. Comprehensive planning/multi-purpose projects **More**
h. Water supply planning **More if pricing policy changes.**
i. Dam safety **More**
j. Dredge material management plans/disposal facilities **More as we have to address contaminated sediments, ESA issues, and upland disposal.**
k. Recreation **More.**
l. Hydropower **Much more (major rehab).**
m. Project renovation (major rehabs) **More**
n. Reevaluations of completed projects **More**
o. Urban stream corridor redevelopment **More**
p. Environmental infrastructure **More if authorized and funded.**
q. Brownfields **More**
r. Other….**Mine reclamation, estuary restoration, sedimentation/coastline actions, "livable cities" actions, dam removal.**

Table 1. Potential planing work over the next five years. What will you be doing more of? Less of? What will be your key mission areas?

a. Deep draft navigation LESS
b. Inland navigation MORE
c. Flood damage reduction MORE
d. Coastal protection NONE
e. Ecosystem restoration MUCH MORE
f. Watershed studies MORE
g. Comprehensive planning/multi-purpose projects MORE IN TEAMWORK WITH OTHER AGENCIES
h. Water supply planning MORE
i. Dam safety MORE
j. Dredge material management plans/disposal facilities LESS
k. Recreation MORE
l. Hydropower SAME OR LESS
m. Project renovation (major rehabs) MORE
n. Reevaluations of completed projects MORE
o. Urban stream corridor redevelopment MORE

p. Environmental infrastructure MORE
q. Brownfields MORE
r. Other….ABANDONED MINE-RELATED RESTORATION MORE

Table 1. Potential planing work over the next five years. What will you be doing more of? Less of? What will be your key mission areas?
KEY: **+** more
- less
nc no expected change
na not applicable

a. Deep draft navigation **+**
b. Inland navigation **na**
c. Flood damage reduction **-**
d. Coastal protection **-**
e. Ecosystem restoration **+**
f. Watershed studies **+**
g. Comprehensive planning/multi-purpose projects **+**
h. Water supply planning **+**
i. Dam safety **na**
j. Dredge material management plans/disposal facilities **+**
k. Recreation **nc**
l. Hydropower **na**
m. Project renovation (major rehabs) **nc**
n. Reevaluations of completed projects **+**
o. Urban stream corridor redevelopment **+**
p. Environmental infrastructure **+**
q. Brownfields **+**
r. Other….

More and more, our work is focused on ecosystem restoration or restoration in combination with other purposes. We are also trying to take a more holistic or watershed approach to our projects – and must lead our customers to that, as well. Our customers are also asking for assistance in water supply planning – sadly, we have only limited authority.

Water Supply issues, Environmental, Restudies. Less strictly flood control.

Deep draft navigation, coastal protection, ecosystem restoration, water supply planning, dredged material management, and reevaluations of completed projects.(What will you be doing more of, less of, what will be your key mission areas?) **I think we will be doing less flood damage reduction.**

I see future planning work as the following, more or less in order: Water supply planning, watershed studies, comprehensive planning/multi-purpose projects, ecosystem restoration, flood damage reduction, urban stream corridor development, major rehab (hydropower), are likely to be key mission areas.

More Work: Inland navigation (Upper Ohio River); flood damage reduction (particularly non structural, special authorities such as Sect 581, and combined with ecosystem restoration); ecosystem restoration particularly Sect 206); watershed studies; reevaluation of completed projects; environmental infrastructure (eg, combined sewer sewer overflow problems (CSO)); and brownfields.

Less Work: flood damage reduction (conventional authorities).
Key Mission Areas: inland navigation (Upper Ohio River); flood damage reduction (under special, Sect 581 type authorities); ecosystem restoration; and environmental infrastructure(CSO)

From table 1: More: b;e;f;h;m;o;p
Less:g;I;d;h;I;k;l
Key missions: b,c;e;f;p

More environmental restoration tied to navigation and dredge material mgmt (key mission area).
More environmental infrastructure; more watershed studies.
Customers want more Brownfields but the district still hasn't figured out a way to really fund this mission.

b. c. e. hopefully f. h. p. hopefully others.

3. What skills, knowledge and abilities will your planning workforce need to ensure that you have adequate planning capability to meet mission requirements? Where are you likely to have the biggest shortfalls? {Interviewer instructions – show Table 2 to respondent as an aid to discussion}

plan formulation, formulation of complex projects, and studies, balancing competing interests, working in partnerships with other agencies, leveraging all federal programs. Biggest shortfalls in complex formulation, formulation in environmental restoration and watershed planning, conflict resolution, working with customers with a great deal of expertise

Needs: All areas listed in table, but with emphasis on maintaining a strong planning nucleus in the District, which can be expanded through resources at other Corps offices, other agencies, and through private sector contracting.

Shortfalls: Advanced plan formulation, evaluation expertise (economic, ecosystem, tradeoff, and risk analysis).

I see our biggest shortfall as a lack of experienced planners, particularly for complex studies. There has also been difficulty in maintaining technical expertise in economics and environmental areas.

A. There seems to be an overall lack of basic planning formulation expertise due to the low number of trained and seasoned plan formulators resulting from circumstances identified in question 1 above. This affects the ability to execute studies in a timely and effective manner. Advanced plan formulation capability may not be called for often, and when needed there are a few experienced individuals that can be relied on to provide this. Based on recent experience with HQ reviewers in the economic analyses area, there seems to be a need for specialized economic evaluation expertise in particular mission areas that districts get involved in. There is also a lack of independent technical review that arises from a dwindling workforce in the various technical areas. Discipline areas that are one deep in staff, will need to rely on outside District (AE, other Districts, etc) assistance to provide ITRs.

A. Certainly water resource-based training (university level, perhaps Master's level) is important. However, I believe that multi-discipline training will be valuable in the future if there is growth in the EI program. Training in comprehensive community planning will be of particular value. An overall increase in general and advanced plan formulation skills is critical to producing successful new project authorizations. Economic evaluation skills will continue to be critical to benefit-cost analyses and providing convincing justification for proposed improvements. Specialized deep draft navigation economic evaluation skills are needed to address the demand for deeper draft channels and harbors that enable our ports to compete in the world marketplace. Skills in applying Corps policies will increase in importance if policy review is delegated to the field soon.

A. The items that our workforce needs and experienced shortfalls are in the first three areas, as itemized in Table 2, in the same order:

- *(a) General plan formulation expertise*
- *(b) Advanced plan formulation capability.*
- *(c) General economic evaluation expertise.*

A large amount of problems we have experienced is the lack of knowledge and experience in dealing with local permits, which are related to item (e). If a staff is relatively stable and many projects of the same type are in the planning stage, then the confidence level rises. Knowledge and abilities are also, in this sense, related to the workload of the district.

KSAs needed to meet mission requirements: a, b, c e, f (mission area: ecosystem restoration), g, h, j, k. Biggest Shortfalls: b, c, f, g, h.

Our most significant shortfall will likely be advanced plan formulation capability (reference question 1 above).

In the planning arena, additional advanced plan formulation capability is the most critical requirement for watershed studies and the multitude of issues that must be addressed. With the planners also serving the PM function, additional knowledge of PM systems is required.

Of the list, advanced plan formulation capability is the most critical shortfall – the ability to push the envelop in a multi-objective watershed context. Natural resource economics is a shortfall as well as the incremental analysis/formulation for ecosystem restoration. The capability for conducting computer simulations for testing alternatives on multiple resources needs to be developed.

Advanced plan formulation capability is the greatest need, to address the complex multi-objective solutions resulting from the watershed studies. General plan formulation expertise is also needed. There is a shortfall in environmental expertise for the quantification of habitat values – HEP and HGM. A class is being sought from WES.

There are a lot of younger planners without mentors that are in need of basic training in planning. On top of this is the need for advanced plan formulation expertise. In the economics and environmental fields, the expertise is there but just not in adequate quantities.

There is a great need for basic plan formulation expertise and a much greater need for advanced plan formulation expertise. The expertise of the existing economists is very good but their numbers are too limited. The same is true for environmental expertise. There are many individuals that can run a public meeting but there is a great need to go beyond this to the next step of consensus building with many stakeholders. This

consensus building is hard to define and thus far, the ability to accomplish it has been dependent upon an individuals personality. Independent technical review suffers from the lack of breath and depth and is basically a capacity issue.

Formulation expertise, plan formulation capabilities, general and specialized economic expertise, independent technical review (Corps staffs are short just to perform the work, let alone review), general and specialized environmental expertise. Biggest shortfalls are in the areas of formulation and economics

We need well rounded communicators that can act as facilitators with various stakeholders in a watershed. They need to be skilled at formulation, problem identification, and able to bring together other agencies programs and abilities to address complex resource issues in a region.

The biggest needs are for Wildlife Biologists, Environmental Specialists, Fisheries Biologists, and Interdisciplinary Environmental Scientists (to do PM type work).

Items b., d. (mission area-environmental restoration), and f.

See Table 2.

As the program diversifies to include more ecosystem restoration, watershed planning, Brownfields initiatives, etc., we will be dealing with more partners and politicians who are new to the Corps. The skills that will be needed to administer this type of program are advanced plan formulation and public involvement. These are skills that only senior, experienced people have. The other skills listed on table 2 are all important for execution, but you will still need a cadre of knowledgeable people to lead the program.

OUR MOST CRITICAL SHORTFALL IS GENERAL PLAN FORMULATION AND ADVANCED PLAN FORMULATION EXPERTISE.

The most critical shortfalls in planning expertise that we are likely to face include:

a. *Both general and advanced plan formulation expertise.*
b. *Specialized environmental and economic problem solving expertise to demonstrate viable project outputs for environmental restoration improvements in urban and semi-urban areas.*
c. *Ability to prepare and successfully negotiate good and cost effective PMP's/FCSA's.*
d. *Public involvement expertise to include building resource agency and sponsor support.*
e. *Good report writing skills to explain complex matters in a clear and concise manner.*

Table 2. Over the next five years what are the most critical shortfalls in planning expertise that you are likely to face?

a. General plan formulation expertise (basic KSAs in planning process, authorities, policies, cost apportionment, etc.) **Critical..**
b. Advanced plan formulation capability (ability to lead on difficult and complex issues, ability to push the envelope for novel solutions, etc.) **Very critical**
c. General economic evaluation expertise (basic KSAs in P&G evaluation approaches, cost benefit analysis, risk analysis, etc.) **Critical**
d. Specialized economic evaluation expertise for particular mission areas [What mission areas?] **Critical...hydropower economics,**

e. General environmental evaluation expertise (KSAs in NEPA process, key environmental laws and requirements, mitigation approaches, etc.) **Important**
f. Specialized environmental problem solving expertise for particular mission areas [What mission areas?] **Critical. Especially with ESA and salmon recovery actions.**
g. Conflict resolution expertise **Critical**
h. Public involvement expertise **Critical**
i. Social evaluation expertise **Critical**
j. Cultural resources expertise **Critical**
k. Capability to perform independent technical review **Critical**

Other…

Table 2. Over the next five years what are the most critical shortfalls in planning expertise that you are likely to face?

a. General plan formulation expertise (basic KSAs in planning process, authorities, policies, cost apportionment, etc.) CRITICAL….because the process is so complex
b. Advanced plan formulation capability (ability to lead on difficult and complex issues, ability to push the envelope for novel solutions, etc.) CRITICAL
c. General economic evaluation expertise (basic KSAs in P&G evaluation approaches, cost benefit analysis, risk analysis, etc.)
d. Specialized economic evaluation expertise for particular mission areas [What mission areas?]
e. General environmental evaluation expertise (KSAs in NEPA process, key environmental laws and requirements, mitigation approaches, etc.)
f. Specialized environmental problem solving expertise for particular mission areas [What mission areas?] CRITICAL….Stream Restoration
g. Conflict resolution expertise
h. Public involvement expertise
i. Social evaluation expertise
j. Cultural resources expertise
k. Capability to perform independent technical review
l. Other…

Table 2. Over the next five years what are the most critical shortfalls in planning expertise that you are likely to face?

a. General plan formulation expertise (basic KSAs in planning process, authorities, policies, cost apportionment, etc.)
b. Advanced plan formulation capability (ability to lead on difficult and complex issues, ability to push the envelope for novel solutions, etc.) In general
c. General economic evaluation expertise (basic KSAs in P&G evaluation approaches, cost benefit analysis, risk analysis, etc.)
d. Specialized economic evaluation expertise for particular mission areas [What mission areas?] In general
e. General environmental evaluation expertise (KSAs in NEPA process, key environmental laws and requirements, mitigation approaches, etc.)
f. Specialized environmental problem solving expertise for particular mission areas [What mission areas?] In general
g. Conflict resolution expertise
h. Public involvement expertise
i. Social evaluation expertise
j. Cultural resources expertise
k. Capability to perform independent technical review
l. Other…

Some of the old standards will never go out of style – like lead a multidisciplinary team, develop and implement public involvement activities, prepare budgetary and other support data for testifying officers and coordinate customer needs for budgetary purposes, develop economic analyses of an array of alternatives, evaluate economic and environmental impacts, write accurate and well thought out planning reports. But we will also need training in watershed management, analysis of ecosystem and watershed problems, and formulation of solutions. Because other state and Federal agencies are focusing their efforts on the latter it's actually easier to get training for that than it is for the basic planning approach. Right now we have experienced Plan Formulators and Economists – but they could all retire in the next 10 years. We need young engineers, economists, and biologists to come on board now so they can be trained by the time the experienced folks leave. The training they need will be the kind that used to be readily available – the Planner Orientation, Planning Principles and Procedures, Planning Program Management, etc classes – that taught how to think systematically but creatively and how to plan a project according to law and COE regulations.

Items b and d.

Most of the KSAs in Table 2. Where are you likely to have the biggest shortfalls?
Shortfalls will be in coastal engineering, economic evaluation, and plan formulation

The most important I feel is general plan formulation expertise and advance plan formulation capability. I would also identify general and specialized economic evaluation expertise.

Reference Table 2: Items a, b, c, and f (ecosystem restoration/ AMD abatement)

From table 2: shortfalls: b;c;d;e;k

- Training of new economists before those eligible to leave retire.
- More capabilities in Environmental scientists/biologists responsible for plan formulation, NEPA, EIS, etc. (Move them directly into Planning.)
- More capabilities in ecosystem restoration, environmental dredging, HEP analysis for all planners.
- Advanced formulation capabilities
- Cost allocation

Environmental capabilities are the largest shortfall.

a. b. c. e. h. j. k

4. There may be many parts to the puzzle for improving planning capability. Here are some. {Interviewer instructions – show Table 3 to respondent as an aid to discussion} In your view what are the most important (top 4 – 5) "ingredients" in any realistic strategy for improving Civil Works planning capability?

Provide enhanced training for planners, promote cross-training within Corps and other agencies, mentoring with Senior planners, support long-term training for planners, clarify role in PDT, and continued executive support of planning function

Many of the ingredients listed in the table are fundamental to a healthy organization, but they are not unique to the planning function – hire capable people, grade at appropriate level, improve quality management processes, etc.

The District has used the PMBP and the QMP to integrate planning into the District's business processes and is using APIC as a means to establish a framework for improvement.

The real problem is not in capability, but in funding planning opportunities. It's impossible to maintain planning capability without opportunities to do water resource planning. Bring back the demand and we will be able to rebuild the capability from the strong planning core still existing.

What is missing and is critical to improving Civil Works planning capability is support for water resource planning in all regions of the country. Each region has unique needs tied to national interests. States and local communities need to be able to rely on the Corps for partnership in water resource planning. There needs to be continuity of support and a reasonable level of investment in planning.

I would list the most important strategies as improving grade structure, providing enhanced training, establishing a better career path for planners, use of incentives and awards, and emphasis on the use of virtual teams.

A. Hiring capable planners is a no brainer, but that is often hard to come by unless you are hiring away top planners from another Corps planning office. The top five strategies deal with training planners and providing incentives for them to stick around and enjoy a career in planning. This can be accomplished by providing enhanced training and development for planners through cross-training within the Corps (either at different districts or at different Corps levels (Dist/Div/HQ) and an easily accessible certification program for all planners. There needs to be an established career path for planners with improved planning grade levels so that a good planner need not seek out other fields for promotion such as Project Management if he/she enjoys planning work.

A. I like a), b),e),i), m). Also, I recommend a Planning Intern program, perhaps coupled with a revitalized Planning Associate program, be instituted. Item j) needs focus as well, and it goes beyond merely clarifying roles. Planners need some sense of ownership of their work. In order for planners to work with sponsors to conceptualize solutions, the Corps needs to reinforce their role in dealing with the public. However, PMBP implementation assigns the responsibility for customer interface with the PM. If we relegate our planners to the role of office-bound technocrats, our planning capability will wither.

A. The top items, in my estimation, are, in order:

1. (I). Establish career path for planners and (b), Improve planning grade levels. These are closely related items. Right now, it appears, that PMs are getting key positions and recognition. If PMs and planners are synonymous in the same organization, this point may be moot. However, in some organizations, the planners essentially have to perform the formulation, writing, and general leadership with the in-house staff. If we intend to reward this critical work effort, we must establish and promote the staff into senior planner positions, GS-13s, comparable to PMs.

3. (e). Provide enhanced training and development opportunities for planners. Even if there is a loss of expertise, if all districts would undergo more training of newer personnel, over a relatively short time, perhaps a greater confidence level can be reestablished. However, this also requires more support and intensity from HQ, Divisions, and possibly HND to support both conferences/workshops and formal coursework.

4. (k). Improve executive understanding of and support for the planning function. In some respects, the planning function has lost its identity in the bureaucracy. The commanders generally do not come to the districts with a broad range knowledge of the civil works program. Coupled with the overall lack of appreciation is greater reliance on the PMs to manage the projects and studies. Hence, personnel and administrative support of planning function appears to have been reduced over the last six years.

5. (d). Form/use centers of planning expertise. This is also related to (c), Improve technical quality assurance procedures. Generally, if a district does not have adequate expertise, the reports will not be satisfactory. In most circumstances, planning is a government function, most of which cannot be adequately performed by contractors. Hence, if districts or divisions have known expertise and can provide reimbursable support, the planning community should take advantage and expand its base.

e, g, k, m, q

Teaching people at the district is the most effective action. An example is the two-day planning workshop presented by SPD. More capable PMs are required and training for them is more critical than for planners. Improved technical quality procedures would lead to a more orderly process, which would lead to more gratification for the staff, thereby improving moral. Work needs to be organized to require less PM responsibilities – thereby allowing more effort to address technical challenges. There is no career path for planners. Planners progress to PMs.

Hiring capable planners usually translates into recruiting from other Corps offices. Because of the previous classification issues in the San Francisco District, improving the grade structure is always at the top of the list. Establishing career path for planners is important, as is the recognition of the planner as the leader of the PDT for the planning phase.

Historically, the ability to attract and retain people in the Corps has been its ability to offer different experiences and opportunities. These include training opportunities, especially opportunities for degree programs, cross-training within the Corps and cross-training with other agencies. These types of programs entice individuals to work for the Corps through varied experiences.

> ***The new employees are geared to technology. The ability to use new technology makes coming to work fun. The future is probably desk-top GIS.***
>
> **Executive recognition of the importance of the planning function needs to be continually emphasized. Without this recognition, the planning organization will never maintain a qualified workforce. Improving planning grade levels is an issue, mostly as it relates to the inequity between planning and PPMD. Establishing a career path for planners is important as well as providing enhanced training and development opportunities and incentives and awards to recognize good work. Cross training is painful in the short term, and usually proposed for the wrong reasons.**
>
> ***The most important ingredients are to hire more planners, provide them with training and development opportunities and clarify the planners role in the project management business process.***

The problem is that the new workforce will have a 10 year duration. Training needs to be early and intensive – full emersion - in a big dose. Mentoring is required – team mentoring as well as individual mentoring needs to be evaluated. From the list training and development stands out as well. Clarifying the PM and planning roles is critical, along with improving executive understanding of planning. Many of the items on the list are orientated to the values of the older portion of the workforce which will not be typical of the workforce of the future.

Improve planning grade levels, i.e. level the playing field with PM chain. Establish/maintain career paths for planners, **promote cross training within the Corps,** hire capable planners, set up personnel system that is user friendly, (not one that is steeped in bureacracy).

Need to "grow our own" planners. Get young people and put them with more senior planners. Give them interesting work. Empower them to make decisions, and provide mentoring and training. And hope they will stay around.

The most important ingredients are:

-- Project turn-around timing (most Corps programs are overburdened with documentation and reviews). The processes need to be streamlined greatly and delegated to the Districts.

-- Standard project measures are needed for environmental and flood control project (as NRCS Headquarters has developed).

-- More flexibility needs to be taken in accepting risk for environmental improvement projects…….in reference to time periods for easements, PCA agreement flexibility, etc.

-- More HQUSACE willingness to be adaptive and acceptive on supporting legislative proposals for new, non-traditional projects (Lewis and Clark initiatives, Corps dam removal lead for the Nation, ability to cost-share with other Federal agencies on environmental improvement projects, etc.).

Items b. and e.

See Table 3.

The items listed on table 3 are all important, but the key to establishing and maintaining a strong planning capability is to maintain a stable planning organization. You do this by emphasizing the importance and role of planning (and Planning Divisions) in the project delivery process; creating a grade/pay structure that is commensurate with PPMD and other offices; and creating and maintaining an atmosphere conducive to good planning and success, in part by eliminating many of the distracting, annoying tangential items that are given a disproportionally high amount of attention.

HIRE CAPABLE PLANNERS, IMPROVE PLANNING GRADE LEVELS, PROVIDE ENHANCED TRAINING AND DEVELOPMENT, AND IMPROVE EXECUTIVE UNDERSTANDING OF AND SUPPORT FOR PLANNING FUNCTION.

The most important ingredients are:

a. *Hire capable planners and/or hire staff that have the problem solving skills needed to become a capable planner.*
b. *Provide enhanced training and development opportunities for planners.*
c. *Improve access to planning information and resources.*

Improve mentoring processes and opportunities for planners.

Table 3. Potential ingredients of realistic and effective strategy for improving Civil Works planning capability.

a. Hire capable planners (i.e. already having the skills we are looking for) IMPORTANT, BUT NOT FEASIBLE
b. Improve planning grade levels SOMEWHAT IMPROTANT TO ATTRACT THE BEST
c. Improve technical quality assurance procedures MOST IMPORTANT TO SIMPLIFY AND MAKE PROCESS EFFICIENT TO THE CUSTOMER
d. Form/use centers of planning expertise
e. Provide enhanced training and development opportunities for planners GOOD
f. Organize work to provide greater technical challenge
g. Use incentives and awards to recognize good work
h. Improve working conditions
i. Establish career path for planners
j. Clarify planning's role in PDT/PMBP VERY IMPROTANT….NOW MUDDLED
k. Improve executive understanding of and support for planning function
l. Provide opportunities for degree programs
m. Institute certification program for planners
n. Promote cross-training within the Corps
o. Promote cross-training with other agencies
p. Improve access to planning information and resources
q. Emphasize use of virtual teams
r. Other…

Table 3. Potential ingredients of realistic and effective strategy for improving Civil Works planning capability.

a. Hire capable planners (i.e. already having the skills we are looking for) **Is not realistic. May be able to hire capable planners away from other districts but it is no net gain for the Corps.**
b. Improve planning grade levels **Critical...and I am in the process of doing that.**
c. Improve technical quality assurance procedures **Already in place each district should have their Quality Management Plans in place and working.**
d. Form/use centers of planning expertise **Great potential...especially in areas such as economics.**
e. Provide enhanced training and development opportunities for planners **Not only for planners but for others in other disciplines that may want to come to planning.**
f. Organize work to provide greater technical challenge **Contract out the nasty stuff...keep the interesting stuff.**
g. Use incentives and awards to recognize good work **Important and should be directed at teams and team awards.**
h. Improve working conditions **Important and is being addressed.**
i. Establish career path for planners **Imperative.**
j. Clarify planning's role in PDT/PMBP **Imperative.**
k. Improve executive understanding of and support for planning function **Imperative.**
l. Provide opportunities for degree programs **Imperative.**
m. Institute certification program for planners **good idea**
n. Promote cross-training within the Corps **Important and we are doing it.**
o. Promote cross-training with other agencies **Important and we are doing it....an IPA with EPA.**
p. Improve access to planning information and resources **We are doing this**
q. Emphasize use of virtual teams **We are doing this and also have "vertical" teams also.**
r. Other…

Table 3. Potential ingredients of realistic and effective strategy for improving Civil Works planning capability.

a. Hire capable planners (i.e. already having the skills we are looking for)
b. Improve planning grade levels
c. Improve technical quality assurance procedures
d. Form/use centers of planning expertise
e. Provide enhanced training and development opportunities for planners
f. Organize work to provide greater technical challenge
g. Use incentives and awards to recognize good work
h. Improve working conditions
i. Establish career path for planners
j. Clarify planning's role in PDT/PMBP
k. Improve executive understanding of and support for planning function
l. Provide opportunities for degree programs
m. Institute certification program for planners
n. Promote cross-training within the Corps
o. Promote cross-training with other agencies
p. Improve access to planning information and resources
q. Emphasize use of virtual teams
r. Other… We must look outside the organization as an additional tool (the AE community, educational institutions).

My top 6 of those listed:

a. Improve planning grade levels
b. Establish career path for planners
c. Improve executive understanding of and support for planning function
d. Clarify planning's role in PDT/PMBP
e. Provide enhanced training and development opportunities for planners
f. Provide opportunities for degree programs

b,I,j,m

Hire and train planners before the next wave of experienced planners retires. Provide better training and development opportunities. Improve planning grade levels to stem the exodus of young planners. Establish a highly visible career path for planners.

Improve planning grade levels, establish career path for planners, provide enhanced training, clarify planning's role, improve working conditions

Reference Table 3: Items b, d, e, i, and q.

From table 3: a;b;d;e;I;q

- Improve Planning grade levels; the senior planners have moved into Project Management for higher grades and a better career ladder.
- Establish career paths for planners (goes along with comment above).
- Organizing the work to provide greater technical challenge would help support higher planning grades and keep senior staff in planning
- Improving executive understanding of and support for planning would help justify higher grades

Clarify planning's role in PDT/PMBP not only with PM's but also the planning staff themselves

a.b. e. i.k.

5. Is there any "low hanging fruit" we need to pick that would make a big improvement in planning capability with relatively little expenditure of resources?

Conduct minimal workshops so planners can be identified, share lessons learned, successful projects, regional planning conference,

Increase funding of planning opportunities. Establish continuity so Districts can develop and execute a long-term strategy for water resource planning.

I think improving grade levels would be the single most important initiative and could be accomplished with a relatively small cost compared to the overall program.

A. Develop cross training within a district so that other staff from other offices could be detailed to planning (no TDY or PCS costs). Recruitment of graduates from nearby colleges at entry level that bring enthusiasm and an opportunity for districts to "grow" the staff. It may take a couple of years, but with a senior planner guiding them, new staff can make a difference.

A. Reclassifying senior planners to GS-13 would fit this category. The difference in pay between GS-12 and GS-13 is not a major resource expenditure across the program. Certainly not when you compare it to the cost of training and developing senior planners.

A. Given the often lack of resources, a big improvement, in the short run is to provide regional lists of A-Es and professional consultants who are capable and experienced in providing planning services. Although may be costlier and require independent management of consultants, this may be the sole solution for some critical reports. The district would be responsible for contracting with the A-Es independently.

Perhaps establishing some sort of Corps Bulletin Board for Planners where planners could go to learn about training available, lessons learned, interesting features about recently approved Corps reports, and to ask questions of their colleagues nationwide.

CAP authorities need to be funded <u>at least</u> to nationwide ceilings (CAP projects probably provide best on-the-job-training for journeyman planners).

The SPD 2-day planning workshop that is scheduled for the fall. The district has compromised planning for PM. Explicitly separating the duties would help.

Give some management back to planners.

Continuation of the short-burst training by the Division.

Some way to get through the recruiting process. We need to hire mentors and get around the Resumex system.

There are a bunch of training classes that need to be provided frequently and locally (some exist). We need to take advantage of alternate ways of distributing information- CDs,

internet, etc. We need a meaner and broader version of the Leadership Development Program.

YES, RETAIN THE GOOD PEOPLE WE HAVE NOW BY IMPLEMENTING THE ABOVE SUGGESTIONS, BEFORE WE LOOSE THEM TO COMPETING ORGANIZATIONS.

Reach out to Operations to train selected people in planning so they can represent planning in more remote places. Reach out to other functional areas and have a technical person do more "technical" planning studies.

Cooperative cost-sharing with BPA, EDA and State agencies.

We need to re-structure decision-making in the following way:
-HQ should make only programmatic decisions.
-Div should only make decisions concerning complex projects with multiple jurisdictions (Districts).
-Districts should handle all others

Use of technical review by other Corps Districts. Use of teams and PPMD.

No. Low hanging fruit (i.e.--opportunities) are routinely grabbed by planners first.

NONE THAT I KNOW OF

No easy solutions are apparent.

We recommend 3 things:

(1) an annual Planning conference – maybe at the MSC level for starters – where folks from HQ, other districts or divisions discuss new regulations and authorities, projects they are working on, etc. Something like the CAP folks and the PAS and FPMS folks do;

(2) an annual meeting of just District folks who work in the GI or CAP programs similar to the meetings SWD had last fall. SWD PM and PL folks met with District personnel and discussed the budget process, PMBP, latest Planning regs, etc, with District PM and PL folks. Make it a 1 day conference in town so ALL Planners and PMs can (must) attend; and

(3) an annual meeting of key Environmental personnel similar to the Environmental Chiefs meetings that have been held in the past. This could be concurrent with the GI and CAP meetings.

Our RPB will be one

Use incentives to reduce, even reverse, the migration of planners to other functions within the Corps.

Closely mentor and develop existing planners - make planning fun again.

Ensure that the field takes full advantage of the Planning Principles and Procedures PROSPECT and other appropriate planning courses. Both new planners and non-planners who frequently support planning studies in other organizations (ED, RE, OC, CT, etc.) should participate. This is especially important with the updated ER 1105-2-100 Planning Guidance. The course can be offered on-site at field locations.

Promote training programs for new planners & interns

Improving executive understanding of and support for planning would help with morale, support for program, etc.

Obviously brokering among Districts

6. What are the three most critical areas of training that your current planning workforce needs to support your mission areas and technical capabilities?

environmental restoration, knowledge of Corps authorities and policies, information on how Corps makes decisions, how to work with customers (how to fit what Corps can do into what customers want)

Advanced plan formulation, evaluation techniques, management/leadership

General plan formulation skills, knowledge of laws and regulations, and economic analysis.

A. For the Division, it would be training in latest civil works policy to handle the delegation of authority for PCA review from HQ to the MSC.

A. We have immediate needs for training in deep draft navigation, planning principles and procedures, and economic analysis for WRP.
A. The three most critical areas of training in terms of knowledge requirements are:

1. A firm appreciation of the limits of documentation required to make a decision. Too often, we explore or "design" works which lead to no solution or excessively detailed designs when not necessary for the stage of work. The planners, in this method, often are not synchronized with designers who want every detail prior to completing the work.

2. A firm understanding and control of the monetary limits of each type of investigation. For example, if a initial feasibility study is performed for CAP projects, we are obligated to control costs to less than $40 k. We cannot go off on tangents, expending funds and produce little at the end.

3. A firm understanding of the local obligations and requirements for every stage of the work. Without local sponsors committing their respective agencies and being partners in the entire effort, the project will never be implemented. We need to have the planners be able to explain the consequences to our sponsoring partners at each stage or work. Depending on the organization, some of this effort may fall upon the Project Managers.

General Plan formulation training, training in small group dynamics and training in formulating projects for environmental restoration.

Plan formulation.,Customer outreach, Environmental (for project managers).

In the planning arena, plan formulation and report preparation are the two most critical areas. There needs to be more differentiation between planning and PM and training provided for PM. The PM "stovepipe" demands are much greater than anticipated.

1) Plan formulation and Report preparation - especially for the non-traditional watershed initiatives.

2) GIS for Planning

3) Contract management for planners – Need to communicate planning with a contractor.

1) Basic plan formulation, including optimization and incremental analysis.

2) Habitat evaluation process and procedures.

3) Training in other functional areas – H&H for planners was recently provided at the Los Angeles District by HEC. Training that relates the other functions to planning would be beneficial – design, real estate, etc.

1) <u>The most critical area of training is basic planning 101.</u>

2) <u>From a technical perspective ecosystem restoration is a critical area of training.</u>

3) <u>Training is also required regarding the planners role in the project management business process.</u>

1) <u>Formulation cries out as the most critical area from a technical perspective.</u>

2) <u>People skills with both teams and the public is a required area of training.</u>

<u>And, communication, both writing and speaking.</u>

<u>Plan formulation, economic and planning process, project management tools (i.e. networking software)</u>

Formulation process. Procedural processes/strategies for report approval and authorization. CEFMS/PROMIS/PPDS training.

Stream restoration measures training, CAP & GI process training and PM training.

Refer to Table 2, items b. d. (mission area-eniro restoration), and f.

Integrated Plan Formulation, Env. Infrastructure, Regional economic development navigation related.

The areas that need the most training are the budget process/financial rules; project management/business processes; and general plan formulation. I'm not a big advocate of PROSPECT or technical training because I think its value is limited and most people need to learn the "Corps way" on the job with the skills that they brought to the job. That's one of the reasons that we need to retain the SENIOR people---as mentors/teachers.

BASIC PLAN FORMULATION, BASIC PLAN FORMULATION, AND BASIC PLAN FORMULATION.

Plan formulation for environmental restoration studies. Increased technical skills for acid mine drainage and beneficial use of dredged material planning. Improved PMP/FCSA preparations and negotiating skills.

Ecosystem restoration and watershed planning and Planning program management.

See 3.

Plan formulation, conflict resolution, project management business practice.

Multi-objective approach to planning; ecosystem restoration techniques, planning process, policies, and procedures.

(i) More depth and skills using automated tools for economic benefit evaluation, risk analysis, incremental analysis, and cost effectiveness analysis, considering the PLAN FORMULATION CONTEXT that drives these requirements.
(ii) More depth and skills in (a) GIS applications and (b) PM systems reporting. Communication and coordination of project development needs improvement, both with customers (the focus of a) and corporately (the focus of b).
(iii) More knowledge of customer business processes, funding sources, and partner capabilities to satisfy project implementation requirements is needed. This is not technical analysis but increased skill in outreach development. This may be primarily a project management function, but project planning can be improved (focused, targeted) with enhanced skills and knowledge in these areas. We need to be open to "training" from outside sources (e.g., local, state, and other Federal agencies) and willing to "cross train" when possible.

The environmental programs such as CAP 206 & 1135. Advanced formulation skills. Economics.

ecosystem restoration, HEP analysis, non-structural alternatives (that are biologically based)

FDP formulation, economic assessments, (particularly environmental), PP&G

7. Training and development of planners can be provided in many ways. What are your views on the most effective ways of ensuring that planners get the right knowledge, skills and abilities? {Interviewer instructions – show Table 4 to respondent as an aid to discussion}

rotational assignments, working with a senior planner, short-term assignment at HQ, short courses with specific applicability to work place, long-term training

Participate on planning teams as a technical specialist

Obtain training in fundamentals – planning process, policy, etc.

Work under coaching from experienced planners

Take on increasingly more demanding planning assignments
Interact with other planners – in and out of Corps
Complement with a comprehensive academic program (as one, or pieced together) – balancing planning, management, leadership, and technical (econ, H&H, etc.)
Spend some time at HQ
Participate in State/local planning initiatives

Mentoring, OJT, custom training, and long-term training.

A. The method of training is dependent on the level of the planner's experience. If a planning group has a number of seasoned planners, they could mentor younger planners and afford rotational assignments to expose them to different aspects of the Corps organization to build depth of experience. Prospect courses could also be useful to younger planners. For more experienced planners, custom seminars and workshops would probably work best to bring training to meet specific needs.

A. A combination of long-term training and a planning intern program is recommended. The other training listed in Table 4 could be mixed in. I would be cautious about rotational assignments to MSC or HQ, because I perceive that those elements are losing expertise. This approach would not work without good mentors.

A. The most effective ways of training are as follows:

1. On-the job training. We must focus on intensity and execution. We are often criticized, sometimes sarcastically, by other district personnel at the length of time we take to complete actions. This reduces our credibility with the district staff and with the sponsors. We must increase our surveillance and execute studies - all other alternatives are not acceptable.

2. Other. Attendance at planning conferences and seminars, whether regional or national. This provides for networking and sharing of experiences and advice, increases the exposure of planners to other methods of doing business and often energizes personal initiatives. In addition, some divisions sponsor in-house seminars on processes for their subordinate districts.

3. PROSPECT courses. Increase the amount formal courses. The group of courses sponsored by HND are beneficial and must be continued.

a. Long term training.

b. PROSPECT courses.

c. Within-MSC training

Training provided by the Division (Items b. and j.) Mentoring is accomplished through on the job training.

Bringing training to the district is most cost effective. (HEC H&H for planners, SPD training) Mentoring is not really being done any more. Rotational assignments are normally used to solve staffing problems, rather than provide for an individuals needs. The duration of employment has shortened which limits the payback of rotational training or long-term training . Prospect courses are normally used but are very expensive. On the job training is the name of the game. Web-based training would be appropriate for software.

Within-district training has been very valuable using a brown bag approach. Having representatives from other functional areas explain their functions has been very helpful. Opportunities are provided for mentoring. It works well as a natural process but not if mentors are assigned. As indicated above long-term training (University) is an enticement for working at the Corps.

At one time the district had a two-week policy for training and conference participation. Because of overhead rates and "total labor multiplier" training has been reduced to one week. This change greatly upset members of the staff. Prospect classes are considered to be too expensive.

Within MSC training and mentoring are the two items that may serve as the best approaches. The Division has expressed a willingness to provide training and the district must take advantage of it. Mentoring is being specifically included in the duties of specific senior planners. And ex-planners that have moved on to PPMD are providing mentoring to young planners.

Train the trainer. A full performance planner should be redefined as one that can teach 3-5 basic classes related to planning. Training only with district participants often results in a "bitch" session because there are no outside perspectives. Short term assignments outside of the district/outside of the division would broaden perspectives. Need to take advantage of all opportunities: college courses, technical writing, toastmasters, on-the-job training, web based training, etc.

Cross training within Districts/disciplines, within MSC training, rotational assignments.

PROSPECT is too antiquated and expensive. We are "tailoring" our own "prospect type" classes and bringing them here. Also, we have been using retired Corps personnel to train personnel.

In-house mentoring, support and guidance from former Corps people working for A-Es, and formal training.

b., j., and l.

See Table 4.

The quality of training depends upon the quality of the trainers, who are the SENIOR planners. Step one would be to retain them in a stable Planning Division. Step two would be to have clear guidance on PROCESS (that anyone can follow), as most of the problems surface as a result of process issues, as opposed to technical knowledge issues. Step three would be for Divisions to use the QA function to provide lessons-learned (that anyone can follow) on a frequent, as needed basis.

WITHIN-MSC TRAINING, PROSPECT COURSES, CUSTOM SEMINARS AND WORKSHOPS, VIDIO-CONFERENCED COURSES AND ON-THE-JOB TRAINING.

Most effective training and development methods:

a. *Within-district training, including PROSPECT courses on site.*
b. *Mentoring.*
c. *Custom seminars and workshops.*
d. *On-the job training.*

Table 4. Potential training and development approaches for building planning capability.

a. Within-district training WE DO IT
b. Within-MSC training WE DO IT
c. Mentoring WE DON'T DO IT WELL
d. Rotational assignments SOME ROTATION IS DONE
e. Short-term assignments to HQ NOT MUCH DONE
f. Long term training LITTLE DONE
g. PROSPECT courses USUALLY NOT COST BENEFICIAL
h. Self-paced instruction CDs NOT USED MUCH
i. College courses SOME INVOLVEMENT
j. Custom ("just in time") seminars and workshops THE **MOST** COST BENEFICIAL APPROACH
k. Video-conferenced courses NOT USED
l. On-the-job training DONE EXTENSIVELY
m. Web-based training NOT DONE MUCH
n. Other…

Table 4. Potential training and development approaches for building planning capability.

a. Within-district training **Great Potential..we are doing**
b. Within-MSC training **Great Potential..we are doing**

c. Mentoring **Have two planners now in mentoring plan...need to do it better though.**
d. Rotational assignments **Great Potential..we are doing**
e. Short-term assignments to HQ **Have done in the past but no one wants to go to HQ.**
f. Long term training **Great Potential**
g. PROSPECT courses **Needs work...PROSPECT too expensive and outdated.**
h. Self-paced instruction CDs **Not much potential.**
i. College courses **Great Potential..we are doing**
j. Custom ("just in time") seminars and workshops **Great Potential..we are doing**
k. Video-conferenced courses **Not much potential**
l. On-the-job training **Great Potential..we are doing**
m. Web-based training **not much potenial**
n. Other…

Table 4. Potential training and development approaches for building planning capability.

a. Within-district training
b. Within-MSC training
c. Mentoring
d. Rotational assignments
e. Short-term assignments to HQ
f. Long term training
g. PROSPECT courses
h. Self-paced instruction CDs
i. College courses
j. Custom ("just in time") seminars and workshops
k. Video-conferenced courses
l. On-the-job training
m. Web-based training
n. Other…

Our top 5 list:

a. Rotational assignments – we should never hire a professional employee (engineer, economist, or otherwise) without sending them through some form of a rotational training program.
b. PROSPECT courses – this is often the best place to get overall Planning training. But PROSPECT class tuitions are outrageously expensive – add travel costs and they've priced themselves into oblivion. We can afford to send 2 to 3 folks to PROSPECT classes each year. College tuition is less.
c. Custom ("just in time") seminars and workshops – SWD PL staff did a terrific job of putting on a 905b-Recon workshop for us last winter. We've asked them to do the same thing for Feasibility studies this winter. The PM-PL team did a great workshop for us, too – we just needed more folks there.
d. Within-MSC training – SWD has discussed bringing classes in – PROSPECT and, maybe, other classes as well. This reduces travel time and cost and, usually, tuition, as well. It also gives Planning folks within the Division a chance to get to know each other. That's very valuable if we're going to build virtual teams or have joint-district studies.

e. ***Long term training – Only if we can find a way to make it affordable. Something like the Army Mgmt Staff College non-resident version. We can't afford to let folks go for a whole year and can't afford the budget hit. It should be taught by field or HQ personnel (not professional instructors or contractors) who are recognized experts in the area taught; it should require no more than 6 weeks out of the office and may be best in 2 week segments, and could include extensive "homework" while the employee is back in the home organization; leadership of the program should come from HQ PL and instructors and "tuition" should be funded by HQ; employee salary, travel, and per diem could be funded by the sending organization; training should focus on Civil Works Planning and should emphasize basic planning processes and authorities – specialized training such as hurricane protection or deep draft navigation could be covered in other classes.***

There is no substitute for on the job training but we need formal traing opportunities. I would like to see us start with shared MSC opportunities and reinstitution of longer term. I favor a 90 day type school.

Custom seminars and workshops, OJT, within district training.

The most effective training (wherever that may be) occurs when it is used immediately. Further, the immediate supervisor must make it a priority, with pre- and post training expectations, discussions, etc, as well as make it a point to ensure the individual needs and wants the training.

Reference Table 4: Items b, c, e, g, j, and l.

From Table 4: a;b;c;d;g;l; and technical discipline conferences, either MSC-wide or Corps-wide.

On the job training and within MSC training Also custom seminars and workshops

a. thru g.

8. What are your views about re-instituting an updated Planner Associates-type program? (Opinions about pros, cons, format, what would need to be updated)

Cost is a concern, pro would be to follow WRDA development, and other decision processes in Washington, con is hard for staff to take long-term assignments, question – is there sufficient Washington staff to conduct such training

It's a good idea. Stay on the job, but attend classes/events with the same classmates throughout. Include opportunities to be exposed to a range of planning initiatives and share ideas. Require independent and team work projects. Include a 3-6 month assignment at HQ. Accomplish all over a two-year period. It should serve as a substitute for the LDP.

The 11-month time frame is probably not practical. Cutting it back to 5-6 months and dividing the course into say 6-week to 2-month modules would be more practical.

A. An updated PA would be good. Suggestions include making it much shorter than 9 months and offering it to all planners interested in participating. May want to have a form that comprises a two month forum, that can be broken into a series of one or two week sessions.

A. Definitely. One format might be to target career Corps folks not currently in Planning. The big advantage of the PA program was the opportunity to completely focus on learning (lots of evening reading, group discussions, lectures, the reasoning that established policy, total immersion environmental field classes, and building networks) without worrying about job deadlines. Perhaps a more affordable and abbreviated program focussed on policies and procedures for each project purpose, economic evaluation techniques, and environmental processes would minimize the time and cost of the program. This might be accomplished at a training center over a three or four month timeframe. If possible, the training could be done in shifts of several weeks on and several weeks back at the district to enable some continuity of work and allow family life to continue. However, it is important that the classmates be together long enough to share past work experiences and build a trusted network from which they can obtain advice and assistance for specific planning needs in the future.

A. The district graduated two individuals when the PA program was very active. Unfortunately, the results were not beneficial to the planning program and left a bad taste among management since both individuals departed the planning function shortly upon graduation. The investment in time and cost to the organization over a year period was substantial in both cases, without rewarding the organization with their knowledge gained. If such a program were reinstated, we must make a condition of employment that the individual is obligated to be retained in the planning function for one year following graduation- if not they must repay the training costs. This may be similar to long term degree programs that some districts sponsor for their employees. In general, the feedback obtained from prior graduates has been very positive - that the experienced gained was tremendous.

Probably one of the best things that could happen, but shorter duration to 6 months and <u>emphasize</u> planning.

Re-instituting the PA program is not supported. We cannot afford it.

The program must get back to basics. It lost its focus when they attempted to add PM. It needs to be abbreviated as the payoff is not there since individuals change careers more often.

It would be good to roll the program into the Water Resources Fellowship Program. (PA was only recognized within the Corps) Best part of the PA program was that the participants took the Planning Orientation Course on the road. Need to customize something through a University.

I have no strong feelings, if we can afford it. Individuals that went to the program seemed to get a lot out of it.

The way that it was done before will fail. The districts cannot afford to send people away for a year - 3 to 6 months maximum. The training can't wait for a person to have 5 to 10 years of experience. It must be early (first 3 years), not in mid career.

Not sure, had no experience with the former one. We need to concentrate on programs which are focused on direct benefit professional development, like local or within Division rotational assignments, and localized or within Division cross training, and local, private sector, or within Division training opportunities. Many times LDP type courses which take people out of commission for long periods have no direct benefit to organization or mission.

A type of PA program or "certification" program should be re-instituted...a combination of Corps/university classes/correspondence classes/developmental assignments.

A major rehab of the programs and processes, with focus on delegation of authority to Districts **before** putting effort into reviving the Associates program.

It is no longer relevant in today's professional environment. Also, it is too costly as an overhead charge.

Yes.

I support the PA program and believe it should be reinstituted as it was before. Past graduates all seem to be very knowledgeable and well-rounded in planning issues.

I DON'T RECOMMEND IT. IT IS TOO LONG AND TOO COSTLY.

An updated Planner Associates-type program would be valuable, but should be reduced to a 2-3 month duration. Customize the program to include the most critical planning skills and knowledge. Could be set up a regional basis to promote more participation.

We probably need something like the PA program but, as mentioned in 7, above, it needs to be more like the non-resident AMSC program. We can't afford to let our best folks go for a year and remain unconvinced that all the stuff the old PA program had folks doing was really necessary. We also can't afford a huge hit to our training budget. There has to be middle ground.

see above

Recommend a planning program that consists of core courses and short developmental assignments that lead to formal recognition.

An excellent program - could be shorter (2-3 months).possibly with some correspondence work. Maybe have regional locations - focus on the particular missions of the region. Make it easier for planners with potential to enter. The adverse family impacts probably limits participation - maybe funds a couple of trips home

I am no longer in favor of the "old" type of Planner Associates program because it removes key employees from the District's workforce and from possibly challenging assignments for too long a period of continuous time (one year). As an alternative, I would prefer, for example, a series of relatively short-term (2 or 3 months) assignments on various planning topics at various locations. The training could be given in segments over a three or four year period, at the end of which the employee would be given a "Planner Associates Certificate".

The program is a good idea, but not for year-long assignments. The District is already too short staffed to lose good people for extended periods.

Format – should not be offsite at Fort Belvoir for a year

Great idea, shorter version maybe combining with PM

9. If you could make one recommendation to the Chief on improving our planning capability what would it be?

Provide focused opportunities for training and fund planning work, 2nd would be a PA program.

Increase planning opportunities. Work with the Administration and Congress on increasing the size of the GI Program and establishing funding continuity so that Districts can develop and execute a long-term strategy for water resource planning. The needs exist.

Improve planning grade levels.

A. Provide appropriate training such as formal intro/orientation for new planners, specific local training or national/regional conferences for the entire staff, or update training for experienced staff.

A. I believe there is a lack of leadership, focus, and direction at HQ relating to the CW Program. HQ should take the lead in growing and expanding the program. So far, this "vision" has been dumped to the FAO level, but not really supported at the higher levels. In order to attract and keep high caliber technical people, a vibrant program is needed, one that makes the staff feel that they're doing something important

A. The one recommendation is that we should make the planning function, again recognizable in the organization. Make planning co-equal with the engineering and construction missions. In some respects, size is immaterial with recognition. For example, most districts have stand-along safety offices and some, emergency management offices, both very small in personnel but visible to the command. The Corps is big on "teamwork" and cutting across boundaries, but we all know that organizational visibility does count when command support is required.

Reinstitute some form of the PA program.

Separate planning divisions should be established where they can be supported by the workload. They should be insulated from PM. This must include sufficient overhead funding to support training. Limits might be programs of $3-4 million.

Maintain a strong planning organization in each district and don't dilute it by combining it with PM.

Give study management back to planning.

I would challenge for a better way to obtain/retain human resources. People are leaving faster than they can be brought on board. We need an exception for direct hire.

The Corps must start investing in people, both in the number of people and the development that must occur within three years. (hire 1000 planners)

Establish clearly that the Planning expertise and organizations must be maintained in each District office. Encourage the Planning organizations to provide Project Management for civil works projects

Clearer definition of PM/Planners roles. A project is in plannings hands until it is authorized

Simplify the processes……use an enema.

De-centralize

Get out to the Districts early; simplify the process.

The thing I would tell the Chief is to stop diverting planning talent into other offices that don't produce projects. Every time there is a reorganization, a new organization of trackers, managers and monitors is created and planning talent (usually SENIOR talent) is lost. A bigger issue, although not a direct answer to the question, is the current overall organization which has competition for the same resources and doesn't really allow for dedicated teams.

ENDORSEMENT BY HIM TO THE DE'S.

Require Division Planning offices to hold 3-4 day planning process and plan formulation training workshops for District staff.

We need appropriate grade structure. There are economists, lead planners, biologists, who are grossly underpaid for their skill and work level and level of responsibility (due to complexity of the project) – we need working level GS-13 positions where appropriate. There are Planning organizations where there are gaps in the grade structure (Division Chief is a 15, subordinate supervisors are all 13's).

Planning has to be an attractive career path just like other technical areas. Need Planning organizations, technical experts(and grades).

Hire and train planners now before the next wave of experienced planners retire.

Pay attention - make planning a priority. Leadership to make it happen.

Short Answer: Accept the philosophy that the Corps' effectiveness in implementing solutions to the Nation's water-related problems TOMORROW requires a healthy and robust Planning capability TODAY ---and---reflect this philosophy in all future policy.
Long Answer: Accept and promote the fact that specialized skills, knowledge, and abilities (KSA's) are prerequisites for a good planner and that the Corps should make a commitment to providing the necessary training and experience opportunities to produce high KSA's among the Planning personnel. I would also ask the Chief to do everything possible to address (and erase) the erroneous attitude shared by some in the organization that "anyone can be a Planner".

Improve the personnel process so that we can promote existing and hire replacement personnel as apprpriate in a reasonable time frame.

Have him and all commanders, executives and managers realize that Planning is the key to the future; without you have nothing in the construction pipeline. Planning needs to be given the right resources and looked upon as something other than a “stepchild” to Engineering or Project Management.

Retain planners and stop drain to PM, using career ladder to higher grades.

10. Any improvements to planning capability are likely to require resources. What are your views on how the planning capability improvements you recommended should be resourced?

Central fund, like long-term training, seek out providing degree or certification in conjuction

Don't see a need for a large, extra investment. It will require that District's establish increasing planning capability as a priority in their organizational assessments. Costs should be integrated in each District's annual training and development program. One time costs such as for development of a "Planning Associates" type program should be paid by HQ.

The funding should come from centralized funding for the most part, without dependence on study or project funds. When you consider the overall Corps budget, changes could be implemented with a relatively small cost.

A. As in any initiative, to be properly resourced, it needs support of upper management as a high priority item and budgeted for as with other items considered in the development of the budget.

A. I believe this is a Corps-wide problem. Therefore, HQ should be willing to lead (and fund) much of the effort.

A. Some of the planning capability, of generalized nature, appears similar to the technical assistance accounts in both the GI and CAP programs. These accounts are usually used to perform early scoping of studies before funds receipt or to coordinate with sponsors. We should consider providing each district or division a small amount of GE funds, similar in nature to the military program which provided OMA funds for undefined "installation support". This generalized planning capability, especially when related to sponsors and customers could partially be financed through GE, if the concept is acceptable.

PA program centrally funded, all others locally.

Planning must have sufficient overhead to support training. Each study team should have project-supported training (or refresher training) at the initiation of each reconnaissance study and feasibility study.

Centralized funding should be used for some training. MSC resources are free to the district. Higher turnover triggers the requirements for more training but the training budgets have decreased. There needs to be more forgiveness in operating budgets and in the total labor multiplier. Training budgets are limited to 2% and individuals are limited to one class per year. Prospect courses are out as the major training vehicle because of cost.

The districts need some "walking around money" for the development of capability in addition to project funding. There needs to be an ability to budget general expense for the district.

This needs to be attacked from two angles. The district needs to find good classes and commit the training funds. While the Division limit for training is 3%, we are at 3.5% and have cut outreach and computer acquisition to keep the total labor multiplier down. We also need to take advantage of training that is not expensive, such as training provided by the Division.

Universities are an untapped resource and we need to draw them in. There should be some internal trade-offs. Ask sponsors for more. What materials or services would a sponsor or AE provide in exchange for their participation. Partnering with other agencies may be an option.

In my view, cross training, within Division training, private sector training, local or within Division rotational assignments can be cost effective and mission focused within the Division.

Planning is the future of the Corps....it should be resourced partly from a centrally funded HQ account (for the "re-institued PA) to OH.

Be willing to pay for experienced talent (GS-12 & 13 level) if you want to attract and hold the better people on the market.

Improve direct hire authority without the need for using the intern program.

Judicious mixture of in-house (including contractor provided resources).

Organizationally, we don't need additional resources to improve our capability. Eventually, we will need to have more of a "RMB-type" approach, where the Districts within NAD share SENIOR planning resources, as the SENIOR staff continues to dissipate.

FUND THEM BY HQ.

Make maximum use of the Corps' General Expense funding and require improved planning cabability as a priority for use of district training funds.

Most of the costs can be absorbed by the Planning organizations, but any long term program may require subsidies from other funding sources.

Needs to be centrally or regionally funded. I realize that could require across the board taxing.

Technical indirect.

I would like to focus on what is going to happen if we don't improve planning capability.

Training costs for improving the Planning capability of a District should not be borne only by the Planning element's overhead account. Training funds should come from a "special" source or from the District's overall overhead account.

Can HQ provide training funds? District overhead rates are already too high and the needed additional training would be a further burden.

bite the bullet and use T.O. and DA funds.

Appendix F

Planners' Web Survey

Summary of Closed-End Responses

- A total of 421 persons completed the survey.

- Most respondents came from districts, work in planning organizations, perform plan formulation duties, are at the GS-12, non-supervisory level, are between 41 and 50 years of age, and rate themselves at the journeyman level of skill.

- 3 out of 4 respondents believe that Corps planning capability has gotten worse over the past few years.

- Almost 1 in 3 respondents is over 50 years of age (and thus could potentially retire within 5 years). For districts the figure is 30%; for divisions 51% (Chart 1).
  - Overall, 42% of planners rating their skill level as "expert" are over 50 years of age (Chart 2).
    - For district respondents the figure is 42% (Chart 3).
    - For division respondents the figure is 61% (Chart 4).
  - Overall, 29% of planners rating their skill level as "journeyman" are over 50 years of age.
    - For district respondents the figure is 27% (Chart 3).
    - For division respondents the figure is 56% (Chart 4).

- The percentage of respondents rating themselves as having either a good bit or expert level of experience in our major mission areas who are over 50 years of age is as follows (Charts 5 – 12):

Mission Area	MSC	District
Flood Damage	63%	25%
Inland Nav.	40%	32%
Deep Draft	60%	27%
Ecosyst. Rest.	60%	26%

- Respondents rated mentoring and on-the-job training as most effective for building planning capability.

- Most respondents listed their level of experience as low in performing planning functions in the following areas:
  - Deep draft navigation

- Inland navigation
- Shallow draft harbors
- Coastal protection
- Planning Assistance to States
- Emergency operations
- Water supply
- Dam safety
- Dredge material management
- Hydropower
- Major rehabs
- Reevaluations
- Urban stream corridor redevelopment
- Environmental infrastructure
- Brownfields

- Most respondents listed their current level of knowledge, skill or abilities low in the following areas:
  - Construction contracting procedures
  - Financial plan evaluations
  - Engineering economics
  - Floodplain management rqts.
  - GIS
  - PCA wording rqts.
  - Real estate rules/rqts.
  - P&G evaluation procedures
  - Risk analysis
  - Endangered species consultation
  - Environmental mitigation
  - Habitat evaluation
  - Post authorization procedures
  - Local cooperation reqts.
  - Documenting policy compliance review
  - Gov't to gov't relations
  - Scheduling and work breakdown structure
  - Hydrology and flow freq.
  - Social impact evaluation
  - Cultural resources evaluation

Summary of Open-End Responses

Four questions (2, 3, 6 and 8) allowed respondents to provide a variety of answers. A keyword search was performed on these responses to identify major categories of responses.

Question 2 asked respondents to identify important contributing factors to any changes in planning capability. Of the 211 responses provided, about 30 percent noted loss of experienced staff from a variety of sources as a principle factor for changes in Corps planning capability. Another 20 percent focused on retirement of experienced planners as an explicit factor. Other important reasons cited included lack of training (17% of responses), and growth of project management function (11%).

Question 3 asked respondents for one recommendation for improving planning capability. The most frequently appearing recommendations included training for the planning workforce (43% of responses), increasing the grade levels in planning (13%), clarifying roles and responsibilities of planning and PM (11%), and changes in plan formulation activities (8%).

Question 6 asked respondents for the kinds of training they believed they needed. The most frequently appearing responses included training in planning principles and procedures (53%), environmental/ecosystem restoration (23%), and GIS (13%).

Question 8 asked respondents to identify the most effective ingredients for building planning capability. Improving executive understanding of and support for the planning function was identified in 36 percent of responses, followed by establishing career paths for planners (29%), clarifying planning's role in the PDT/PMBP (21%), improving working conditions and hiring planners with needed skills (both receiving about 15% of responses).

Chart 1

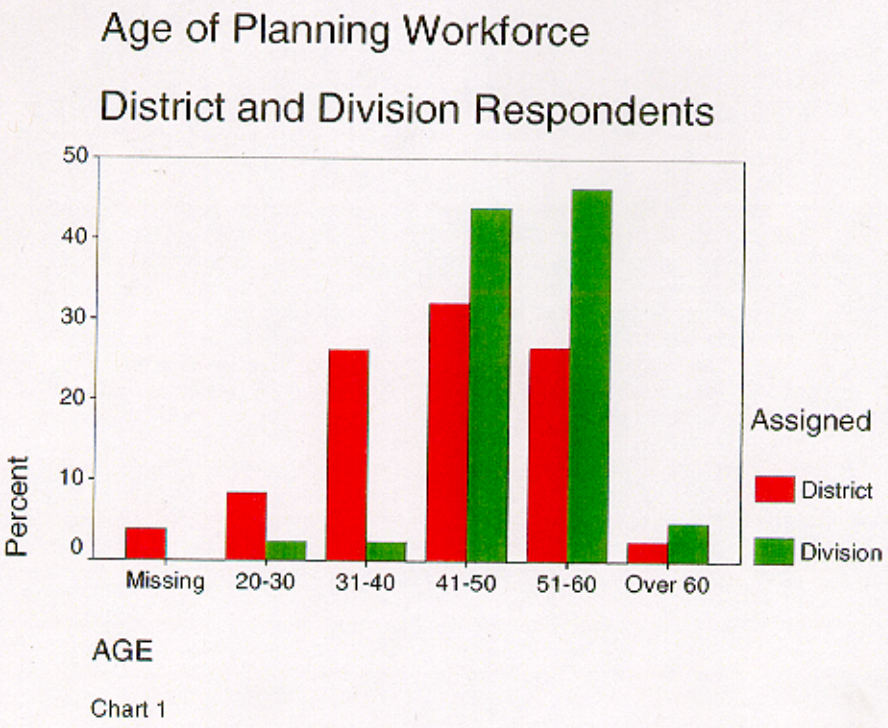

Chart 2

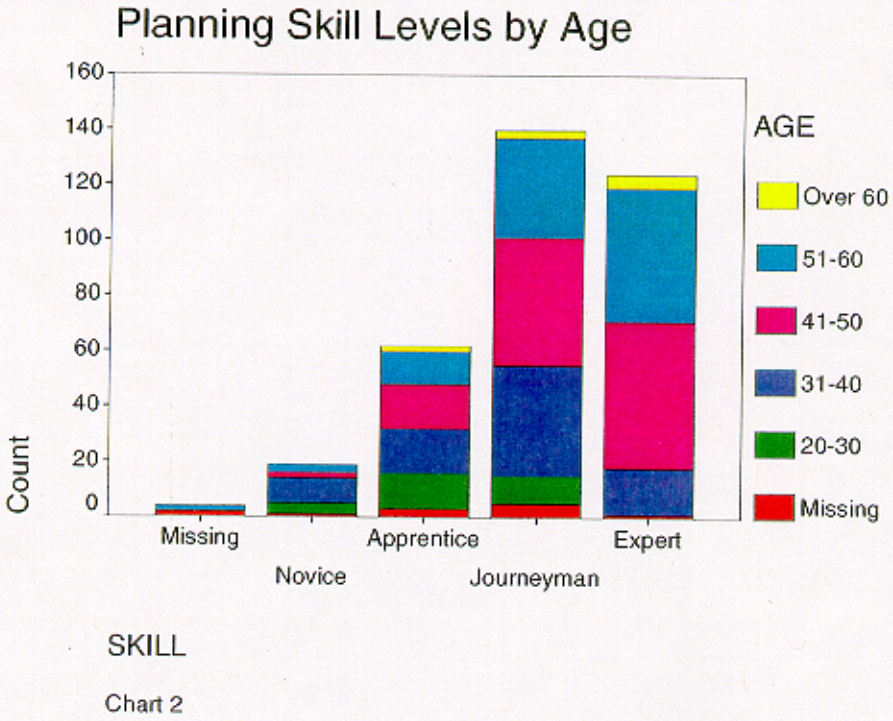

Chart 3

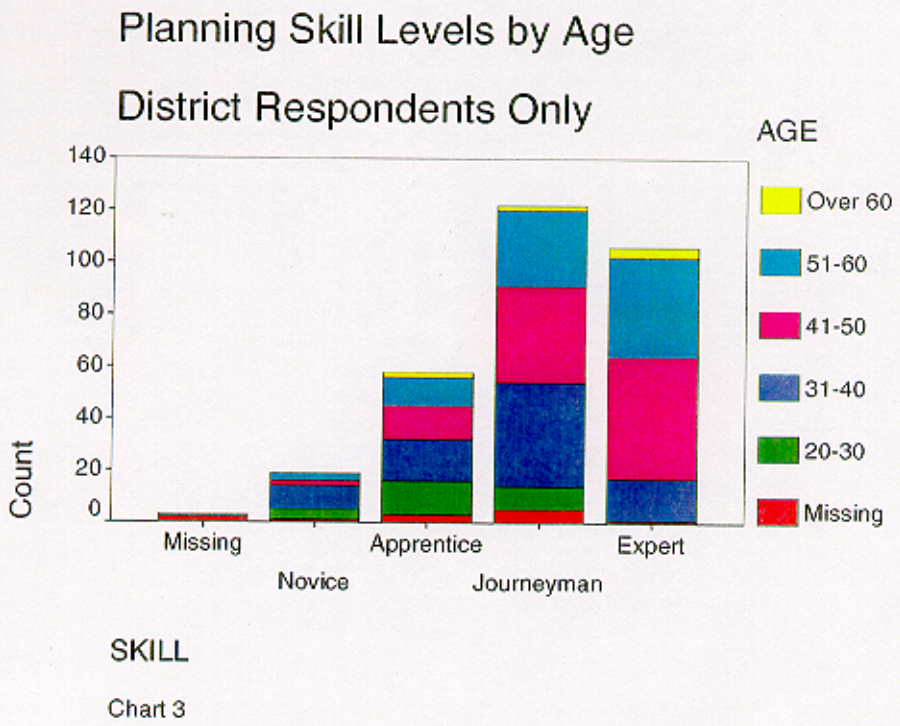

Chart 3

Chart 4

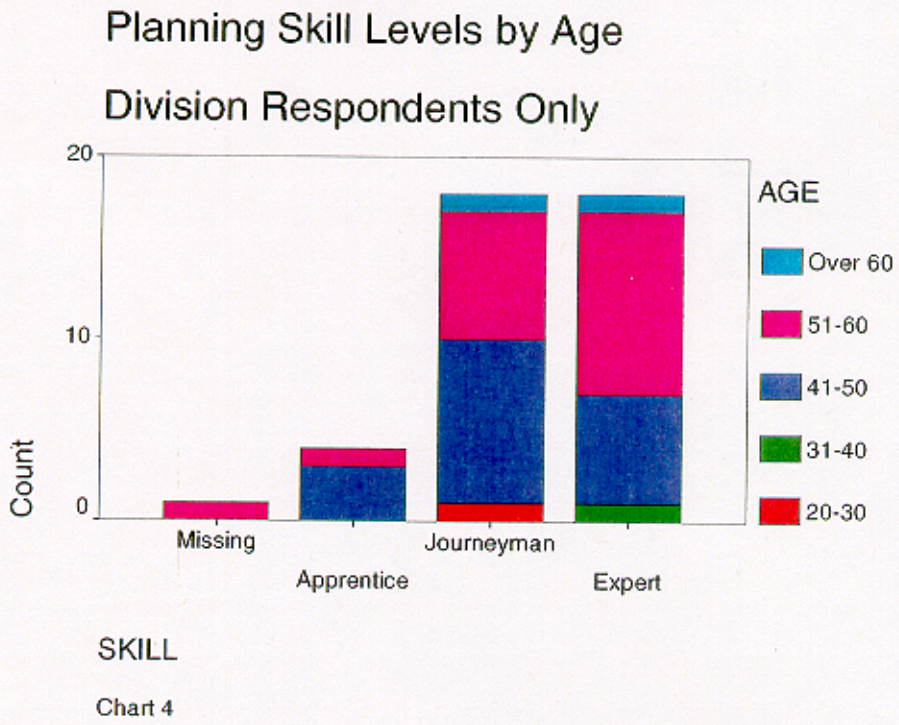

Chart 4

Chart 5

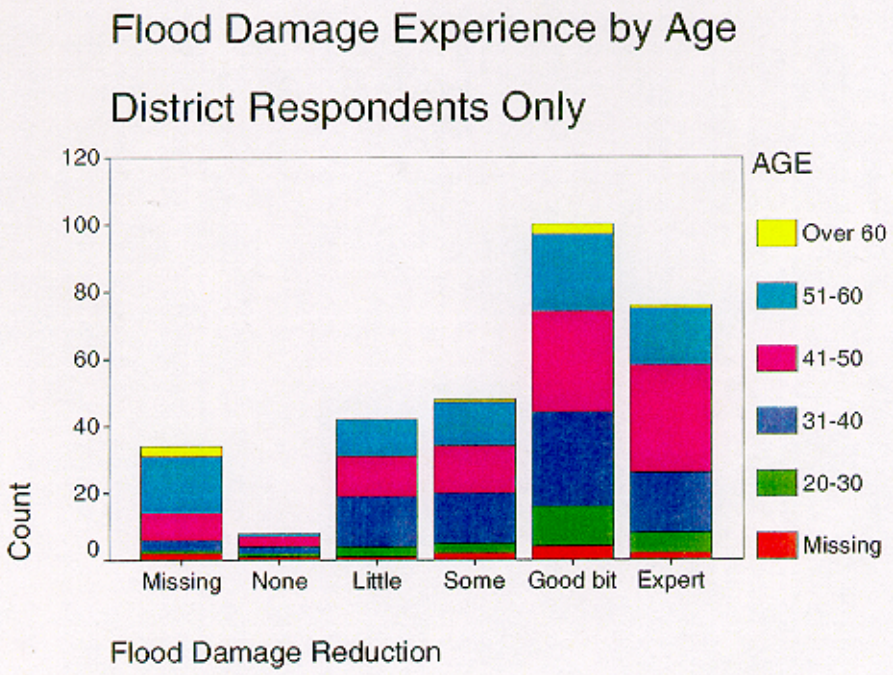

Chart 5

Chart 6

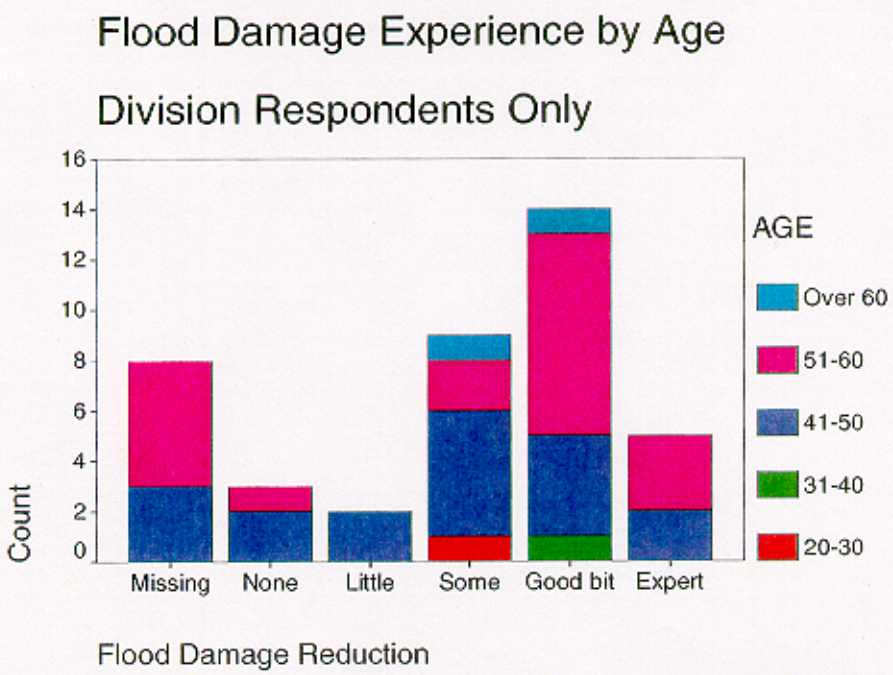

Chart 6

Chart 9

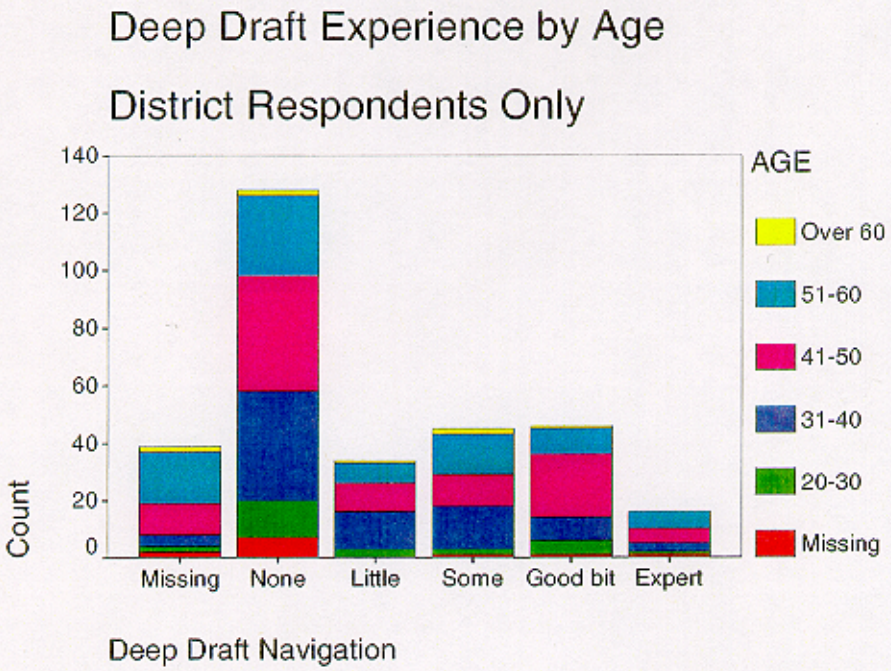

Chart 9

Chart 10

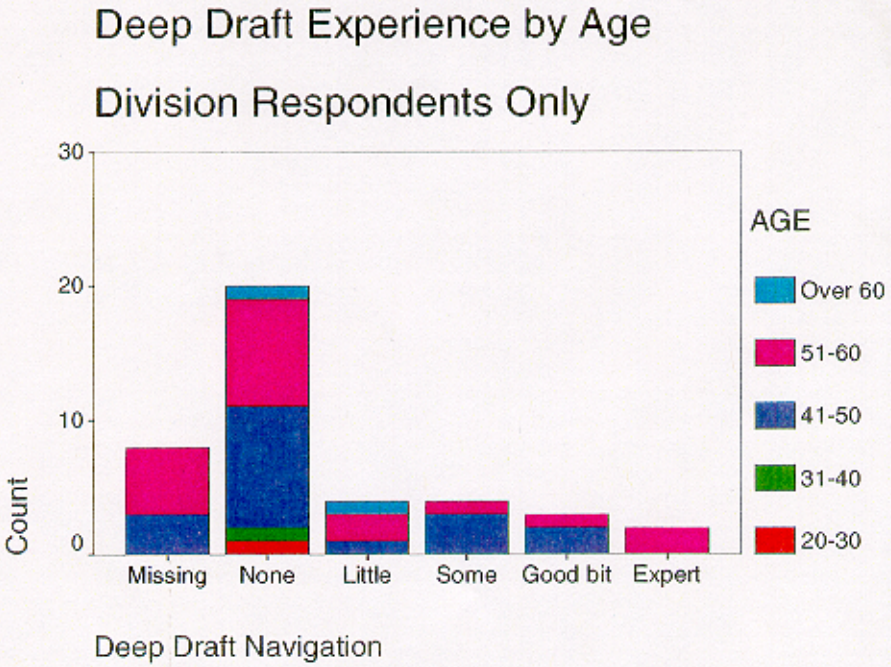

Chart 10

Chart 11

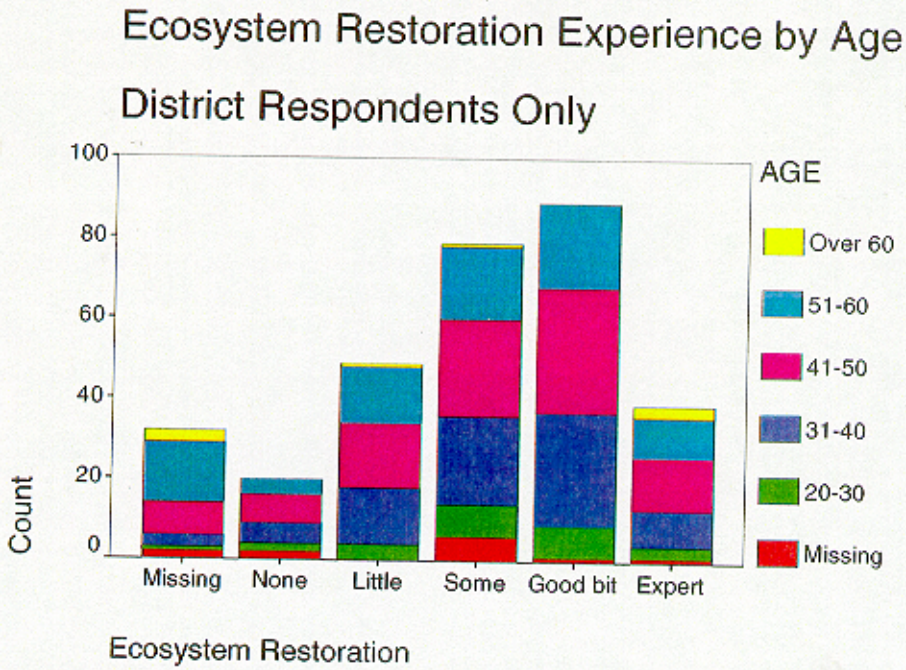

Chart 11

Chart 12

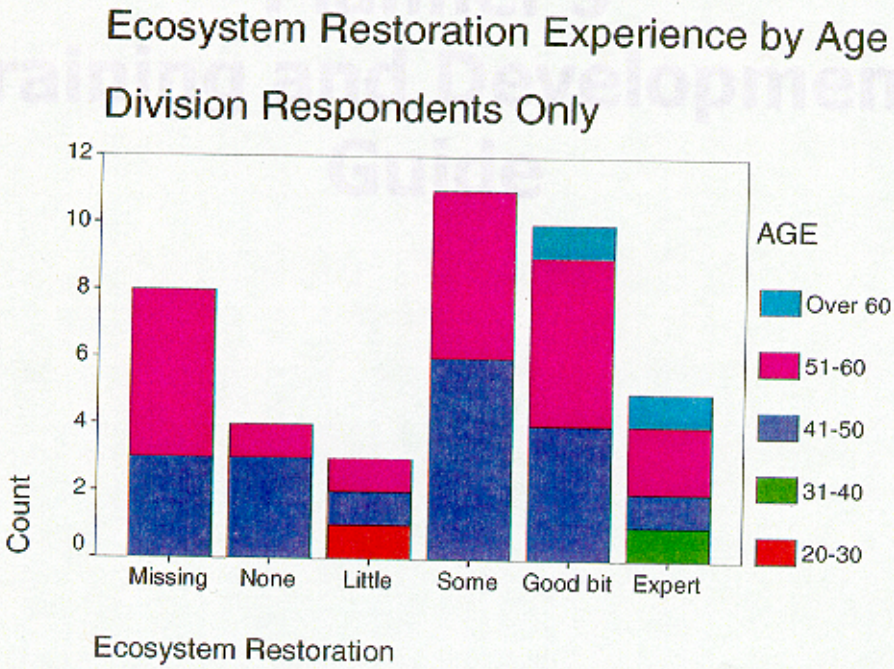

Chart 12

Appendix G

Planners Training and Development Guide

The planners training and development guide is a roadmap for planner development during the stages of a planner's career, and will help ensure that planners share a common body of knowledge and experience. The guide is shown on the attached figure, and consists of several columns. Column one shows the key knowledge, skills, and abilities (KSA) that constitute the basis of the technical planning function. Symbols show when in a planners career (novice, apprentice, journey-level, expert) that KSA is to be substantially acquired or substantially upgraded. The next column presents the eight planners "core curriculum" courses, and displays how these courses provide training in the planner KSAs. The eight core courses are those courses that all in the technical planning function should take. These courses will provide a common base of knowledge in all planning KSAs.

The next column identifies "elective" courses that planners are encouraged to take based on their need and interest. The first elective shown is the Expert Planner Program. This intensive six-month program provides advanced plan formulation development. The next entries are the current technical planning-related courses offered under the Corps PROSPECT program, showing how each course addresses key planning KSA. Finally, the last column presents guidelines for On-the-Job training and mentoring that planners should receive at the novice, apprentice, journey, and expert levels.

The guide is intended to serve as a roadmap for planner development during the stages of a planner's career, from novice to expert. The guide shows the "core courses" that planners should take, and at what stage in the planner's career they should be taken. It also shows the developmental activities that should occur at each stage of the planner's career.

Stages of Planner Development:

Novice: is an inexperienced and untrained newcomer to planning.

Apprentice: is learning the vocation of planning – not quite a beginner, but still requiring close supervision.

Journey-level: is experienced and capable of performing all but the most complex planning assignments independently with little direct supervision.

Expert: is a highly skilled subject matter expert capable of handling planning tasks of the highest level of difficulty.

H	A	J	E	Knowledge, Skills, and Abilities	"Core" Courses [1]	Other Developmental Activities [2]
●				Develop planning process	● ● ●	
●				CUT Milestones	● ▼	
■				CUT Milestoning	● ▼	
■	○			Communication skills		
●	○			Project management (business process)	● ▼ ▼	
■	○			Contracting (authority procedures)	●	
	●			Customer (corporate/service) services	▼ ● ●	
	●			Determining (need/requirements)	● ▼ ▼ ● ▼ ▼	
	●			Plan review/approval process	▼ ▼ ●	
	●			Benefiting (value) project/activities	▼ ●	
	●			Benefiting objectives	▼ ●	
	●			Benefiting/developing alternatives	● ●	
	●			Screening alternatives	● ●	
	●			Selection criteria/criteria	● ● ▼	
	●			Over approximate (planning)	▼ ●	
	●	○		NEPA process	● ▼ ▼	
	●			Coordination with other agencies	● ●	
	●	○		Environmental (mitigation) analysis	▼ ▼	
	●			Scoping (process)	▼ ▼	
	●			Customer (consultation)	▼ ▼	
	●			Local (operations) requirements	●	
	●			Economic (analysis/documentation)	▼ ▼	
	●			Engineering (concepts/economics)	▼ ▼	
	●			Hydraulic (engineering) requirements	▼	
	●			Real Estate (rules and requirements)	▼	
	●			Technical (review)	● ▼	
	●			Risk (analysis) management	● ▼	
	●			Public (consultation) procedures	● ▼ ▼	
	●			Scoping (knowledge/experience)	●	
	●			Independent (technical review)	● ●	
	●			Project features (location, etc.)	● ●	
	●			Project approval steps	● ●	
	●			Design (consultation) preparation, (and review)	▼ ●	
	●	○		Incremental (analyses)	▼ ▼ ●	
	●			Benefit (analyses)	▼ ▼	
	●			Hydrology and (water) quality (analyses)	▼ ● ▼	
		●		Construction (process)	▼ ▼	
		●		Modeling (systems/alternatives)	▼ ▼	
		●		Optimization	▼	
		●	○	Environmental (review/consultation) process	▼ ●	
		●	○	Permit (status/procedures/requirements) process	●	
		●		Performance (measurement/evaluation) procedures	●	
		●		Construction (contracting) procedures	●	
		●	○	Financial (performance/expense/revenue) reporting	●	
		●		Documenting (policy/compliance review)	▼ ●	
		●		Grant (applications)	▼	
		●		Understanding (requirements/forecasting)	●	
		●	○	Government (government) relations	●	
		●		Risk (analysis/mitigation) (technical/economic)	▼ ●	
		●	○	Leadership	●	
		●		Managing	●	
		●		Federal (budget) process	▼ ●	
		●		CUT (administration) process	▼ ●	
			●	Consultation	●	
			●	Managing (projects)	●	
			●	Managing (staff/consultants)	●	
			●	Project (management and environmental assessment)	●	
			●	Policy (development)	●	

● Demonstrated in core curriculum (substantially satisfied)

○ Demonstrated in core curriculum (partially satisfied)

● Provided in supplemental (satisfied)

▼ Tracked (not satisfied)

CUT Milestoning

Novice:
- Receive "planner welcome package"
- Be assigned to a "planner" counselor
- Be a member of a SDB(b) team
- Participate on an IPR team
- Write something substantial (SDB(b) fact sheet, etc.)
- Attend project activities
- Participate in a public meeting

Apprentice:
- Complete individual development assignments in RE, comm, engr.
- Regularly attend PRB meetings
- Review a budget justification sheet

Journey-level:
- Complete cross-district, MSC developmental assignment.
- Attend Congressional hearing.

Expert:
- Instructor at core curriculum courses;
- Developmental assignment at other agency, committee, etc.

Notes:

1. Core Courses constitute the set of training to provide skills acquisition in the planning KSAs. Planners need to concentrate on obtaining these courses:
   - CWDC (targeted at Novice/Apprentice level. Delivered at least once/year at each MSC. Should be completed within the first 12 months of a planner's career.
   - Intro. to Planning: (targeted at Novice/Apprentice level. Delivered at least once/year at each MSC. Should be completed within the first 12 mos. of a planner's career.
   - Planning Principle and Procedures: (targeted at Novice/Apprentice level. Delivered at least once/year at each MSC. Should be completed within the first 12 months of a planner's career.
   - Plan Formulation Workshop: (targeted at Apprentice/Journey level. Delivered at least every other bus locations.
   - Econ Analysis for WRP: (targeted at Apprentice/Journey level. Delivered at least every other locations.
   - Hydr. Eng. for WRP: (targeted at Apprentice/Journey level. Delivered at least every other locations.
   - Env Analysis for WRP: (targeted at Apprentice/Journey level. Delivered at least every other locations.
   - Communication Building for WRP: (targeted at Apprentice/Journey level. Delivered at least every other bus locations.
2. Other Developmental Activities supplement formal training provided by the core courses.
   - Expert Planner Development Program: This is a 6 month developmental assignment (targeted at journey-level planners. Details can be found on the planners resource webpage (www.usace.army.mil/planner resource)
   - Electives provides more training in specific areas to broaden and further enhance skills (in particular KSAs. A list of PROSPECT electives courses of these (applicability to planners is shown.
   - CUT Milestoning: should be targeted at those KSAs appropriate to the individual's career phase (see example suggested activities for each phase in the boxes to the left).

APPENDIX H

Novice Orientation Plan

Target Development Stage

Novice Level Planner

Development Objectives

The primary objective of the Novice Orientation Plan is to get the newly hired planner into a productive status, as soon as possible, such that he/she is able to meaningfully contribute to the Project Delivery Process. This requires providing some basic formal training, mentoring, developmental/rotational assignments and on-the-job training and experiences. This basic training and development package needs to focus on acquainting the novice with the role and tradition of the Civil Works (CW) program and the key role the planning function plays in the CW mission. The immediate supervisor and intermediate or senior rater will serve as mentors in the novice's early development. Their responsibility is to assure that the novice is exposed to not only the work of the members of the planning organization, but is familiar with the role of the other CW functional elements and understands how the Planner contributes to the Project Delivery Process.

Upon completion of the Novice Orientation Plan, the novice should have a basic knowledge of the Corps and its program; a clear understanding of the steps involved in the CW Planning Process; an introductory knowledge of the Planning Guidance Notebook, Federal budget process, contracting procedures, and policy impacts; developed some skills in planning management techniques; and the ability to apply basic planning principles, policies and procedures to job assignments.

Plan Elements

This 12-month plan is designed to provide a comprehensive understanding of the Civil Works mission. Within the first 12 months of the novice's assignment, the novice will:

a) Be welcomed on the first day by the immediate supervisor and intermediate or senior rater who will introduce the agency roles and organization, chain of command, and conduct an acquaintance tour of the district. The new planner also will be given the "Planner's Welcome" Boot CD-ROM disk (to be developed as part of the task

force recommendations) containing a video clip of the HQ Planning and Policy Chief "personal" welcome; CW history and accomplishments; introductory material on planning's role, principles and procedures (the Planner Partnership Kit or a modified version); Planner Training and Development Guide; Planning Guidance Notebook (PGN); useful planner resource web-site(s) and references, etc. As the "Boot Disk" is updated, it would serve as a useful tool for all planners and CW staff.

b) Receive from the immediate supervisor and intermediate or senior rater help, guidance, mentoring, etc., until the novice feels comfortable enough to select a mentor of his/her own choosing.

c) Be assigned as a member of a Reconnaissance Phase, Section 905(b) analysis study team.

d) Participate on an Independent Technical Review (ITR) team.

e) Write something substantial, such as a Section 905(b) analysis, a Preliminary Restoration Plan, WRDA Authorization Fact Sheet, etc.

f) Deliver at least one presentation or project briefing.

g) Work on a contract action (write a scope of work, participate in negotiation process, etc.).

h) Work on a study or project involving one of the Corps' research labs.

i) Participate in the Civil Works budget process by attending a budget-related meeting, writing and or reviewing study justification sheets, and regularly attending District Project Review Board meetings.

j) Attend the following Planner's "Core" curriculum training courses within the first twelve (12) months of assignment to CW planning:
   - Introduction to Planning (within first six-months)
   - Civil Works Orientation Workshop (within first six-months)
   - Planning Principles, Policies and Procedures (during last six months)

k) Participate in at least one public meeting or workshop.

l) Read:
   - ER 1105-2-100
   - District and Division specific Planning Guidance
   - District Quality Management Plan / Quality Control Plan

m) Visit at least four field sites:

- A "study area"
- Construction site
- Completed project
- Emergency operations action (if possible)

Selection of Participants

The Novice Orientation Plan is mandatory for all new planners at the entry level with no prior Corps Civil Works Water Resource Planning experience. This plan is to be reflected in the novice's Individual Development Plan (IDP) and his/her first year performance standards. Other new employees to Planning with some Corps, Civil Works, Water Resources Planning, or similar experience may work out modified development plans with the District Chief of Planning, as appropriate.

Resource Requirements

The employing office would bear the costs for the 12 month development activities. Formal training courses taken under Item j which are part of the "Core" Planner Curriculum (Appendix - K) are centrally funded (labor, travel, per diem, instructors, and instructional materials).

APPENDIX I

Planners' Web-Site

Introduction

The current environment that the Corps operates in dictates a more efficient method of doing business. In order to meet this challenge, Corps personnel, and particularly planners, have relied on the Internet to provide and access information to speed the business process and to leverage comprehensive resources.

Background

Planners currently have the ability to access many web sites on the Internet that contain information on regulations, policy letters, laws, Congressional actions, PowerPoint presentations, links to other agencies, and many other resources. One of the problems that Planning Chiefs have raised during interviews was that it is not possible to go to a single resource center or library to query or search for a specific resource. Nor is there a way to be assured that the resource found is current. Planners have also cited examples of discussions that they were having with a colleague (e.g. HQ planning or policy representative) where they believed they were looking at the same regulation but, in fact, were looking at different versions of the same regulation located on different web sites. Many other problems associated with not having a common resource center or resource library for planners to access have been brought to the attention of the task force.

Planners are also seeking a tool that will assist them in developing products. One tool that they see as valuable is the ability to look at similar project planning reports so they can see how others approached and addressed similar problems/opportunities. Also the availability of a lessons learned data base would be of value. Currently, such information is not readily available on the web. Another application is web-based training for planners. Planners identified that they need a tool that will allow for various types of training that can be accessed when they have a free moment (training that is always available). Currently, some MSCs have various modules of the basic planning training courses on the MSC web sites that can serve as models for developing such web-based training or for hosting/conducting their own workshops on a particular subject when and as needed.

Planners Resource Web Site Concept

Given this expression of needs the task force proposed that a central resource web-site for planners be created. The steering committee endorsed this idea, making it one of the three high priority items they directed the field team to pursue. Thus far the task force has defined the general requirements for the web-site:

- Need for consistency in links (assure that a links are active, correct and current)
- Insure that information is current and that the "official" document is at one unique location
- Navigation must be easy.
  - Make links user friendly and ADA compliant
  - Provide easy pick lists for finding information
  - Information must be easy to access
- Need a good search engine for categories of information. (This was determined to be most important to task force)
- Planning information buttons linked to simplified planning resources site
- Resource library needs to be user friendly (It is desired by the task force to have one planning resource library web page for the entire Corps.)
- Be able to search/find project purpose
- Linkage to District/division workshop power point presentations

In addition, a task force sub-team has met with representatives from HQUSACE planning and policy division who maintain current web pages to discuss ways that the resources web-site could be created, as well as updated and maintained. The conclusion reached was that development of a resource web-site was feasible, the site could be placed on the headquarters planning and policy web-site, and that the resources web-site could be maintained, subject to appropriate funding being provided.

Next Steps

The task force recommends that the sub-team it created be maintained to continue the web-site development work. It further recommends that the sub-team be augmented by the addition of one district, and one MSC person with planning and web experience. The sub-team will refine the basic scope of work provided in this appendix, and will provide technical oversight to contractor development of the site. The sub-team would report to the Executive Oversight Committee (Recommendation #14).

Scope of Work

Development of Planners Resource Web-site

Introduction

Civil Works planners need a central resource web-site to provide them one stop access to current policy and guidance, planning resources, news, and training and development services. This scope of work describes tasks to be performed to create this web-site.

Site Structure

The web-site will consist of the following key elements:

-Current regulations and guidance: all appropriate planning ERs, PGN, PGL, and other related guidance will be provided;

-Legislative links: to all WRDAs and Appropriations acts;

-Planning resources: links will be provided to planning-related publications, such as pamphlets, research reports, OMB-approved questionnaires, etc.

-Planners' study aids: organized by study authority, and/or project purpose, links to example reports, checklists, helpful analytic models, etc.

-Planners information exchange: a bulletin board for planners to ask questions and network electronically;

-Planners training library: self-help modules on basic planning topics, canned presentations suitable for sharing with sponsors, community groups, etc.

-Search capability: a search engine capable of accessing all information on the web-site and providing responses to planners' queries.

Site Requirements

1. **Need for consistency in links (assure that a links are active, correct and current):** All links in the Planners Web Site that reference the same resource material would point to the same document or set of documents. In addition, these links would be researched and maintained to ensure that they are current and relevant. All identical links in the website would point to the same document(s).

2. **Insure that information is current and that the "official" document is at one unique location. Creator of information needs to assure information is maintained:** Review all resources to ensure that they are current and that each resource has a unique owner. Develop a procedure that describes: how documents are assigned an owner; how an owner goes about posting a new document; and how an owner replaces an old version of a document with a new version. The process will also address a requirement for creators to periodically review "owned" documents to insure that documents are current and/or valid (have they expired).

3. **Navigation must be easy:**
   - **Make links user friendly and ADA compliant:** Add an address identification box to each link that would provide owners name, date link was last maintained/updated, brief explanation of link, where appropriate;
   - **Provide easy pick lists:** That will make it easier to find information.

4. **Need an inclusive search engine for categories of information. (This was determined to be most important to task force):** Identify and configure a search engine to search the planning web site. In addition, this work will require that the web pages will need to be re-edited so that search capabilities will be enhanced to allow for more comprehensive and clear searches.
5. **Planning information buttons linked to simplified planning resources site:** Commonly accessed information would be accessed through a button contained on the home page of the web site.

6. **User friendly resource library:** This library would contain references and links to current and older versions of regulations, policy letters, laws, references, Congressional actions (current and old), documents from other agencies, relevant planning documents and guidance, news letters, and resources from other agencies and organizations where appropriate.

7. **Be able to search/find project purpose:** All executive summaries of completed planning studies would be placed on the web server. This would allow planners to look at how other studies were formulated. This is seen to be a tool that would allow a planning team to be more efficient and cost effective. By seeing how other people formulated same type of projects could save the project team time and money.

8. **Linkage to district/division workshop power point presentations:** Many districts are holding workshops and providing various types of training for their respective districts/project teams. The task force is recommending that the MSC's be given the opportunity to post their workshop and/or training material on the planners web-site. Also the task

force recommends that several training modules be designed and placed on the planning web-site for planners to access and use (e.g. attached outline of available briefing package addressing planning's role in the Project Delivery Team (PDT) for in-briefing of new commanders, executive staff, orientation of other PDT members, project sponsors, etc.).

9. **Maintenance of Web site:** The planners web site should be maintained to ensure that links remain valid and that new material that is identified by HQ, MSC, District, project teams etc. can be added to web site.

Tasks to be Performed

1. Hold scoping meeting with technical sub-team.
2. Develop rapid proto-type web-site and demonstrate look and feel of the site to the technical sub-team.
3. Refine proto-type in response to sub-team comments, and populate the web-site with content.
4. Demonstrate web-site to Executive Oversight Committee.
5. Develop an update and maintenance plan/manual.
6. Provide complete web-site.

Schedule

Task 1: No later than (NLT) 5 days after Notice to Proceed (NTP).
Task 2: NLT 60 days after NTP.
Task 3: NLT 120 days after NTP.
Task 4: NLT 150 days after NTP.
Task 5: NLT 180 days after NTP.
Task 6: NLT 200 days after NTP.

APPENDIX J

Plan Formulation Workshop

The plan formulation workshop is intended to fill a need expressed by planning chiefs for a “one stop” way of acquiring basic plan formulation skills. While there are a number of courses that touch on various aspects of plan formulation, the workshop that has been developed is the only instructional offering that addresses multi-purpose formulation as it applies to the Corps’ three priority mission areas of navigation, flood damage reduction, and environmental restoration. This appendix contains both a summary of the workshop, and a scope of work for the development of the workshop.

Workshop Summary

This general outline of potential course Modules assumes a workshop running between 1:00 on Monday until 12:00 on Friday. While the outline covers the four project purposes of ecosystem restoration, flood damage reduction, inland navigation and deep draft navigation, each session would be modified to cover ecosystem restoration and one of the other three project purposes. Then, by combining the two purposes, multi-purpose plan formulation would be covered. Participants should leave with the knowledge that will allow them to formulate the NED Plan, the NER Plan and the NED/NER Plan, and address issues in plan selection.

MONDAY 1:00 – GENERAL

Module Gl – The Module would start with the introduction of workshop instructors and course participants. The purpose and overview of the workshop would be presented.

Module G2 – This Module will briefly review the six step planning process and how the steps undergo a number of iterations during the development of a plan. It will provide a focus on plan formulation with reference to the other steps in the planning process. It will also include a discussion of the importance of stakeholder involvement and consensus building throughout the planning process.

Module G3 – This Module would discuss the establishment of planning objectives and constraints. It would address the without project condition. And, it would also compare with/without analysis, before & after analysis and gap analysis.

Module G4 – This Module will generically introduce basic plan formulation concepts – with an explanation that they will be dealt with more specifically by purpose so that through examples, they will be more understandable. Management measures and plans will be defined. Application of the P&G formulation criteria will be discussed. The NED Plan, NER Plan and NED/NER Plan will be defined. Locally preferred plans will be defined. And, plan formulation will be placed in the context of an art, rather than a science.

MONDAY 5:00 – ADJOURN

TUESDAY 8:00 – PROJECT PURPOSE TRACKS

TRACK 1: FLOOD DAMAGE REDUCTION

Module F1 - This Module is a review of the Corps' authorities to implement flood damage reduction projects. This discussion will include the types of projects that may be implemented under each authority, the limitations on what may be considered under each authority, cost-sharing requirements, and project specific policies.

Module F2 - This Module will cover the first two steps of the planning process, problem identification and inventory and forecast. It will cover flood related damages, including those that have not been effectively developed in flood damage prevention studies. The relationship between damages, specification of planning objectives and potential benefits will be discussed. Damages would include typical structure and content damages as well as: emergency costs to other agencies, damages and clean up costs for utility companies, and rental costs/losses. The emphasis will be on the information gathering that must be accomplished for the development of alternatives. Case studies will be discussed.

Module F3 - This Module is the first in a series that deal with the third step of the planning process, formulation. It will address measures to reduce damages, rather than reducing the flooding. The Module will cover the use and preparation of flood warning and emergency evacuation plans as a potential strategy for all flood damage prevention studies and projects. The incorporation of nonstructural measures in flood damage prevention projects, including the requirement for a non-structural plan, will be discussed. Examples of recent successful projects will be discussed and basic orientation in the use of PC based software for estimating costs and benefits of nonstructural flood damage prevention measures would be introduced.

Module F4 – This Module will discuss the use of floodwalls, levees and channel improvements as major components of flood damage prevention projects. Examples of recent successful projects to improve the capacity of the system to

convey flows will be discussed.

Module F5 - This Module will discuss the use of structures to detain flows, including reservoirs and detention basins as major components of flood damage prevention projects. Examples of recent successful projects will be discussed.

Module F6 - This Module will cover the design, costing and construction of flood damage prevention improvements. This module is the first to addresses the fourth step of the planning process, evaluation. Cost estimating will be covered with an emphasis on generating an understanding of the variables that can influence cost. Recent developments in design and construction innovation will be reviewed. The influence of real estate costs will also be included.

Module F7 -This Module covers developing and presenting a sound incremental analysis. This module would include alternative formulation strategies Including: starting with a small plan and adding increments until the costs exceed the benefits and formulating a wide array of plans with all combinations of measures. It would also include first add/last add analysis with the reordering of increments in the analysis. Examples will focus on plans with a mix of structural and non-structural measures.

Module F8 - This Module covers optimization and selection of the NED Plan, which is an element of the fifth step of the planning process, comparison. The options of optimizing by output and by size will be discussed, and the bracketing of the NED Plan. The influence of the NED Plan and the sixth step of the planning process, selection, will be discussed.

Module F9 - This Module will review the computer model suite, which will be used in the team exercise to follow. In this Module we will cover the "nuts and bolts" of the Corps' HEC FDA economic projection models, and Corps personnel will discuss their experience and techniques in making use of these models on successful flood damage prevention studies.

TRACK 2: INLAND NAVIGATION

Module IN1 - This Module is a review of the Corps' authorities to implement navigation projects. This discussion will include the types of projects that may be implemented under each authority, the limitations on what may be considered under each authority, cost-sharing requirements and purpose specific policies.

Module IN2 – This Module will be the first to cover the first two steps of the planning process, problem identification and inventory and forecast. It will be a descriptive overview of the existing national navigation system tailored to the area...for instance...the Great Lakes area...the module would be geared to include the history of it's development, types of locks, dams and other features and their technological development through time. The Module will include a

review of operating equipment, tows, barges, Great Lakes craft, and landside infrastructure. Major emphasis will be placed on the interaction of economics and technological advances as engines of change.

Module IN3 - This Module will cover the general economics of the targeted navigation system including the role of population and resource distribution, trading patterns, alternative transportation systems including highway and rail and the need/advantages of water transportation. The Module will cover the topic of rate analysis and it's relation to the development of waterway benefits. Multi-port analysis would also be discussed.

Module IN4 - This Module will discuss the nature of commodities that have historically dominated on the waterway system and consider the potential for new commodities to move to the waterway. Commodity forecasts will be covered to include a workshp exercise in developing forecasts for a select group of commodities,

Module IN5 – This Module will deal with the third step of the planning process, formulation. It will review the measures that could be combined to formulate alternatives plans for navigational improvements. Plan formulation strategies will be discussed.

Module IN6 - This Module will cover the design (including physical model testing), costing and construction of a lock. Major lock features including walls, empty fill systems and gates will be covered in greater detail. This module is the first to addresses the fourth step of the planning process, evaluation. Cost estimating will be covered with an emphasis on generating an understanding of how site and facility performance can influence cost. Recent developments in design and construction innovation will be reviewed. The influence of real estate costs will also be included.

Module IN7 This Module covers optimization and selection of the NED Plan, which is an element of the fifth step of the planning process, comparison. The policies for the last added reach of channel will be discussed, and the bracketing of the NED Plan. The influence of the NED Plan and the sixth step of the planning process, selection, will be discussed.

Module IN8 - This Module will review the computer model suite, which will be used in the team exercise to follow, and Corps personnel will discuss their experience and techniques in making use of these models on successful studies.

TRACK 3: DEEP-DRAFT NAVIGATION

Module DN1 - This Module is a review of the Corps' authorities to implement navigation projects. This discussion will include the types of projects that may be implemented under each authority, the limitations on what may be considered under each authority, cost-sharing requirements and purpose specific policies.

Module DN2 – This Module will cover the first two steps of the planning process, problem identification and inventory and forecast. It will be a descriptive overview of the existing national navigation system tailored to the area...for instance the module might be geared to include the history of container traffic development, types of ships, cranes, terminals and other features and their technological development through time. The Module will include a review of operating equipment and landside infrastructure. Major emphasis will be placed on the interaction of economics and technological advances as engines of change.

Module DN3 - This Module will cover the general economics of the targeted navigation system including the role of population and resource distribution, trading patterns, alternative transportation systems including highway and rail and the need/advantages of water transportation. Multi-port analysis would also be discussed.

Module DN4 - This Module will discuss commodity forecasts to include a workshop exercise in developing forecasts for a select group of commodities. Forecasts of the vessel fleet mix will also be discussed.

Module DN5 – This Module will deal with the third step of the planning process, formulation. It will review the measures that could be combined to formulate alternatives plans for navigational improvements. Plan formulation strategies will be discussed.

Module DN6 - This Module will cover the design, costing and construction of deep draft navigation improvements. This module is the first to addresses the fourth step of the planning process, evaluation. Cost estimating will be covered with an emphasis on generating an understanding of the variables that can influence cost. Recent developments in design and construction innovation will be reviewed. The influence of real estate costs will also be included.

Module DN7 This Module covers optimization and selection of the NED Plan, which is an element of the fifth step of the planning process, comparison. The policies for the last added reach of channel will be discussed, and the bracketing of the NED Plan. The influence of the NED Plan and the sixth step of the planning process, selection, will be discussed.

Module DN8 - This Module will review the models and tools, which will be used in the team exercise to follow, and Corps personnel will discuss their experience and techniques in making use of these tools on successful studies.

TUESDAY 2:00 – LABORATORY EXERCISE

TRACK 1 – FLOOD DAMAGE REDUCTION

Module XFD - This Module will involve a laboratory exercise. The workshop participants will be divided into teams who will be given specific formulation tasks to complete. (Potential use of the HEC models must be investigated). Each team will develop an array of flood control alternatives. The team will generate a benefit/cost analysis for each alternative, including sensitivity analyses and develop a recommendation. The use of the Modesto feasibility study may be used as an example (contact Mike Burnham, HEC). The instructional staff will critique the team's output.

TRACK 2 – INLAND NAVIGATION

Module XIN- This Module will involve a laboratory exercise. The workshop participants will be divided into teams who will be given specific formulation tasks to complete. Each team will develop an array of alternatives for a lock or harbor improvement project. The team will generate traffic forecasts, rate savings, capacity analyses and alternative costs. The team will generate a benefit/cost analysis for each alternative, including sensitivity analyses and develop a recommendation. The instructional staff will critique the team's output.

TRACK 3 – DEEP-DRAFT NAVIGATION

Module XDN- This Module will involve a laboratory exercise. The workshop participants will be divided into teams who will be given specific formulation tasks to complete. Each team will develop an array of alternatives for a deep draft harbor improvement project. The team will generate traffic forecasts, savings in transportation costs and alternative costs. The team will generate a benefit/cost analysis for each alternative and perform optimization, including sensitivity analyses and develop a recommendation. The instructional staff will critique the team's output.

TUESDAY 5:00 – ADJOURN

WEDNESDAY 8:00 - ENVIRONMENTAL COMPLIANCE

Module EC1 - This Module presents a brief overview of several key laws and regulations that require and guide environmental consideration in all projects.

R&HA 1899, Clean Water Act, Clean Air Act, Endangered Species Act, Fish & Wildlife Coordination Act, Wild & Scenic Rivers Act, RCRA/CERCLA, National Historic Preservation Act, etc. NEPA will be considered in a separate Module. Discussions will include the opportunities and constraints that the acts place on the plan formulation process.

Module EC2 - This Module discusses the intent and breadth of what NEPA covers and describes the NEPA process, what it includes, and how it relates to the formulation process. The different NEPA documents will be described. The module will focus on the constraints that NEPA places on the formulation process.

Module EC 3 - This Module will define and contrast mitigation and restoration. Examples of how minor design considerations early in the concept design stage can avoid or reduce environmental impacts that would require costly mitigation. Special emphasis will be given to establishing a proper project impact footprint for each resource and projection of environmental conditions based on projected development patterns through the end of the project life establishing the project's effects and mitigation requirements. Mitigation policies and strategies will be discussed as they impact formulation.

WEDNESDAY 10:00 - ECOSYSTEM RESTORATION

Module ER1 - This Module is a review of the Corps' authorities to implement ecosystem restoration projects. This discussion will include the types of projects that may be implemented under each authority, the limitations on what may be considered under each authority, cost-sharing requirements and purpose specific policies.

Module ER2 – This Module will cover the first two steps of the planning process, problem identification and inventory and forecast with an emphasis on the information gathering that is required to formulate plans. This Module will review the methods used for the quantification of habitat values (Acres, HEP, HMG, etc.)

Module ER3 - This Module will deal with the third step of the planning process, formulation. It will review potential ecosystem restoration measures that have been considered in plan formulation. This Module will also emphasize the impacts of policy constraints regarding ecosystem restoration measures.

Module ER4 - This Module will cover the design, costing and construction of ecosystem restoration improvements. This module is the first to addresses the fourth step of the planning process, evaluation. Cost estimating will be covered with an emphasis on generating an understanding of the variables that can influence cost. Recent developments in design and construction innovation will be reviewed.

Module ER5 -This Module teaches how to determine if a project is justified. Does it create, replace, protect or restore a habitat, community, or ecosystem type, value, or function that is important, and how to properly and report that relationship. Incremental analysis for environmental features will be covered, with reference to the earlier presentation on traditional monetary analysis.

Module ER6 - This module covers optimization and selection of the NER Plan, which is an element of the fifth step of the planning process, comparison. Optimizing by output and by size will be discussed, and the bracketing of the NER Plan. The influence of the NER Plan and the sixth step of the planning process, selection, will be discussed.

WEDNESDAY 2:00 – LABORATORY EXERCISE

Module XER- This Module will involve a laboratory exercise. The workshop participants will be divided into teams who will be given specific formulation tasks to complete. Under the direction of instructors, each team will develop an array of alternatives for an ecosystem restoration project. The team will be introduced to IWR Plan as a tool to formulate and evaluate alternatives. The team will generate an incremental cost analysis and identify an NER Plan. The instructional staff will critique the team's output.

WEDNESDAY 5:00 – ADJOURN

THURSDAY 8:00 - MULTI-OBJECTIVE PROJECTS

Module M1 - This Module will discuss other project purposes and features that can be included in multi-purpose projects, including: recreation, water supply, hydropower, etc. Policy limits regarding these features will be discussed.

TRACK 1- FLOOD DAMAGE REDUCTION

Module M2-FC - This Module describes how to integrate structural and non-structural flood damage reduction features with ecosystem restoration features. Situations with incidental benefits will be discussed.

TRACK 2 – INLAND NAVIGATION

Module M2-IN - This Module describes how to integrate inland navigation features with ecosystem restoration features.

TRACK 3 – DEEP DRAFT NAVIGATION

Module M2-DN - This Module describes how to integrate deep draft navigation features with ecosystem restoration features. Included would be such initiatives as the beneficial use of dredged material.

Module M3 - This Module describes how Social Impact Assessment/Other Social Effects and Regional Development dynamics are included in plan formulation.

Module M4 - This Module cover evaluation and will discuss the allocation of costs among the project purposes. The separable cost remaining benefit method will be addressed and the impacts of purpose specific policies will be discussed.

Module M5 - This Module will discuss the fifth step of the planning process, comparison and include trade-off analysis and the designation of the NED/NER Plan. The “least environmentally damaging plan” will also be discussed.

Module M6 - This Module will address locally preferred plans and their impacts on the formulation process. This module will cover the sixth step of the planning process, selection, and deviations to the NED, NER, NED/NER selection criteria will be discussed. The impacts of selecting a locally preferred plan on cost apportionment will also be discussed. Examples of the selection process will be discussed.

THURSDAY 1:00 - HANDS ON EXERCISE

Module MX - This Module will involve an exercise. The workshop participants will be divided into teams who will be given specific formulation tasks to complete. The exercise will provide an opportunity for instructors to relate previous training Modules to real world conditions. Students will have the opportunity to brainstorm measures, formulate different types of plans, developing an understanding of data requirements and interrelationships between different project purposes. The workshop exercise will be for a typical multi-purpose project.

TRACK 1- FLOOD DAMAGE REDUCTION

TRACK 2 – INLAND NAVIGATION

TRACK 3 – DEEP DRAFT NAVIGATION

THURSDAY 5:00 – ADJOURN

FRIDAY 8:00 - WRAP-UP

Module W1 – Presentation by teams on results of exercises. Review the results of the actual study findings and recommendations. Round table discussion of differing formulation approaches and impact on results.

Module W2 - Public meetings, workshops and consensus building would be addressed. The requirements of stakeholder involvement in all of the planning steps will be emphasized. Examples will be provided where the direction of studies have changed as a result of the identification of stakeholder issues.

Module W3 – Trainers and students will share their expertise and tools that have resulted in successful projects, as well as some of the pitfalls that can occur. Regional specific issues will be addressed.

FRIDAY 12:00 – ADJOURN

- DRAFT -

SCOPE OF WORK

PLAN FORMULATION WORKSHOP

PHASE 1: PREPARE FOR WORKSHOPS

TASK 1: Identify team, which will produce module plans and related material in Task 3. Currently estimated at 3-4 members. Current estimate of number of workshops: 8 (one to each MSC; POD could possibly be combined with SPD). COE POC will approve any supplemental members, who are not currently employed by contractor. Members of this team will also be involved as part of the workshop implementation team (Task 5). Identify template(s) for lesson plans and exercises. Contractor to provide a written overview of the workshop and an outline of each topic, including learning objectives.

NTP+5

TASK 2: Coordinate examples for exercises and region specific modules with COE POC designated Division (including District) personnel. The workshop will require the development of three case studies for use in class exercises to demonstrate NED formulation, NER formulation, and formulation of a multi-purpose project. The region specific modules are IN2, etc. and DN2, etc. The exercises include Tuesday's X__afternoon modules, XER and MX. COE will provide a list of current planning studies in the 8 regions with perceived formulation issues highlighted. COE will also provide any necessary regulations and guidebooks, especially "breaking" guidance for recent legislation. Workshop materials/products will be developed with the assistance of a COE technical review group (see Task 3 for details).

NTP+15

TASK 3: Provide 10 copies of draft lesson plans for all 54 modules, including the exercise modules and region specific modules in Task 2. This submission will be tailored for the first Plan Formulation Workshop (TBD). The submission will include a workshop agenda showing time required for each module. An IPR briefing will be provided to COE POC/ Technical Review Group at a site TBD. Comments on the draft lesson plan from COE POC will be by NTP+45. The Corps will establish a Technical Review Group to assist in the development of the workshop. The technical review group will meet to: 1) review course outline and learning objectives; 2)

review the draft Power Point presentations, and 3) provide feedback from the observance of the first training workshop session.

NTP+30

TASK 4: Provide copy of final lesson plans for 54 modules for first Plan Formulation Workshop to COE POC. These lesson plans will be in Power Point format and will convey the basic points for each module. Speaker notes for each presentation also to be provided as well as explanatory notes for the class exercises, along with worksheets and other graphical displays/maps. Any other related material will be included, such as graphics, pictures or mini-exercises.

TASK 5: Conduct Train-the-Trainer seminar/workshops for Corps "core" instructor team at location TBD. The instructor team will be identified by the COE POC and will consist of approximately 8-10 persons to be trained to assist course delivery. One – 2 members from the core instructor team will assist in the conduct of each workshop session.

NTP+60

TASK 6: Finalize Workshop Facilities and Implementation Teams with COE POC, including in-house and contractor based team members. It is currently anticipated that contractor will provide 1-2 members to the team as presenters and facilitators and that COE instructor's team (1-2 members) will provide instruction and support for the regional specific modules and exercises and will make specific or specialized presentations throughout the workshop as assigned. Invitations for each workshop will be prepared and sent by COE with roster of invitees for all workshops furnished to Contractor at NTP+50.

NTP+60

PHASE 2: CONDUCT WORKSHOPS

TASK 7: Contractor will provide facilitation and presentation services as well as workshop materials for 8 workshops at cities in the continental US to be designated by COE POC. Each workshop session to include 30 students. Target audience is apprentice and journeyman level planners. The first workshop will begin at NTP+60 or at COE POC direction. Four workshops to be held during 4th quarter FY 01, and four are to be held 1st quarter FY 02.

TASK 8: Within 5 days of the first workshop, contractor will provide COE POC a 3-5-page in process after action report

(AAR). The AAR will be based on participant and presenter feedback in the following areas: material quality and relevance; assessment of presentations; type of attendees and recommendations for revisions or new topics/modules, if any.

TASK 9: Contractor will revise or provide new workshop lesson plans for up to 20 percent of the workshop lesson plans and submit to COE POC for approval. The proposed changes to the workshop will be coordinated with the Corps Technical Review Group (TRG). Comments from the TRG will be provided within 14 days. The lesson plans will be based upon POC feedback and upon tailored revisions for the second workshop (see Tasks 2 and 3 above).

TASK 10: Contractor will revise new workshop plans, based upon COE POC comments and will provide POC with copy.

TASKS 11-34: These repeat TASKS 7 through 10 for the first 7 workshops and TASK 8 for the eighth as directed by the COE POC.

TASK 35: Contractor will prepare a draft final AAR covering all the Workshops. The AAR will be based on participant and presenter feedback. It will include an assessment of the workshops in terms of stated goals, quality of materials, facilities, presenters and facilitators. It will also include an assessment of on-going needs for plan formulation assistance to Districts from IWR, HQ, and other districts. It will include any perceived need for planning process revisions. It will include training needs in the area of plan formulation. An executive summary will be included; its target audience will be the Civil Works Directorate.

TASK 36: Contractor will finalize AAR within 30 days of receipt of COE POC comments.

Appendix K

Planning "Core" Curriculum

Development Objectives

The current trend across the Corps is for District planning functions and organizations to have a larger percentage of young and/or inexperienced planners than in the past. In addition, the duration of employment is decreasing and there will be fewer full career employees, as we move into the 21st Century. These trends require that planners must achieve a **"full performance"** level in a much shorter period of time. The planner should be able to function at a journeyman level at the end of a three-year period, rather than the current ten to fifteen year period that it seems to take. For these new/inexperienced planners to function at a full performance level within three-years, there is a need for some **"basic training"** in the Corps planning process and policies, plan formulation and economic and environmental evaluation procedures, and the processes for the development and authorization of a Civil Works project. The primary objective of the core curriculum is to provide for the basic, formal training needed for the entry level planners to move to the journeyman planner stage of development.

Curriculum Elements

The Task Force has identified a basic core curriculum as part of the overall Planner's Training and Development Guide (Appendix G) that should be provided to all novice and apprentice level planners, as indicated below. This core curriculum includes a suite of eight courses and workshops that all persons in the Planning technical functions, including plan formulation, economic evaluation, environmental analysis, and public involvement, should be required to take, or at least strongly encouraged to take, in order for each planner to have a common base of knowledge in all the basic Planning Knowledge, Skills, and Abilities (KSA's). All of these courses should be taken during the first three years of assignment to CW Planning. This suite of courses and workshops, Figure K-1, include the following:

- **Introduction to Planning (IP)** (Novice Level). A 2-day planning workshop for new planners. Subject matter to include discussions regarding basic planning principles (What is Planning?), planning functions (Who is a Planner?), planning's responsibilities in the Project Delivery Process (What does a Planner do?), and introduction to the six-step planning process (How is Planning done?)

- **Civil Works Orientation Workshop (CW)** (Novice Level). A 3-day workshop for new planners. Subject matter includes the 21 steps to success in the development of a Civil Works project. Includes introduction to the authorization and appropriation process.

- **Planning Principles and Procedures (P3)** (Novice/Apprentice Level). A 4-day workshop addressing CW policies and requirements of the Planning Guidance Notebook.

- **Plan Formulation Workshop (PF)** (Apprentice Level). A 4-day workshop addressing the entire plan formulation process as it applies to the Corps multi-purpose plan formulation requirements. While the course outline covers the four project purposes of ecosystem restoration, flood damage reduction, inland navigation, and deep draft navigation each session will be modified to cover ecosystem restoration and one of the other three project purposes.

- **Consensus Building For Water Resources Planning (CB)** (Apprentice Level). A 3-day workshop on public involvement techniques and processes, negotiations and conflict resolution. Course to provide detailed discussions and class room exercises on workshop/public meeting formats, team building, active listening, developing a win-win position, what makes a successful public involvement program, etc.

- **Environmental Analysis for Water Resources Planning (ENV)** (Apprentice Level). A 4-day workshop for apprentice level planners on NEPA process and environmental analysis. Course to provide detailed discussions on the authorities, procedures, and methods of environmental analysis.

- **Hydrologic Engineering for Water Resources Planning (HYD)** (Apprentice Level). A 4-day course in hydrologic engineering put on by the Hydrologic Engineering Center. Course to provide a basic understanding of basic hydrologic and hydraulic concepts as they are applied to water resource planning.

- **Economic Analysis for Water Resources Planning (ECO)** Apprentice Level). A 4-day workshop to provide detailed discussions on the concepts and methods used in the economic analysis of water resources projects, including risk-based analysis. The course covers basic economic concepts and methods of computing the economic costs and benefits for various type projects.

Planner's "CORE" Curriculum

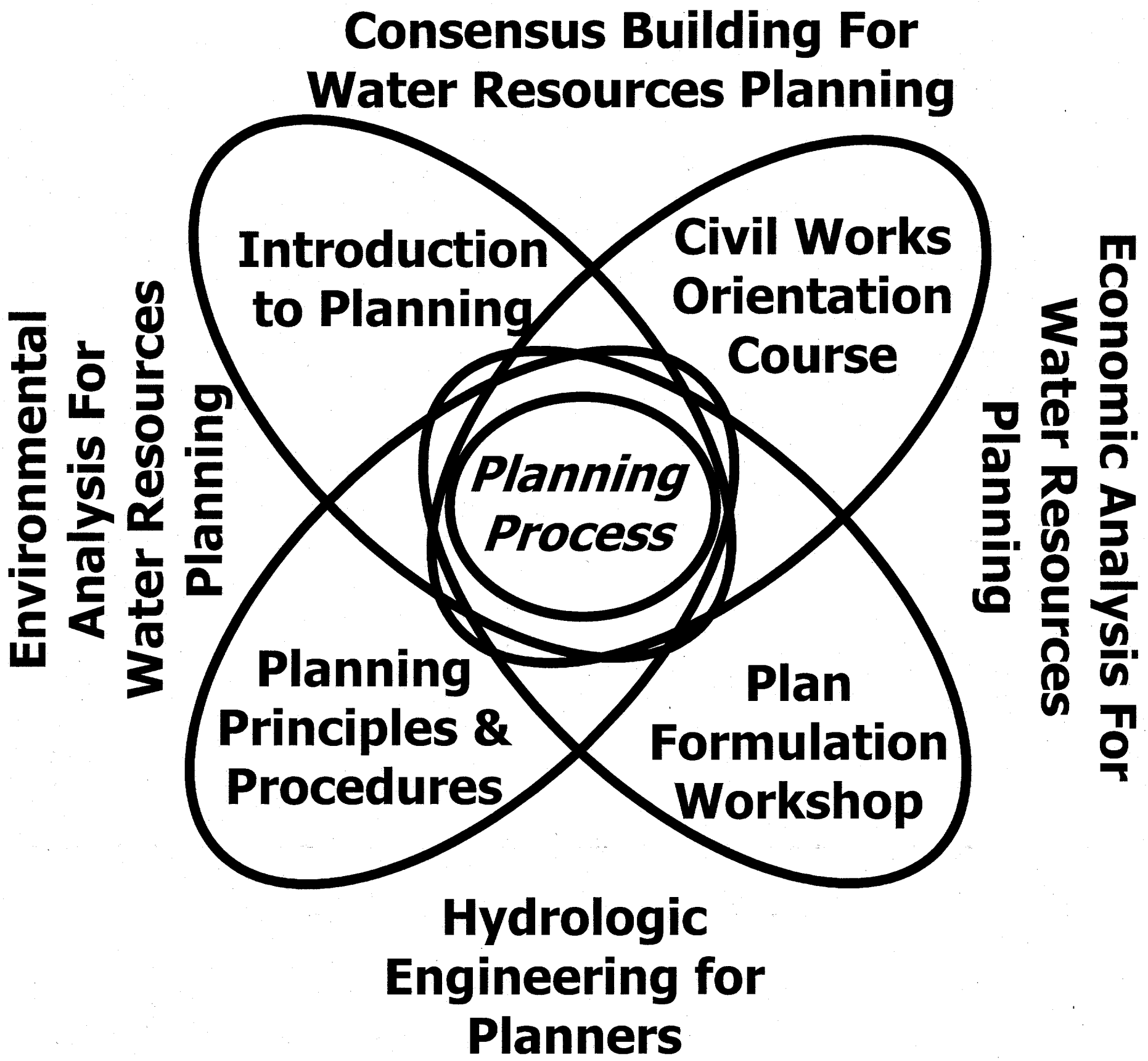

Figure K - 1

Core Curriculum Training Plan For Entry Level Planners

The suggested/desired sequencing of the core curriculum courses and workshops for each novice and apprentice level planner are shown in Table K-1. It is recognized that these courses may not be available to each planner in their home MSC in the desired sequence. As such, the order of courses may need to be modified in individual development plans; some courses may need to be taken outside of their home MSC, if there is an opportunity to do so; or the rapid response delivery be supplemented by Prospect courses for individual planners, if needed. The Introduction to Planning Workshop, Civil Works Orientation Seminar, and the Planning Principles and Procedures Course are desired as prerequisites for the Plan Formulation Workshop.

TABLE K – 1

Core Curriculum Training Plan For Entry Level Planner

Planner Level	1st Year	2nd Year	3rd Year
Novice	---	---	---
	Intro to Planning	---	---
	CW Orientation	---	---
	Plng Principles & Procedures	---	---
Apprentice	**---**	**---**	**---**
Plan Formulation	---	Plan Formulation Workshop	Hydrologic Engr for Planners
	---	Consensus Building for WR Planning	Economic Analysis for WR Planning
	---	Environmental Analysis for WR Plng	---
Economics	---	Plan Formulation Workshop	Consensus Building for WR Planning
	---	Hydrologic Engr for Planners	Environmental Analysis for WR Plng
	---	Economic Analysis for WR Planning	---
Environmental	---	Plan Formulation Workshop	Hydrologic Engr for Planners
	---	Environmental Analysis for WR Plng	Economic Analysis for WR Planning
	---	Consensus Building for WR Planning	---

Delivery System

Most of the courses making up the core curriculum are or have been in the Corps' "Prospect" program. For example: the existing prospect course on Planning Principles and Procedures provides training on the basic planning process. The existing prospect training course on Civil Works Orientation provides training on the development of a Civil Works project. To the extent that there is continued interest (as expressed in the annual training survey) for these courses, they should continue to be given for planners and non-planners alike.

However, in looking at a "rapid response" delivery of the core curriculum courses over the next three years, and the need for development of several new courses, the existing prospect courses and its current method of delivery do not meet planning's short-term needs. This type of training is generally considered far too expensive to develop and deliver, is not responsive to need based (on-demand) training, is usually not provided locally when and where needed and is limited in its ability to reach a specific large audience on a timely basis.

Currently, there are numerous workshops and seminars provided in the districts by HQUSACE and MSC staffs, as well as by senior district staff members. Chief among these workshops are the two-day Planning Workshop that was provided by IWR, the Project Development Process Workshop provided by an ad hoc team of HQUSACE and MSC representatives, and the three-day CW Orientation Seminar conducted by proponents of the prospect course concerning the same subject. These workshops and seminars are taken on the road to the districts and division offices and have proven to be very popular and cost effective (ranging about $200+ per student). Formalization of this ad hoc approach is the basis of the model being recommended for the rapid response deployment of the proposed core curriculum courses and workshops.

With the ever increasing burden of reduced training and travel budgets, locally and/or regionally hosted training courses and workshops offer an opportunity to obtain a substantial amount of training for planners at a relatively low cost.

For the remainder of FY01 through 1st Qtr FY04 the task force recommends that the full core curriculum of all 8 courses be developed and delivered on a rapid response basis to each MSC. It is proposed that one of the core courses will be delivered to each MSC on a quarterly basis during this period.

The core curriculum will be scheduled in a manner to permit a new planner to complete the 8 course curriculum within 2 ½ to 3 years without having to travel outside the MSC boundaries. One of the curriculum courses will be scheduled in the recommended order of presentation to be available somewhere in each MSC every 90 days. A conceptual plan for the sequencing of the

delivery of the core courses to each MSC, during the rapid deployment period, FY01 through FY04, and for development of estimated funding requirements, is presented in Table K-2. Since each course is to be developed or updated during FY 01, each core course would be available for delivery when demand dictates.

"Rapid Response" Deployment Plan Concepts

Each course or workshop included in the core curriculum will require the designation of a course proponent with the assigned responsibility for the development, delivery and continuous maintenance of course materials. This course proponent also will serve as the lead instructor for the assigned course. A registry of active proponents for each course will be maintained by the HQUSACE Chief, Planning and Policy Division.

The overall administration of the core curriculum will be at the direction of the HQUSACE Planner's "Training and Development Proponent," working under the oversight of the "Training and Development Advisory Board for Planning." This board consists of the HQUSACE and MSC Planning and Policy Chiefs (or their reps), IWR representative, plus the HQUSACE Planning Training and Development proponent. The group will meet annually or semi-annually in conjunction with the MSC Planning Chief's meetings. Figure K-2 illustrates the proposed Planning Training Program Oversight of the core curriculum.

The instructor team for each class will normally come from a pool of 8-10 instructors certified to deliver the course. The instructor team could include contractors; HQUSACE, IWR, and/or MSC staff; members of UCOWR; and/or senior level planners from the districts. Each of these instructors will have attended a Train-the-Trainer seminar for teaching subject course. The first session of each course/workshop should be held as a Train-the-Trainer session for all instructors before taking the training on the road to the MSCs. Typically the workshop will be delivered to the MSCs using three instructors, including at least one HQUSACE representative. It is also desired to have a practicing planner assisting in teaching each course, if possible.

The instructor pool concept is intended to assure that the training maintains high standards, consistently applied Corps-wide. The instructor pool contains MSC and HQ personnel, which should communicate the importance the Corps gives to the program, underscores the Corps' commitment to the program, and lends legitimacy and authority to the material being presented. Keeping course material current and relevant is also made easier under the constant supervision of a smaller group of responsible presenters.

In addition, presentations and course material should be posted on a web-site so that all trainers may have access to the latest information. Updates would be explained so that the information will not grow stale.

TABLE K - 2

Conceptual Plan for the Sequencing of the Delivery of Core Curriculum Courses to Each MSC
FY 01 - FY 04

	FY 01	FY 02				FY 03				FY 04
MSC	**4th Qtr**	**1st Qtr**	**2nd Qtr**	**3rd Qtr**	**4th Qtr**	**1st Qtr**	**2nd Qtr**	**3rd Qtr**	**4th Qtr**	**1st Qtr**
LRD	PF*	CW / IP[1]	Priority Selection[2]	P3	CB	ENV	Priority Selection[2]	HYD	ECO	PF
MVD	PF*	CW / IP[1]	Priority Selection	P3	CB	ENV	Priority Selection	HYD	ECO	PF
NAD	PF*	CW / IP[1]	Priority Selection	P3	CB	ENV	Priority Selection	HYD	ECO	PF
NWD	PF*	CW / IP[1]	Priority Selection	P3	CB	ENV	Priority Selection	HYD	ECO	PF
POD	CW / IP	PF*	Priority Selection	CB	P3	HYD	Priority Selection	ECO	PF	ENV
SAD	CW / IP	PF*	Priority Selection	CB	P3	HYD	Priority Selection	ECO	PF	ENV
SPD	CW / IP	PF*	Priority Selection	CB	P3	HYD	Priority Selection	ECO	PF	ENV
SWD	CW / IP	PF*	Priority Selection	CB	P3	HYD	Priority Selection	ECO	PF	ENV

Notes: ***** Initial offerings for Apprentice through Experienced Planners; 1. CW Orientation and Introduction to Planning wold both be offered during the quarter. Introduction to Planning to be presented by Division and/or District trainers. Although not shown in table, CW Orientation and Introduction to Planning will be available for presentation every year for new planners. 2. **Priority Selection**: MSC choice of core curriculum course depending on division priority/need, primarily for filling gaps in training for journeyman and expert planners. Priority Selection offerings to be given at Division expense.

Key: PF= Plan Formulation Workshop; CW= Civil Works Orientation Workshop; IP= Introduction to Planning Workshop; P3= Planning Principles and Procedures Workshop; ENV= Environmental Analysis for Planning; ECO= Economic Analysis for Planning; HYD= Hydrologic Engineering for Planning; CB= Consensus Building Workshop.

Planning Training Program Oversight of "CORE" Curriculum

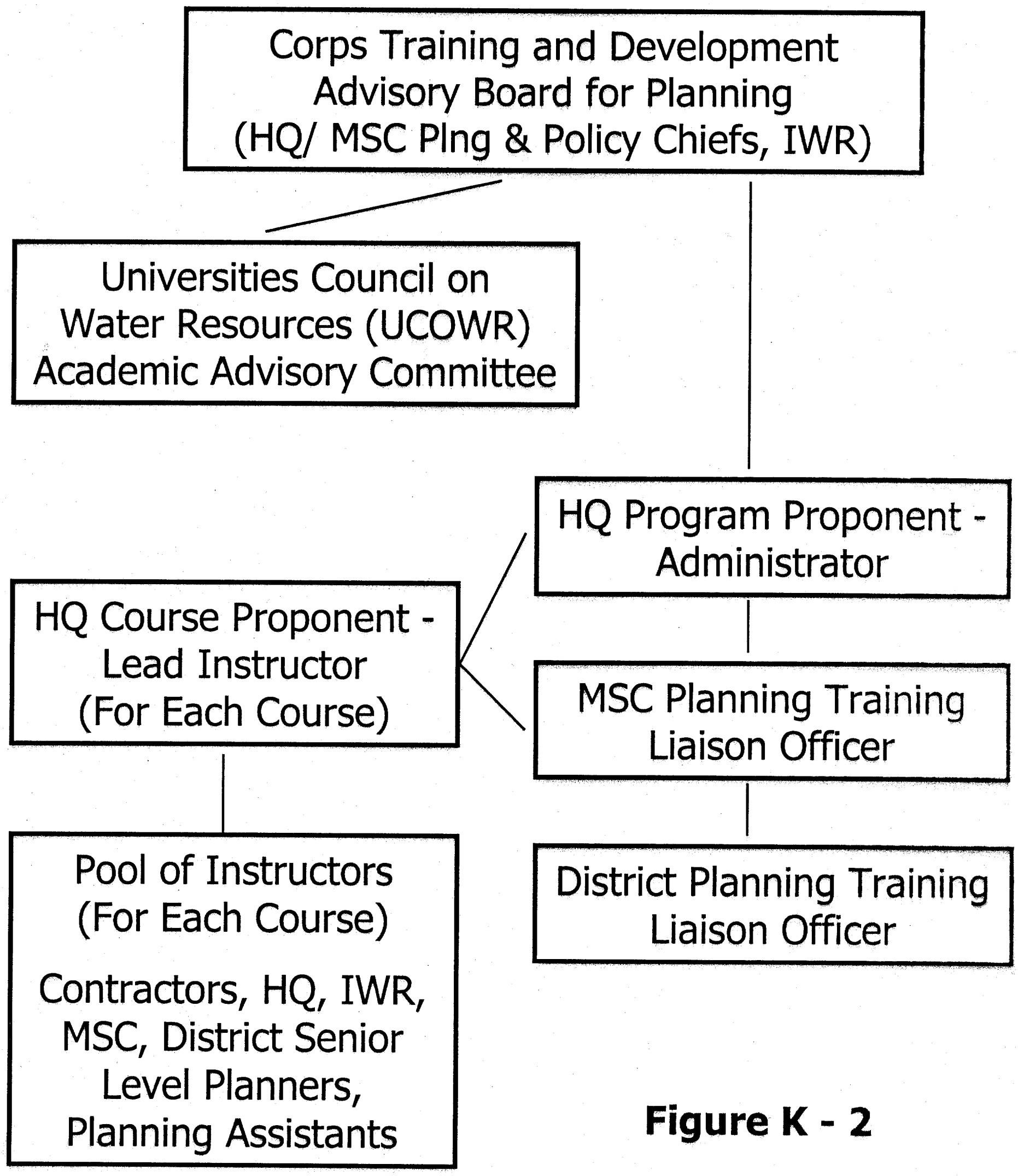

Figure K - 2

State University Extension Services/Universities Council on Water Resources

In developing a rapid responses strategy for new training courses for the core curriculum courses and workshops, the Corps also could look to opportunities provided through State University Extension Services and membership of Universities Council on Water Resources. Based on discussions with several universities, including Texas A & M University, Colorado State University, and Virginia Tech, it appears that all have the capability, experience, and infrastructure to efficiently and effectively meet the Corps' needs for developing basic training packages for entry level planners, as well as providing other training, re-training, and technical assistance to the Corps to meet other "Just-in-Time" / "Need Based" training for planners and others.

"Rapid Response" Deployment Plan Costs

Labor, travel, and per diem for novice level planners hired during or after the rapid deployment plan is inaugurated will be centrally funded for the full 8 course suite.

Labor, travel, and per diem costs for planners with less than 3 years experience will be centrally funded for core courses not yet taken.

Experienced planners or staff of other functional elements are welcome to participate in core curriculum courses at their home office expense, as space allows. Approximately 10 spaces in each course could be allotted for others to attend. Again, many of the core curriculum courses, or variations of these courses, will continue to be available in the Corps' Prospect program.

The total estimated cost for the rapid deployment of the core curriculum courses and workshops from FY01 to FY 04 is summarized in Table K-3. The cited costs are considered to be conservative, reflecting a full suite of training delivered primarily with existing Corps planning resources to each individual MSC from FY01 through FY04.

The detailed, estimated costs for the rapid development of new courses and workshops, and for delivery of each core course or workshop are shown in Tables K-4 through K-11 of this appendix.

TABLE K - 3

Summary - Core Curriculum Estimated Costs FY01 - FY04

	FY01	FY02	FY03	FY04
Deployment Costs	---	---	---	---
Intro to Planning	$ 35,000	$ 5,000	$ 5,000	$ 5,000
CW Orientation	54,600	47,800	47,800	47,800
Plng Principles	17,800	99,000	5,000	5,000
Plan Formulation	137,000	62,000	40,000	35,000
Consensus Building	41,800	61,600	5,000	5,000
Environmental	41,800	5,000	40,000	40,000
Hydrologic Engr	20,000	0	80,000	0
Economic Analysis	31,800	5,000	70,000	5,000
Subtotal	$379,800	$285,400	$292,800	$142,800
Student Participation	---	---	---	---
Intro to Planning	---	---	---	---
CW Orientation	$166,400	$166,400	$166,400	$166,400
Plng Principles	---	456,000	---	---
Plan Formulation	354,000	354,000	228,000	228,000
Consensus Building	---	371,200	---	---
Environmental	---	---	228,000	228,000
Hydrologic Engr	---	---	456,000	---
Economic Analysis	---	---	456,000	---
Subtotal	$520,400	$1,347,600	$1,534,400	$622,400
TOTAL	$900,200	$1,633,000	$1,827,200	$765,200

Rapid Response Deployment Plans

Introduction To Planning Workshop

Assumptions

- To be developed as two-day workshop for use by District and MSC senior planners for presentation at **local (District) level**, as needed.
- To be based on existing IWR Planning Workshop on the six-step planning process (to be modified, as necessary, to address workshop learning objectives)
- Assistance with presentation of workshop could be possible assignment for participants in the Planner Assistantship Program.
- Workshop to be available for deployment by 4th Qtr FY01.

Deployment Strategy

- Designate HQUSACE proponent for workshop. **(1 week)**
- Reprogram GE/GI funds at the HQ level for development and/or updating of existing workshop materials. **(2 weeks)**
- Assign IWR task to gather and review existing workshop materials and documentation. Prepare workshop outline. **(4 weeks, $15,000)**
- IWR coordinate workshop outline with MSCs. **(4 weeks)**
- Workshop materials modified, as necessary, and script developed by IWR. **(4 weeks, $15,000)**
- One set of originals of course material to be provided to each MSC for local reproduction, as needed. **(1 week, $1,000)**
- Pool of "core" instructors identified by each MSC (approx. 4 each).
- Train-the-Trainer session conducted by HQ proponent/IWR. **(3 day session, $2,000)**
- Workshop delivered by District and Division staff.

Estimated Total Time to Develop: 16 weeks

Estimated Cost to Develop: $ 33,000
(Cost of delivery and printing course material viewed as Dist/Div cost)

Annual Maintenance/Update Costs: $ 5,000

TABLE K - 4

Central Funding Requirements - Introduction to Planning Workshop

	FY01	FY02	FY 03	FY04
TOTAL	$35,000	$5,000	$5,000	$5,000

Civil Works Orientation Workshop

Assumptions

- To be presented in each Division, at least once, during FY01 - FY02, and FY 03 – FY 04.
- To be presented as three day workshop.
- To use workshop material, student handouts, and presentations and scripts developed from existing workshop.
- Development, delivery costs, and annual update of course material are to be centrally funded.
- To be delivered by three instructors per class, two of which are GE funded.
- Each instructional session to include 30 students (novice/apprentice planners; others, as space is available)
- All travel, per diem, and labor costs for novice/apprentice planners (with less than three years experience) to be centrally funded (twenty novice/apprentice planners assumed to attend per session).
- Assistance with presentation of workshop could be possible assignment for participants in the Planner Assistantship Program.
- Students that have attended can carry to others (PDT members, sponsors, etc.)
- Workshop, as currently administered, available for immediate delivery (target under "core" curriculum NLT 4th Qtr FY01).

Deployment Strategy

- Designate HQUSACE proponent for workshop and identify "core" instructors. **(1 week)**
- Reprogram GE/GI funds at the HQ level for delivery of workshop to four MSCs during FY01; updating of existing workshop materials, as needed; and for travel, per diem, and labor costs for attending novice/apprentice planners. **(2 weeks)**
- Budget for/ reprogram GE/GI funds for delivery of workshop to remaining MSCs during the 1st Qtr FY02, and for travel, per diem, and labor costs for attending novice/apprentice planners.
- Identify MSC/ District pool of instructors (8) **(1 week)**
- Course material reproduced for trainers **(2 weeks, $1,000)**
- Train-the-Trainer session conducted by HQ proponent. **(3 day session, $2,000)**
- Course material reproduced locally, for each session, although centrally funded. **(1 week)**
- Deliver workshop

Estimated Total Time to Deploy: (8 weeks)

Estimated Development and Delivery Costs

FY01 - Development

- Train-the-Trainer Workshop ($3,000)
- Travel, per diem for instructors
  (8 instructors X ($500/travel + $600 per diem) = $8,800)

FY01 - FY04 - Delivery Costs

- Instructors Travel (3 instructors X 4 classes X$500/travel = $6,000)
- Instructors Per Diem (3 instr X 4 classes X 4 days X $150/day = $7,200)
- Salary, 1 District instructor (4 days X $600/day X 4 classes = $9,600)
- Preparation for each session (5 days X $600/day X 4 classes = $12,000)
- Reproduction Course Material (4 classes X $2,000/class = $8,000)

Student Participation Costs

- Travel (20 novice, apprentice planners X 4 classes X $200/travel = $16,000)
- Per Diem (20 planners X 4 classes X 4 days X $150/day = $48,000)
- Labor (20 planners X 4 classes X 4 days X $320/day = $102,400)

Annual Maintenance/Update Costs: $5,000

TABLE K - 5

Central Funding Requirements - Civil Works Orientation Workshop

	FY01	FY02	FY03	FY04
Train-the-Trainer	$ 11,800	---	---	---
Delivery Costs	42,800	$ 42,800	$ 42,800	$ 42,800
Annual Maintenance	---	5,000	$5,000	$ 5,000
Subtotal	54,600	47,800	47,800	47,800
Cost per student (30/class)	$ 460	$ 400	$ 400	$ 400
Student Participation	---	---	---	---
Travel	$ 64,000	$64,000	---	---
Labor	102,400	102,400	---	---
Subtotal	166,400	166,400	---	---
Cost per student (20)	$ 2,100	$ 2,100	---	---
TOTAL	$221,000	$214,200	$214,200	$214,200

Planning Principles and Procedures Workshop

Assumptions:

- To be presented in each Division, at least once, during FY02.
- To be presented as four day workshop.
- To use workshop material, student handouts, and presentations and scripts developed from existing prospect course on same subject.
- Development, delivery costs, and annual update of course material are to be centrally funded.
- To be delivered by three instructors per class, two of which are GE funded.
- Each instructional session to include 30 students (novice/apprentice planners; others, as space is available)
- All travel, per diem, and labor costs for novice/apprentice planners (with less than three years experience) to be centrally funded (twenty novice/apprentice planners assumed to attend per session).
- Assistance with presentation of workshop could be possible assignment for participants in the Planner Assistantship Program.
- Students that have attended can carry to others (PDT members, sponsors, etc.)
- Workshop, as currently administered, available for delivery when needed (target under "core" curriculum NLT 3rd and 4th Qtr FY02).

Deployment Strategy

- Designate HQUSACE proponent for workshop and identify "core" instructors. **(1 week)**
- Budget for/ reprogram GE/GI funds for delivery of workshop to all of the MSCs during the 3rd and 4th Qtr FY02, and for travel, per diem, and labor costs for attending novice/apprentice planners.
- Identify MSC/ District pool of instructors (8) **(1 week)**
- Update course materials **(2 weeks, $6,000)**
- Course material reproduced for trainers **(2 weeks, $1,000)**
- Train-the-Trainer session conducted by HQ proponent. **(3 day session, $2,000)**
- Course material reproduced locally, for each session, although centrally funded. **(1 week)**
- Deliver workshop

Estimated Total Time to Deploy: (8 weeks)

Estimated Development and Delivery Costs

FY01 - Development

- Update course materials ($6,000)

- Train-the-Trainer Workshop ($3,000)
- Travel, per diem for instructors
  (8 instructors X ($500/travel + $600 per diem) = $8,800)

FY01 & FY02 - Delivery Costs

- Instructors Travel (3 instructors X 8 classes X$500/travel = $12,000)
- Instructors Per Diem (3 instr X 8 classes X 5 days X $150/day = $18,000)
- Salary, 1 District instructor (5 days X $600/day X 8 classes = $24,000)
- Preparation for each session (5 days X $600/day X 8 classes = $24,000)
- Reproduction Course Material (8 classes X $2,000/class = $16,000)

Student Participation Costs

- Travel (20 novice, apprentice planners X 8 classes X $200/travel = $32,000)
- Per Diem (20 planners X 8 classes X 5 days X $150/day = $120,000)
- Labor (20 planners X 8 classes X 5 days X $380/day = $304,000)

Annual Maintenance/Update Costs: $5,000

TABLE K - 6

Central Funding Requirements-Planning Principles and Procedures Workshop

	FY01	FY02	FY03	FY04
Update Course Mat'l	$ 6,000	---	---	---
Train-the-Trainer	11,800	---	---	---
Delivery Costs	---	$ 94,000	---	---
Annual Maintenance	---	5,000	$5,000	$ 5,000
Subtotal	17,800	99,000	5,000	5,000
Cost per student (30/class)	---	$ 410	---	---
Student Participation	---	---	---	---
Travel	---	$152,000	---	---
Labor	---	304,000	---	---
Subtotal	---	456,000	---	---
Cost per student (20)	---	$ 2,850	---	---
TOTAL	$17,800	$555,000	$5,000	$5,000

Plan Formulation Workshop

Assumptions:

- To be presented in each Division, at least once, during FY01 - FY02 and then again in FY03 - FY 04.
- To be presented as a four day workshop.
- Course proposed has not been previously offered. Therefore, all workshop material, student handouts, and presentations and scripts will have to be developed.
- Development and delivery of workshop in FY 01 and 02 to be done by contract. A core of Corps instructors will also be identified to assist in delivery of the workshop. All subsequent sessions to be delivered by core of Corps instructors.
- Development, delivery costs, and annual update of course material are to be centrally funded.
- Development and the initial delivery of workshop to use available rapid response funds carried over from FY00.
- Each instructional session to include 30 students (apprentice/journeyman level planners, as well as others, as space is available)
- All travel, per diem, and labor costs for attendees during FY 01 and FY 02 are to be centrally funded (30 persons assumed to attend per session).
- All travel, per diem, and labor costs for apprentice planners (with less than three years experience) attending workshop in FY03 - FY04 are to be centrally funded (twenty apprentice planners assumed to attend per session).
- Assistance with presentation of workshop, after initial delivery, could be a possible assignment for participants in the Planner Assistantship Program.

Deployment Strategy:

- Designate HQUSACE proponent for workshop and identify subject matter experts in Corps in plan formulation. **(1 week)**
- Select “core” Corps instructors to assist contractor. **(1 week)**
- Based on Scope of Work and Course Outline included in this Task Force report, award contract through existing IWR, IDIQ contract to develop and deliver workshop to each MSC. **(4 weeks)**
- Contractor develops workshop material, student handouts, and presentations and scripts. **(16 weeks)**
- Contractor conducts a Train-the-Trainer workshop for the Corps “core” instructors **(3-day session $2,000)**

- Deliver workshop to each MSC. Course material reproduced locally, for each session, although centrally funded.
- Reprogram GE/GI funds at the HQ level for travel, per diem, and labor for attending planners during FY 01 and FY 02.
- Budget for GE/GI funds for delivery of workshop to all of the MSCs during the 4th Qtr FY03 and 1st Qtr FY04, and for travel, per diem, and labor costs for attending apprentice planners.

Estimated Total Time to Deploy: (22 weeks)

Estimated Development and Delivery Costs

FY01 - Development (FY00 Rapid Response Funds)

- Estimated contract cost ($75,000)
- Train-the-Trainers Workshop ($3,000)
- Travel, per diem for Corps "core" instructors
  (8 instructors X ($500/travel + $600) = $8,800

FY01 & FY02 - Delivery Costs (FY00 Rapid Response Funds)

- Instructors Travel (4 instructors X 4 classes X$500/travel = $ 8,000)
- Instructors Per Diem (4 instr X 4 classes X 5 days X $150/day = $ 12,000)
- Salary, Contractor Instructors (2 instructors x 5 days X $600/day X 4 classes = $24,000)
- Reproduction of Course Material (4 classes X $2,000/class = $ 8,000)
- Miscellaneous (lesson plan revisions, after action reports, etc.) = $ 10,000

FY03 & FY04 - Delivery Costs

- Instructors Travel (3 instructors X 4 classes X$500/travel = $ 6,000)
- Instructors Per Diem (3 instr X 4 classes X 5 days X $150/day = $ 9,000)
- Salary, Contractor Instructor (5 days X $600/day X 4 classes = $12,000)
- Reproduction of Course Material (4 classes X $2,000/class = $ 8,000)

Student Participation Costs - FY01 & FY02

- Travel (30 students x 4 classes x $200/travel = $24,000)
- Per Diem (30 students x 4 classes x 5 days x $150/day = $90,000)
- Labor (30 students x 4 classes x 5 days x $400/travel = $240,000)

Student Participation Costs - FY03 & FY04

- Travel (20 novice, apprentice planners X 4 classes X $200/travel = $16,000)
- Per Diem (20 planners X 4 classes X 5 days X $150/day = $60,000)
- Labor (20 planners X 4 classes X 5 days X $380/day = $152,000)

Annual Maintenance/Update Costs: $5,000

TABLE K - 7

Central Funding Requirements - Plan Formulation Workshop

	FY01	FY02	FY03	FY04
Development Costs	$ 75,000	---	---	---
Train-the-Trainer	11,800	---	---	---
Delivery Costs	62,000	$ 62,000	$35,000	$35,000
Annual Maintenance	---	---	5,000	
Subtotal	137,000	62,000	40,000	35,000
Cost per student (30/class)	$ 1,140	$ 520	$ 330	$ 300
Student Participation	---	---	---	---
Travel	$114,000	$114,000	$ 76,000	$76,000
Labor	$240,000	$240,000	152,000	152,000
Subtotal	$354,000	$354,000	$228,000	$228,000
Cost per student	$2,950	$2,950	$2,850	$2,850
TOTAL	$491,000	$430,800	$268,000	$263,000

Note: FY01 requirements funded for development of workshop and delivery to four MSCs are proposed to be with FY00 Rapid Response carry-over funds ($137,000).

Consensus Building for Water Resources Planning Workshop

Assumptions:

- To be presented in each Division, at least once, during FY02.
- To be presented as a three day workshop.
- Course proposed has not been previously offered. Therefore, all workshop material, student handouts, and presentations and scripts will have to be developed.
- Course to address public involvement, coordination with public, workshop development, strategic communications, conflict resolution, etc.
- Development and delivery of workshop to be done by contract with State Engineering Extension Service or Universities Council on Water Resources. A core of Corps instructors will also be identified to assist in delivery of the workshop. All subsequent sessions to be delivered by core of Corps instructors.
- Development, delivery costs, and annual update of course material are to be centrally funded.
- Each instructional session to include 30 students (apprentice/journeyman level planners, as well as others, as space is available)
- All travel, per diem, and labor costs for apprentice planners (with less than three years experience) attending workshop are to be centrally funded (twenty apprentice planners assumed to attend per session).
- Assistance with presentation of workshop, after initial delivery, could be a possible assignment for participants in the Planner Assistantship Program.

Deployment Strategy:

- Designate HQUSACE proponent for workshop and identify subject matter experts in Corps in public involvement/consensus building. **(1 week)**
- Select "core" Corps instructors to assist contractor. **(1 week)**
- Budget for/ reprogram GE/GI funds for development of workshop in FY01 and for delivery to all of the MSCs during the 3rd and 4th Qtr FY02, and for travel, per diem, and labor costs for attending apprentice planners.
- Develop Scope of Work and Course Outline **(4 weeks)**
- Award contract with State Engineering Extension Service or University (UCOWR) **(4 weeks)**
- Contractor develops workshop material, student handouts, and presentations and scripts. **(16 weeks)**

- Contractor conducts a Train-the-Trainer workshop for the Corps "core" instructors **(3-day session $2,000)**
- Deliver workshop to each MSC. Course material reproduced locally, for each session, although centrally funded.

Estimated Total Time to Deploy: (28 weeks)

Estimated Development and Delivery Costs

FY01 - Development

- Estimated contract cost ($30,000)
- Train-the-Trainers Workshop ($3,000)
- Travel, per diem for Corps "core" instructors
  (8 instructors X ($500/travel + $600) = $8,800

FY02 - Delivery Costs

- Instructors Travel (3 instructors X 8 classes X$500/travel = $ 12,000)
- Instructors Per Diem (3 instr X 8 classes X 4 days X $150/day = $ 14,400)
- Salary, Contractor Instructor (4 days X $600/day X 8 classes = $19,200)
- Reproduction of Course Material (8 classes X $2,000/class = $ 16,000)

Student Participation Costs - FY02

- Travel (20 apprentice planners X 8 classes X $200/travel = $32,000)
- Per Diem (20 planners X 8 classes X 4 days X $150/day = $96,000)
- Labor (20 planners X 8 classes X 4 days X $380/day = $243,200)

Annual Maintenance/Update Costs: $5,000

TABLE K – 8

Central Funding Requirements
Consensus Building for Water Resources Planning

	FY01	FY02	FY03	FY04
Development Costs	$ 30,000	---	---	---
Train-the-Trainer	11,800	---	---	---
Delivery Costs	---	$61,600	---	---
Annual Maintenance	---	---	$5,000	$5,000
Subtotal	41,800	61,600	5,000	5,000
Cost per student (30/class)	---	$ 260	---	---
Student Participation	---	---	---	---
Travel	---	$128,000	---	---
Labor	---	243,200	---	---
Subtotal	---	371,200	---	---
Cost per student (20)	---	$2,320	---	---
TOTAL	$41,800	$432,800	$5,000	$5,000

Environmental Analysis For Water Resource Planning

Assumptions:

- To be presented in each Division, at least once, during FY03 - FY04.
- To be presented as a four day workshop.
- Course proposed has not been previously offered. Therefore, all workshop material, student handouts, and presentations and scripts will have to be developed.
- Development and delivery of workshop to be done by contract with State Engineering Extension Service or Universities Council on Water Resources. A core of Corps instructors will also be identified to assist in delivery of the workshop. All subsequent sessions to be delivered by core of Corps instructors.
- Development, delivery costs, and annual update of course material are to be centrally funded.
- Each instructional session to include 30 students (apprentice/journeyman level planners, as well as others, as space is available)
- All travel, per diem, and labor costs for apprentice planners (with less than three years experience) attending workshop are to be centrally funded (twenty apprentice planners assumed to attend per session).
- Assistance with presentation of workshop, after initial delivery, could be a possible assignment for participants in the Planner Assistantship Program.

Deployment Strategy:

- Designate HQUSACE proponent for workshop and identify subject matter experts in Corps in environmental analysis. **(1 week)**
- Select "core" Corps instructors to assist contractor. **(1 week)**
- Budget for/reprogram GE/GI funds for development of workshop in FY01 and delivery to all of the MSCs during the 1st Qtr FY03 and 1st Qtr FY04, and for travel, per diem, and labor costs for attending apprentice planners.
- Develop Scope of Work and Course Outline **(4 weeks)**
- Award contract with State Engineering Extension Service or University (UCOWR) **(4 weeks)**
- Contractor develops workshop material, student handouts, and presentations and scripts. **(16 weeks)**
- Contractor conducts a Train-the-Trainer workshop for the Corps "core" instructors **(3-day session $2,000)**
- Deliver workshop to each MSC. Course material reproduced locally, for each session, although centrally funded.

Estimated Total Time to Deploy: (28 weeks)

Estimated Development and Delivery Costs

FY01 - Development

- Estimated contract cost ($30,000)
- Train-the-Trainers Workshop ($3,000)
- Travel, per diem for Corps "core" instructors
  (8 instructors X ($500/travel + $600) = $8,800

FY03 & FY04 - Delivery Costs

- Instructors Travel (3 instructors X 4 classes X$500/travel = $ 6,000)
- Instructors Per Diem (3 instr X 4 classes X 5 days X $150/day = $ 9,000)
- Salary, Contractor Instructor (5 days X $600/day X 4 classes = $12,000)
- Reproduction of Course Material (4 classes X $2,000/class = $ 8,000)

Student Participation Costs - FY03 & 04

- Travel (20 apprentice planners X 4 classes X $200/travel = $16,000)
- Per Diem (20 planners X 4 classes X 5 days X $150/day = $60,000)
- Labor (20 planners X 4 classes X 5 days X $380/day = $152,000)

Annual Maintenance/Update Costs: $5,000

TABLE K - 9

Central Funding Requirements
Environmental Analysis for Water Resources Planning

	FY01	FY02	FY03	FY04
Development Costs	$30,000	---	---	---
Train-the-Trainer	11,800	---	---	---
Delivery Costs	---	---	$35,000	$35,000
Annual Maintenance	---	5,000	5,000	5,000
Subtotal	41,800	---	40,000	40,000
Cost per student (30/class)	---	---	$330	$330
Student Participation	---	---	---	---
Travel	---	---	$76,000	$76,000
Labor	---	---	152,000	152,000
Subtotal	---	---	228,000	228,000
Cost per student (20)	---	---	$2,850	$2,850
TOTAL	$41,800	$5,000	$268,000	$268,000

Hydrologic Engineering For Planners Course

Assumptions:

- To be presented in each Division, at least once, during FY03.
- To be presented as a four day workshop.
- Course proposed is currently provided by the Hydrologic Engineering Center (HEC). HEC course to be presented locally to each MSC.
- Delivery costs are to be centrally funded.
- Each instructional session to include 30 students (apprentice/journeyman level planners, as well as others, as space is available)
- All travel, per diem, and labor costs for apprentice planners (with less than three years experience) attending workshop are to be centrally funded (twenty apprentice planners assumed to attend per session).

Deployment Strategy

- Designate HQUSACE proponent for course. **(1 week)**
- Budget for/reprogram GE/GI funds for update of course by HEC in FY01 and delivery to all of the MSCs during FY03, and for travel, per diem, and labor costs for attending apprentice planners.
- Award contract with HEC for delivery of course **(8 weeks)**
- Update of course material by HEC **(8 weeks)**
- Deliver workshop to each MSC. Course material reproduced locally, for each session, although centrally funded.
- Possibly could use Prospect for delivery / logistics support

Estimated Total Time to Deploy: (18 weeks)

Estimated Development and Delivery Costs

FY01 - Development

- Estimated contract cost to update existing material to meet current needs ($20,000)

FY03 - Delivery Costs

- Instructors Travel (2 instructors X 8 classes X$500/travel = $ 8,000)
- Instructors Per Diem (2 instr X 8 classes X 5 days X $150/day = $12,000)
- Salary, Contractor Instructor (5 days X $600/day X 8 classes = $24,000)
- Reproduction of Course Material (8 classes X $2,000/class = $ 16,000)
- Miscellaneous Cost (8 classes X $2,500/class = $20,000)

Student Participation Costs - FY03

- Travel (20 apprentice planners X 8 classes X $200/travel = $32,000)
- Per Diem (20 planners X 8 classes X 5 days X $150/day = $120,000)
- Labor (20 planners X 8 classes X 5 days X $380/day = $304,000)

Annual Maintenance/Update Costs: $5,000

TABLE K - 10

Central Funding Requirements
Hydrologic Engineering for Planners Course

	FY01	FY02	FY03	FY04
Development Costs	$20,000	---	---	---
Train-the-Trainer	---	---	---	---
Delivery Costs	---	---	$80,000	---
Annual Maintenance	---	---	---	---
Subtotal	20,000	---	80,000	---
Cost per student (30/class)	---	---	$240	---
Student Participation	---	---	---	---
Travel	---	---	$152,000	---
Labor	---	---	304,000	---
Subtotal	---	---	456,000	---
Cost per student (20)	---	---	$2,850	---
TOTAL	$20,000	$0	$536,000	$0

Economic Analysis For Water Resources Planning Workshop

Assumptions:

- To be presented in each Division, at least once, during FY03.
- To be presented as a four day workshop.
- Course proposed has been previously offered through Prospect. However, all materials are dated and need to be significantly updated to meet current needs.
- Development and delivery of workshop to be done by contract with State Engineering Extension Service, Universities Council on Water Resources, other. A core of Corps instructors will also be identified to assist in delivery of the workshop. All subsequent sessions to be delivered by core of Corps instructors.
- Development, delivery costs, and annual update of course material are to be centrally funded.
- Each instructional session to include 30 students (apprentice/journeyman level planners, as well as others, as space is available)
- All travel, per diem, and labor costs for apprentice planners (with less than three years experience) attending workshop are to be centrally funded (twenty apprentice planners assumed to attend per session).
- Assistance with presentation of workshop, after initial delivery, could be a possible assignment for participants in the Planner Assistantship Program.

Deployment Strategy:

- Designate HQUSACE proponent for workshop and identify subject matter experts in Corps in economic analysis. **(1 week)**
- Select "core" Corps instructors to assist contractor. **(1 week)**
- Budget for/reprogram GE/GI funds for development of workshop in FY01 and delivery to all of the MSCs during FY03, and for travel, per diem, and labor costs for attending apprentice planners.
- Develop Scope of Work and Course Outline **(4 weeks)**
- Award contract with State Engineering Extension Service, University (UCOWR), or other **(4 weeks)**
- Contractor develops workshop material, student handouts, and presentations and scripts. **(16 weeks)**
- Contractor conducts a Train-the-Trainer workshop for the Corps "core" instructors **(3-day session $2,000)**
- Deliver workshop to each MSC. Course material reproduced locally, for each session, although centrally funded.
- Possibly could use Prospect for delivery / logistics support.

Estimated Total Time to Deploy: (28 weeks)

Estimated Development and Delivery Costs

FY01 - Development

- Estimated contract cost to update existing material ($20,000)
- Train-the-Trainers Workshop ($3,000)
- Travel, per diem for Corps "core" instructors
  (8 instructors X ($500/travel + $600) = $8,800

FY03 - Delivery Costs

- Instructors Travel (3 instructors X 8 classes X$500/travel = $ 12,000)
- Instructors Per Diem (3 instr X 8 classes X 5 days X $150/day = $18,000)
- Salary, Contractor Instructor (5 days X $600/day X 8 classes = $24,000)
- Reproduction of Course Material (8 classes X $2,000/class = $ 16,000)

Student Participation Costs - FY03

- Travel (20 apprentice planners X 8 classes X $200/travel = $32,000)
- Per Diem (20 planners X 8 classes X 5 days X $150/day = $120,000)
- Labor (20 planners X 8 classes X 5 days X $380/day = $304,000)

Annual Maintenance/Update Costs: $5,000

TABLE K - 11

Central Funding Requirements
Economic Analysis For Water Resources Planning Workshop

	FY01	FY02	FY03	FY04
Development Costs	$20,000	---	---	---
Train-the-Trainer	11,800	---	---	---
Delivery Costs	---	---	$70,000	---
Annual Maintenance	---	$5,000	---	$5,000
Subtotal	31,800	---	70,000	---
Cost per student (30/class)	---	---	$290	---
Student Participation	---	---	---	---
Travel	---	---	$152,000	---
Labor	---	---	304,000	---
Subtotal	---	---	456,000	---
Cost per student (20)	---	---	$2,850	---
TOTAL	$31,800	$5,000	$526,000	$5,000

Long - Term Alternative Delivery Strategies (FY04 and Beyond)

In addition to the proposed rapid response delivery system, there are a number of possible delivery options for FY 04 and beyond which would continue to permit cost savings, while remaining faithful to the basic principles of the rapid response delivery system (cost effective, timely, local) and central funding.

During FY 04 and beyond , as well as during the rapid response delivery during FY 01 through FY04, students/entry level planners from one MSC could find themselves taking training with entry level planners from other regions, whether they were taking classes within or outside their respective home MSCs. Incidental to the potential cost savings of the rapid response delivery system, a more regional approach to training would provide a real opportunity for students to establish career long inter-regional relationships. While the regional training approach (a region could be two or more MSCs) might bend the principle of keeping training local, the opportunity for increasing interconnectivity among regions could be worth the inconvenience. A regional approach probably could be better tailored to the specific basic training needs of a region for future entry level planners. The following are provided for further consideration for out-year, basic planning training:

a. Regional vs MSC Training Locations. Rather than providing 1 class per quarter in each MSC, centrally funded students taking the Planner "Core" Curriculum would attend curriculum offerings at one of 2 - 4 regional centers. Fewer sessions at lower cost destinations would reduce both overall delivery and individual student costs.

b. MSC Training. Continue to provide Planner "Core" Curriculum courses to each MSC every one to two years with delivery costs shared with MSCs and Districts in proportion to the number of centrally funded students attending vs the number of other interested students from other functional areas supported by their home office.

c. Two-week training sessions. Deliver "Core" Curriculum training in concentrated, longer term sessions on a regional basis. For instance, two 2-week long sessions, including the intervening Saturday and/or Sunday during which 3 to 4 of the planner "Core" Curriculum courses would be delivered. A larger number of students could be accommodated by rotating students through the 3 or 4 courses which are offered in a rotating schedule.

d. Course Instruction. Deliver courses with instructor teams exclusively made up of recent retirees, contractors, university members of UCOWR, and/or state engineering extension services.

Appendix L

PLANNER ASSISTANTSHIP (Expert Planner Development Program)

In accordance with the Engineer Inspector General Inspection Report on Planning for Civil Works Programs, July 2000, it was noted that "division and district leaders were not happy to see the demise of the Planning Associates Program." This headquarters-sponsored program provided 11 months of intensive training. The training concentrated on developing planning skills but also provided much training in personal skills and skills of leadership. This program was terminated in the mid-90's because of cost. The proposal presented in this appendix is in response to the EIG report's recommendation "That the HQUSACE Chief of Planning, in accordance with other HQUSACE staffs, studies the feasibility of developing a long-term training program for planners."

Target Development Stage

Journeyman Level Planners

Development Objectives

The objective of the Expert Planner Development Program is to move journey-level planners to the expert planner stage of development. The program will provide the participant an intense environment rich in challenge and technical and interpersonal skills development. The program preserves what are widely believed to have been the most useful aspects of the Planner Associates program - extended networking opportunity; exposure to Washington-level processes; and mentoring with senior planners – at less than one quarter the per-student cost, and at a much reduced personal time commitment. The assistantship provides a unique opportunity not generally available in traditional classroom training. The assistantship is where theory meets practice, and is designed to provide the opportunity to develop close, long-term personal and professional relationships. This program will build networks across the Corps, improve techniques of getting things done through virtual teams, develop teambuilding and leadership skills, provide useful classes on policy application, and build a better overall understanding of the Civil Works project development process. Participants will be exposed to the key institutional players in the process where they will gain an appreciation for how the interplay of these players influences the process, including discussions with key people from the Corps, other agencies, Congressional staff, and interest groups to provide them with a wide range of points of view on water resources.

Administration

The assistantship is to be conducted in a multidisciplinary “team environment,” with an assigned mission under the supervision of a team advisor (i.e., an expert level planner, MSC Planning Chief, or HQ Branch Chief). The overall administration of the program will be at the direction of the HQUSACE Planner’s “Training and Development Proponent,” working under the oversight of the Training and Development Advisory Board for Planning. This group consists of the HQUSACE and MSC Planning and Policy Chiefs (or their reps), plus the HQ Planning Training and Development proponent. The group would meet annually or semi-annually in conjunction with the MSC Planning Chiefs meetings.

Program

The Planning Assistantship Program, once fully implemented, will include a “flight” of 2-4 Planning Assistantship Teams operating concurrently each year. Each assistantship will last approximately 6 months. The actual number of assistantship 'flights' per year will depend on the availability of eligible assistantship applicants, mission leaders/team advisors, and availability of central funding. A pilot program, consisting of one team, is proposed for implementation in FY02. Full implementation of the program is proposed for FY03.

Team Make-up

Each Planning Assistantship Team will be comprised of 8 planners and related water-resources specialists from across the U.S. whose diverse subject matter expertise can be combined, under the preceptorship of the team adviser, to achieve the team’s mission objectives. Each team should include at least two plan formulators, plus an economist and environmentalist/social scientist. Team members for each team should be selected from at least 3 to 4 different divisions to allow for diversity in knowledge and experience in water resource issues/projects.

Selection of Participants

Assistantships are not compulsory for advancement. Approximately 16 to 32, assistantships will be awarded each year from a pool of journeyman applicants based on their mission interest, availability and subject matter expertise. The specific selection or priority criteria for selection of participants will be determined by the Training and Development Advisory Board for Planning.

Assistantship Format

The proposed assistantship focuses more on the assigned hands-on real world mission than on formal class training. The assistantship will begin with an intensive (2-3 week) leadership and team building period identical or similar to the OLE and AMSC experience, with the assistantship team mission woven into the exercises. Over the remainder of the approximately 6 month assistantship, the team members will work in their home offices with short (1 to 2 week or less) TDY periods when they will be together for mission accomplishment and team reinforcement. Each assistantship team will have its own unique mission. However, there are a number of required elements common to all teams. These include: Initial intensive leadership and team building period; intense relationship with mission leader; several meetings (team meetings and at least 2 assistantship 'flight' meetings) to maximize networking and relationship building within and across teams with one of these team meetings taking place in Washington D.C. to coincide with a 1 or 2 week long shadowing period with Washington level leaders (HQ/ASA/OMB/Congress); at least one field trip to an unique project site location relating to mission assignment; and development of a team presentation summarizing the team's assignment accomplishment, which would be presented to the participant’s home office staff and senior leadership.

Sample Missions

The sponsor/adviser/preceptor of each assistantship team would develop the specific team mission, so there is no single model for the assistantship missions. Examples of what could serve as team missions include:

- assist in independent technical review (ITR) for 1 or a number of studies;
- prepare 1 or a number of Section 905(b) analyses;
- assist in preparing for and conducting MSC policy reviews and command inspections;
- serve as an independent peer review panel for controversial Corps projects;
- assist in the preparation of a Corps regulation starting with data collection, policy research and interpretation, and guidance development;
- assist Headquarters Policy staff in conducting a policy compliance review of a planning decision document submitted for Washington Level processing;
- assist in the preparation and defense of authorization or appropriation legislation and implementation guidance in response to such legislation;
- turn-key development and delivery of special subject matter training classes, seminars, or workshops for other journeyman and master level planners.

Secondary work may include shadowing experienced planners; developing and delivering short courses in specific subject areas for novice and

apprentice planners; arranging for specialized short courses to be taken by the team or assistantship 'flight'; etc.

Pilot Planner Assistantship Proposed for FY 02

Team leader: TBD

Number of participants: 8

Team make-up:

- Preferably 1 journeyman level planner from each MSC
- Diverse subject matter backgrounds

Primary Mission of Team (Example):

Issue policy and procedural guidance on alternative procedures for the design, formulation, evaluation, and selection of recommended water resource solutions costing less than $10 million.

Problem: Existing guidance regarding the design, formulation, evaluation, and selection of recommended plans to solve water resource related problems are established with large, complex projects in mind. These large investments (greater than $10 million) deserve close scrutiny and detailed analysis to confirm their validity. In spite of general guidance to the contrary for lower cost projects (particularly projects implemented under the Continuing Authorities Program), the greater level of detail of analysis required and justified for large complex projects are applied to analyses of lower cost, lower risk, less complex projects. This is as much a cultural and bureaucratic phenomenon as it is because there is no clear detailed or generally accepted alternative analytical procedures for small simple projects.

The FY02 planning assistants, under the leadership of TBD will learn the principles underlying Civil Works analytical procedures and, using these principles, develop and test alternative procedures for the design, formulation, evaluation, and selection of recommended projects. These alternative procedures will be reviewed and issued in an Engineer Regulation.

Secondary Mission (Example):

Each assistant will serve as team instructor for at least 1 session of a planner core curriculum course.

Assistantship Schedule:

Since most elements of the assistantship mission requirements depend on events not scheduled far in advance, presenting a date certain schedule is not possible.

Rather, specific events and tasks are presented below, and will be scheduled as events dictate.

Week 1: Kick off (Introductions, review of missions, schedules); advisor and team assemble for OLE / OLE type training (two week duration).

Week 2-25: There will be 5 team meetings of about 1 week's duration each for:

- Teaming - Outward Bound type training
- Team meeting with Planner Core Curriculum proponents to map out course and module schedules and assignments
- Coordination Meeting with appropriate personnel regarding the primary mission
- Session of team's choosing (mission related site visit, training, etc)

There will be a 2 week session in Washington, D.C. at a time when there is significant activity, such as budget hearings, authorization hearings, WRDA/appropriations fact sheet or review activities, etc. Work will be coupled with shadow assignments to be scheduled and arranged with HQ, ASA, OMB, Committee staff, as available. In addition, a one to two-day seminar-type training course on a Washington-level topic (Appropriations process, Authorization process, etc.) would be provided.

Approximately 4 weeks of home office time will be spent on mission accomplishment and charged to the assistantship.

Approximately 13 weeks will be available in home office for performance of regular duties and district assignments.

Week 26: Wrap up prepare summary presentations; critique of assistantship (what works, what's broken); certification ceremony; location TBD

Return to home office, make presentation summarizing assistantship accomplishments to commander and office staff.

Resource Requirements

The following assumptions form the basis for the estimated annual cost of the Planning Assistantship Program:

- 2 - 4 Planning Assistantship teams per year (Pilot Program - 1 team)
- 8 participants per team
- Program term for each team 6 months
- 9 weeks of TDY
- 7 TDY assignments
- 9 weeks TDY pay
- 4 weeks home office time on assistantship tasks
- Logistic support - 1 non-GE FTE per team for 6 weeks
- Team Advisor TDY - 9 weeks
- Team Advisor TDY travel - 7 trips
- Team Advisor - labor- no additional costs (existing GE funded)
- Leadership and Team Building training costs ($3,000 per team member)
- Facilitated team meeting sessions (2, 1-week sessions, $1,200 per session; labor $3,400 per session)

Funding Requirements ($)

TABLE L-1

Summary of Annual Costs for Planner Assistantship Program

ITEM	FY01	FY02	FY03	FY04	FY05	FY06
Developm't	100,000	---	---	---	---	---
Admin.	---	25,000	25,000	25,000	25,000	25,000
Pilot 1 Tm @ 8	---	396,000	---	---	---	---
2 Tm @ 8	---	---	762,000	---	---	---
4 Tm @ 8	---	---	---	1,494,000	1,494,000	1,494,000
TOTAL	100,000	421,000	787,000	1,519,000	1,519,000	1,519,000
Avg/Student	---	53,000	49,000	48,000	48,000	48,000

Note: Out-year funding does not include inflation

A detailed cost estimate for implementation of the Planner Assistantship Program is shown in Table L-2.

TABLE L-2

Detailed Cost Estimate ($) for Planner Assistantship Program

ITEM	1 Team 8 Members	2 Teams 8 Members Each	4 Teams 8 Members Each
9 weeks TDY ($150/day per diem)	54,000	108,000	216,000
7 TDY assignments ($500 travel per event)	28,000	56,000	112,000
9 weeks TDY pay + 4 weeks home office ($2,500/wk week/mbr)	260,000	520,000	1,040,000
Logistics Support (1 week/month)	10,000	10,000	10,000
Team Advisor 9 weeks TDY ($150/day per diem)	6,800	6,800	6,800
Team Advisor 7 TDY assignments ($500 travel per event)	3,500	3,500	3,500
Leadership Course ($3,000 / member)	24,000	48,000	96,000
Facilitated Tm Mtgs (2) ($4,600 / meeting)	9,200	9,200	9,200
TOTAL	395,500	761,500	1,493,500
Average Per Student Cost	$49,500	$48,000	$47,000

Comparison to "Old" - Planning Associate Program

During the last three years of the Planning Associate's Program, August 1992 - July 1995, each class had 13 students attending. The budget for each of these years was approximately $2.7 to $3.0 million per year. This amount covered costs for salaries for three people on the administration staff (training administrator, assistant, and a secretary); classroom expenses (rent); travel expenses for training administrator and for transportation arrangements for class

(bus, van, boat rentals, etc.); outside guest speakers and instructors; and TDY expenses for Corps instructors. Salaries for instructors from HQUSACE and the Washington Level Review Center were not included in the program's budget. All student costs, including student salaries, long-term TDY expenses, field trip TDY expenses, and allowable relocation expenses were paid by HQUSACE and were included in the program's budget. The cost per student for these expenses were approximately $100,000 to $125,000 per year. Overall, the average cost per student to attend the Planning Associates Program, during this period, ranged from approximately **$208,000 to $232,000**.

From 1975 to 1995, there were 280 graduates of the Corps of Engineers Planning Associates Program. Of these, about 67 percent or 188 individuals still work for the Corps. These individuals are listed in Table L-3.

[Table L-3 not provided in this file]

APPENDIX M

Partnership with Universities Council on Water Resources

Academic institutions may have a key role in building and sustaining Corps planning capability. The task force entered into discussions with the Universities Council on Water Resources (UCOWR) to explore whether there might be areas of common interest in the training of Corps planners. UCOWR is an organization representing over 90 universities that provide water resources education. The co-chairs of the task force met with UCOWR representatives on 28 Sep 00 at IWR to begin determine interest in and potential for cooperative relationship with UCOWR. Topics explored in this initial meeting included:

-obtaining academic credit for Corps in-house training courses;

-developing a certification program for water resources planners;

-providing easy access to university courses for Corps planners;

-hiring students under co-op program rules, and planners graduating from university programs;

-potential for leveraging university and Corps resources and programs.

Based on a productive first meeting, the task force and UCOWR mutually agreed to continue discussions. The task force co-chairs met with the UCOWR Board of Directors on 11 November 00. As a result of these discussions the UCOWR Board of Directors passed a resolution strongly supporting the Corps planner training and development goals, and indicating its willingness to work with the Corps (Attachment #1). UCOWR offered to assemble an academic advisory board to work with the Corps in the development of an academic degree program in water resources planning that meets Corps needs, and academic requirements. Planners would receive academic credit for certain in-house Corps courses. In addition, planners could take credit-granting courses offered by participating universities, and then would spend a short period of time at the degree-granting participating university of their choice to complete course and matriculation requirements for an MS degree in water resources planning.

The task force believes these discussions show great promise and recommends that the Corps and UCOWR partner on a water resources planner academic curriculum, as well as other related topics to improve Corps planning capability. A draft Partnering Agreement establishing this partnership is attached (Attachment #2).

THE UNIVERSITIES COUNCIL ON WATER RESOURCES

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2000-2001

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Universities Council on Water Resources
Resolution of Support for Cooperative Development of
United States Army Corps of Engineers
Water Resources Education Programs

Whereas the *Universities Council on Water Resources* (UCOWR) is a professional organization of approximately 100 member universities united in their common goals of research, education and public service related to the wise use, protection and conservation of water resources,

Whereas primary missions of UCOWR are to facilitate water-related education at all levels and promote meaningful technology transfer on contemporary and emerging water resource issues, and UCOWR member delegates represent every discipline and field that is concerned with water issues, from law and economics to planning, hydrology, engineering and ecology,

Whereas the *United States Army Corps of Engineers* anticipates the need for interdisciplinary water resources related education, training and advanced degree programs,

Be it resolved that:

The Board of Directors of the *Universities Council on Water Resources*, on behalf of its members, strongly supports the development of cooperative water resources related curriculum and education programs and the efforts of the *United States Army Corps of Engineers* to build and sustain the technical capability of its water resources planners through education and training and, stands ready to work with the Corps of Engineers to achieve this end.

Jonathan Pote
President, UCOWR

Ari M. Michelsen
President-elect, UCOWR

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Attachment #2

-Draft-

Partnering Agreement

Between the US Army Corps of Engineers, and
the Universities Council on Water Resources

The United States Army Corps of Engineers (Corps) has identified a critical need to provide additional water resources related education, training and advanced interdisciplinary degree or certification programs. New and cost effective curriculum, training and education, and professional development programs are needed to maintain and advance the knowledge base and expertise of Corps staff in water resources planning.

The goals and capabilities of the Universities Council on Water Resources (UCOWR) are closely aligned to the education and training needs of the Corps. UCOWR is a professional organization of approximately 100 member universities united in their common goals of research, education and public service related to the wise use, protection and conservation of water resources. Primary missions of UCOWR are to facilitate water-related education at all levels and to promote meaningful technology transfer on contemporary and emerging water resource issues. Member delegates have internationally renowned expertise and represent every discipline and field that is concerned with water issues, from law and economics to planning, hydrology, engineering and ecology.

In recognition of the mutual interests of these two organizations, the Board of Directors of the Universities Council on Water Resources, on behalf of its members, resolved to strongly support Corps' efforts to develop a cooperative water resources curriculum and education program. The Corps and UCOWR agree to work together to explore ways that our mutual interests can be served. In particular we will continue to pursue discussions and appropriate collaboration with respect to the following: the creation of an Academic Advisory Board, the development of a water resources planning curriculum, the development of Degree/Certification programs, distance learning, and other such cooperative endeavors that would be mutually beneficial.

Appendix N

Student Employment Information

This appendix contains three attachments. First is an announcement for the student co-op program (now called the Student Career Experience Program) (Attachment #1). Next is an example web page describing student employment opportunities (Attachment #2). Third is an example working agreement between the Corps and a university to establish mutual understandings of roles and responsibilities in administering a student career experience program. These materials are offered as examples and models to those interested in using this very flexible and valuable way to recruit new planners.

Attachment #1

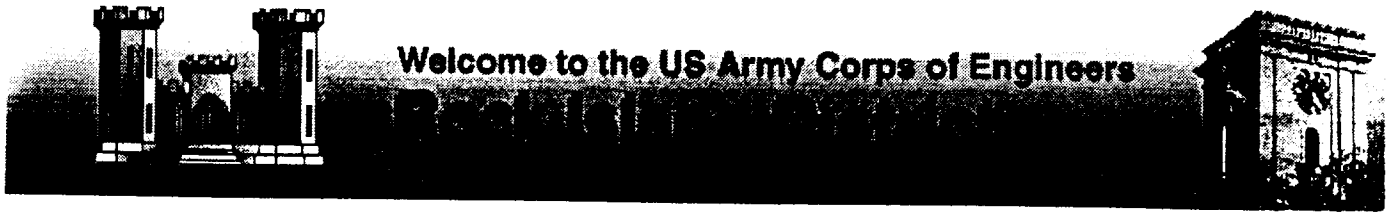
Corps of Engineers Student Employment Opportunities in Water Resources Development

The Army Corps of Engineers is seeking students at the undergraduate and graduate level to work in its water resources development program. Students pursuing degrees in economics, social science, biology/ecology, civil and environmental engineering, geography, planning and related disciplines are sought.

Students will be hired under the government's Student Career Experience Program. This is a very flexible program that enables students to create their own work schedules while pursuing their degrees. Students receive good pay, earn sick leave and vacation, plus are eligible for health benefits. Upon completion of their degree, students may be selected on a non-competitive basis for a position in the Corps related to their academic training and work-study experience.

The Corps of Engineers is the largest public engineering organization in the world. Its water resources program plans, designs, and constructs a major portion of the nation's water resources to include water transportation channels, locks and dams, port protection works, flood protection structures, multi-purpose reservoirs, levees, and environmental enhancement projects.

To find out more about this opportunity to work in a challenging, technical, multi-disciplinary environment while going to school, please contact _____.



Types of Student Appointments with the Federal Government

Student Summer Hire – Temporary Student employment between May and August.

-Must be a college student enrolled or accepted for enrollment, as a degree seeking student, for the Summer or Fall term.

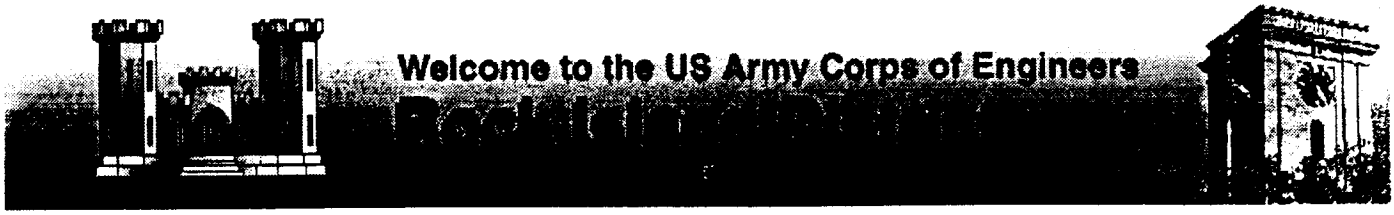
Student Career Experience Program (SCEP) – (Formerly the Cooperative Education Program) – Temporary student employment that is related to the student's major field of study.

-Must be a college student enrolled or accepted for enrollment, as a degree seeking student.
-May work part-time or full-time.
-Student's major must be related to the position being hired into.
-Possibility of conversion to permanent job upon graduation.

Student Temporary Employment Program (STEP) – Part-time employment for students.

-Must be a college student enrolled or accepted for enrollment, as a degree seeking student.
-Must be taking at least half-time academic courseload.
-Financial need is used as a criteria to select students.

Point of Contact: Civilian Personnel Advisory Center. Phone: (309) 794-5840



Student Career Experience Program

Student Career Experience Program (SCEP) is a program that provides experience directly related to the student's educational program and career goals. SCEP replaces the Cooperative Education Program (COOP). Agreements developed under this component provide for a schedule of periods of attendance at an accredited school combined with periods of career-related work in a Federal agency.

When the Rock Island District has a vacancy for a SCEP, a representative from the District contacts the cooperative education office at colleges and universities either by telephone or letter. The information provided is the position title, series, grade and a brief description of the duties that will be involved in the position.

The work experience with the District must be related to the student's academic and career goals. Students should contact their Cooperative Education Office at their college or university for general information.

Individuals qualified for this program are those enrolled, or accepted for enrollment, as a degree-seeking student and taking at least a half-time academic load in an accredited college or university.

Requirements for initial appointments: for a GS-03 position, the student must have completed 30 semester hours of college; for a GS-04 position, the student must have completed 60 semester hours of college. The required education must be related to the field in which the student will receive training on the job.

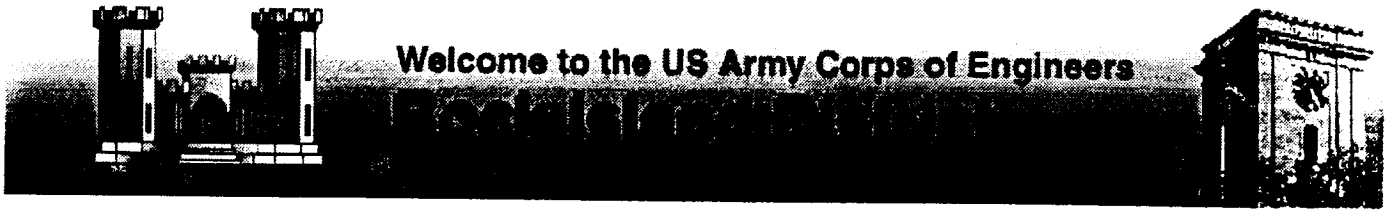
Students who are U.S. citizens, may be noncompetitively converted from the SCEP to a term, career or career-conditional appointment when they have:

(A) Completed within the preceding 120 days, course requirements conferring a degree

(B) Completed at least 640 hours of career-related work before completion of course requirements.

Applications must include a resume and a transcript. For more information, contact the Civilian Personnel Advisory Center or search the Internet at www.cpol.army.mil.

Point of Contact: Civilian Personnel Advisory Center. Phone: (309) 794-5840



Student Temporary Employment Program

The Student Temporary Employment Program (STEP) offers students an opportunity to work for the federal government while still in school.

Students may be appointed to the STEP if they are pursuing any of the following educational programs: high school diploma or General Equivalency Diploma (GED); Vocational/ Technical certificate; Associate degree; Baccalaureate degree; Graduate degree; or professional degree.

To qualify for the program, you must be a student accepted for enrollment, or who is enrolled, as a degree-seeking resident in an accredited high school, technical or vocational school, 2-year or 4-year college or university, graduate or professional school. The student must also be taking at least a half-time academic, vocational, or technical course load.

Students must demonstrate a need for income from employment to stay in school, which is in relation to family size and cannot exceed the medium income per year for a family of four as established by the Department of Employment Security for the Quad City area.

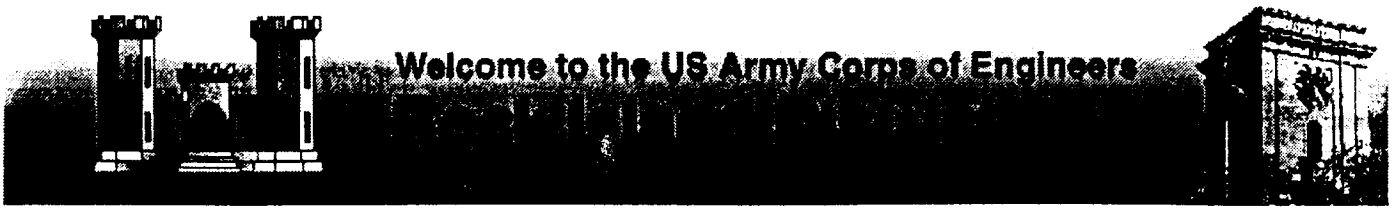
Within the STEP, the nature of student duties does not have to be related to the students academic or career goals. Students are appointed to positions not to exceed one year; however, appointments may be extended in one-year increments as long as the individual meets the definition of a student.

Students may work up to 20 hours per week while school is in session and 40 hours per week when school is officially closed.

For more information on the STEP, follow these steps:

- Go to www.cpol.army.mil on the Internet,
- Enter the "Army Civilian Personnel Management Library,"
- Enter the "Code of Federal Regulations,"
- Request to "Retrieve CFR Sections by Citation,"
- Your search categories are Title 5, CFR Part 213, and Section 3202.

Point of Contact: Civilian Personnel Advisory Center. Phone: (309) 794-5840



Co-Operative Education Program (Co-op Program)

(Student Career Experience Program - SCEP)

Major Duties:

The employee participates as a student trainee in a formal cooperative education-training program. The on-the-job experience includes practical application of principles, concepts, work processes and regulations fundamental to the engineering profession. A variety of projects of moderate difficulty will be assigned in any of the major areas of Engineering Division: Design Branch, Geotechnical Branch, Hydraulics/Hydrology Branch and/or Survey Branch. Within Design Branch work assignments could take place in General Engineering Section (transportation, civil design, mechanical, electrical), Environmental Engineering Section, Structural Engineering Section or Project Management Section depending on the employee's skills and organizational needs.

Typical Work Assignments:

- Material quantity takeoffs for project design and/or cost estimating
- Completion or checking of calculations done by others
- Preparation of reports, construction documents and design drawings
- Review of contractor submitted shop drawings and comparison with contract plans & specs
- Field investigations and report preparation
- Researching and editing technical report material
- Researching and compiling supplier product information
- Assisting in laboratory and field testing of materials
- Assisting in preparation and conduct of conferences, meetings and other activities

Typical District Projects:

- Mississippi River and Illinois Waterway Lock and Dam inspection, repair, rehabilitation
- Flood control structures design, maintenance, inspection and repair
- Building design and repair
- Transportation design and maintenance
- Environmental Management Program (EMP) design and monitoring
- River channel modeling, structure design and dredge maintenance

Contact: Paul A. Kowalczyk P.E.
Co-op Coordinator
(309) 794-5210
Paul.A.Kowalczyk@mvr02.usace.army.mil

U.S. Army Corps of Engineers, Rock Island District
ATTN: Paul A. Kowalczyk
P.O Box 2004
Clock Tower Building
Rock Island, IL 61204-2004

STUDENT CAREER EXPERIENCE PROGRAM WORKING AGREEMENT

between

U.S. Army Corps of Engineers. District. and University

This agreement is the basis for developing mutual understanding and respective responsibilities between a Federal agency and qualifying educational institution in the employment of students in the Student Career Experience Program. The Student Career Experience program is a planned. progressive education program that provides for the integration of the student's academic studies and Federal work experience with the potential of noncompetitive conversion into the Federal career service. It is consistent with guidance contained in 5 CFR part 213. and the agency's policy.

1. The Federal Agency's Role.

a. Designate a staff member to maintain liaison with the qualifying educational institution.

b. Inform school of work experience opportunities and provide adequate job descriptions promptly.

c. Establish work schedules consistent with the school's academic calendar that enable students to complete the Student Career Experience Program.

d. Orient the students to agency's mission. policies. and procedures.

e. Select appointees referred by schools in accordance with EEO principles.

f. Process all personnel actions and keep necessary records related to student employment.

g. Provide quality work assignments related to the student's academic studies or career goals where they can learn and be productive. Provide progressive and diversified career experiences to prepare students for occupations in which they have an interest.

h. Conduct appraisals and counsel students regarding their performance.

i. Notify schools of any change in a Career Experience program student's status.

2. The School's Role.

a. Designate a representative to work with the Federal Agency Student Career Experience Program Coordinator.

b. Assume personal and professional responsibilities for action and activities.

c. Use a courteous, enthusiastic, and professional approach to policies and procedures within the occupation and organization.

d. Monitor academic progress.

e. Inform the Federal agency of any change in a Student Career Experience Program student's status, including reports on a student's progress and performance.

3. The Student's Role.

a. To adhere to the agency's work schedules and Career Experience Program policies and procedures.

b. Assume personal and professional responsibilities for actions and activities.

c. Use a courteous, enthusiastic, and professional approach to policies and procedures within the occupation and organization.

d. To meet academic, performance, and conduct standards set forth by the school and Federal agency.

e. Provide the agency and school Student Career Experience Program coordinators with periodic progress reports on the quality of work and study assignments.

f. To work effectively with peers and supervisors.

g. To notify the school or Federal agency of change in school status.

h. If a noncitizen, to meet citizenship requirements prior to eligibility for conversion into the Federal career service.

4. Student Eligibility. A prospective Student Career Experience Program participant must:

a. Be at least 16 years of age.

b. Meet the agency's policy on nepotism.

c. Meet security or fitness requirements.

5. Selection. An agency may appoint students who:

a. Are enrolled in and recommended by the school's Co-op program.

b. Be in good academic standing.

c. Meet qualification standards of the position.

A Student Career Experience Program participant is appointed on a Schedule B 213.3202(b) appointment which may not extend beyond 120 calendar days after satisfactory completion of educational and study-related work requirements.

6. Pay and Benefits Information.

a. During work periods, students are paid in accordance with established pay schedules for the hours actually worked.

b. Benefits for which students may be eligible include: Retirement, Life and Health Insurance, Vacation, Sick, and Holiday Leave, Tuition Assistance.

7. Work Schedules.

a. Each work experience must be planned consistent with the student's academic studies or career goals and be designed to meet the minimum study-related work hours required for conversion.

b. Schedules may be: Full-time or Alternating; Part-time or Parallel; or a combination of both.

c. Part-Time students must work a minimum of about 16 hours per week with at least 2 academic course load

d. Alternating students are required to have 640 hours of work experience.

e. Work schedules may not be confined to summer or vacation period exclusively, unless covered under exceptions

8. Performance Appraisal.

a. Performance appraisals are required for Student Work Experience Programs participants consistent with the agency's appraisal system. Results should be shared with schools.

b. If a student's performance falls below Fully Successful he/she may be given an opportunity to improve or will be separated from the program.

9. Employment After Completion of Student Career Experience Program Requirements.

a. Within 120 calendar days after completing educational requirements, the employing agency may noncompetitively promote and convert a student to a career or career-conditional appointment.

b. Students must have satisfactorily completed study-related work hour requirements of the Federal Co-op program.

c. Students must meet citizenship and employment of relatives requirements by the date of conversion.

d. Trainees disqualified from continuing in the Student Career Experience Program or not converted must be terminated.

Signed:

_____ _____

ADDENDUM TO STUDENT CAREER EXPERIENCE PROGRAM WORKING AGREEMENT

STUDENT SIGNATURE

I have read and understand the requirements of the Student Career Experience Program. I also understand that if I fail to comply with the program requirements that I may be terminated.

Signed_____ _____

Student Date

_____

Anticipated graduation date

_____ _____

Supervisor's signature Date

_____

Title, series and grade

Intern/Work Cooperate Request

To post your request for a intern or co-op student, please send the following information to the Director:

Agency Information:

Contact Name and Title:

Address:

Telephone:

FAX:

Brief Description of Agency:

Intern/Co-op Assignment:

Salary:

Qualifications and Required Skills:

Required Application Materials, Procedures, and Deadline:

Work Time Frame:

Estimated Selection Dates and Other Comments:

Appendix O

Strategy for Use of FY 00 Carry Over Funds

The task force was able to obtain FY 00 carry over GI funds for use in providing rapid response to critical planning capability needs. Table O-1 provides the recommended use of these funds.

Table O-1

Recommended Use of FY 00 Carry Over Funds

Funding Priorities	Amount
1. Basic Plan Formulation Workshop (Development and Delivery to four MSCs	$137,000
2. Training and Development Brochure (Develop and Print)	20,000
3. Nurture UCOWR Partnership	10,000
4. Develop Brochure on Student Co-op Program (in partnership with HR or other appropriate office)	13,000
Total	$180,000

APPENDIX P

Other Federal Programs Providing Training to Their Employees

INTERNAL REVENUE SERVICE

The Internal Revenue Service (IRS) has hired a consulting firm to create and run the agency's new training program. The firm will direct the IRS Consortium for Learning and Workforce Development that will enable IRS employees to take courses at 16 universities leading to a degree, for certification, or courses on a non-credit basis. Courses may include the following: customer service, taxpayer advocacy, taxation and compliance, human resources, communication, information technology and real estate

Web site:WWW.govexec.com/daily/fed/1000/102300T1htm

OFFICE OF PERSONNEL MANAGEMENT

The Office of Personnel Management (OPM) is providing its employees with an opportunity to earn credits toward a Master's of Public Administration (MPA) in conjunction with American University's School of Public Affairs in Washington, D.C. Under the partnership, the Graduate School of Public Affairs at AU will accept courses taken at OPM's management development centers for up to 12 hours of credit toward an MPA degree.

Web site:WWW.govexec.com/dailyfed/1100/110100t1htm.

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

The National Academy of Public Administration has completed a guide entitled "Building Successful Organizations", that aims at improving personnel management in the federal government, especially in light of the increasing large number of civil servants who will be eligible to retire within the next five years. The guide suggests that agencies may need to study flexible work arrangements, including reliance on part-time and contract workers and enhanced training programs for permanent staff as ways to cope with any surge in retirements

Web site:www.hrm.napawash.org.

Appendix Q

Miscellaneous Actions / Deferred Items

The following items provide a brief discussion on miscellaneous actions addressed by the Task Force, as well as deferred items viewed as being outside of the primary task force mission and immediate focus. These items, although not addressed in detail in this task force report, are considered as extremely important in looking at overall problems, needs and opportunities related to sustaining our Civil Works planning capability. It is proposed that the Deferred Items be addressed by others, as appropriate.

a. Workshop Development for District Commanders / Project Delivery Team / Non-Federal Sponsors / Etc…

Needs:

Planning training needs to be expanded beyond planning and planners.

Discussion:

- Planning is generally not fully understood and usually under-valued as a function in a district. The complexities of developing a Civil Works project and the planning organization's role are not clearly understood by District Commanders. This often leads to resource misallocation and organizational changes that jeopardize the ability to accomplish this critical function. New Commanders need to understand the planning organization's role in the development of a Civil Works project.
- For each study there is a need to train members of the Project Delivery Team, local cost-sharing sponsors, and other stakeholders in the process of project development to facilitate their full participation. This requires that the district's planning staff be capable of providing training. From the Corps' perspective there is a need to train the planning staff to be trainers.
- To meet these training needs many MSCs have developed or are developing presentations/classes/workshops on an ad hoc basis – usually the result of an individual's personal commitment to satisfy a specifically identified need. The presentations developed have been given on an as needed basis at the districts and modified to fit the needs of local sponsors, consultants and individual project delivery teams.

- Presentations and course material could be posted on a web-site so that all trainers may have access to the latest information. Updates would be explained so that the information will not grow stale.

b. Notification of Policy Changes

Need:

The notification of policy changes and other changes to Corps guidance needs to be increased.

Discussion:

- Assign a HQUSACE proponent to communicate changes to the field. The immediate need is for someone to address the changes in ER 1105-2-100.
- Notification of the changes should be provided to the districts and divisions. These notifications would include an abstract that discusses 1) What has changed, 2) How it has changed, 3) The reason for the change, and 4) How field comments regarding the change were addressed.
- Place a notification in the "Planning Ahead" that would communicate the significance change.
- Headquarters representatives should be prepared to present changes in guidance at regional meetings (monthly calls, quarterly meetings, etc.). A PowerPoint presentation summarizing changes should be available to take on the road.

c. Regional / National Planning Conferences

Need:

There is always a need for the planning leadership to share ideas and address common problems and to create opportunities for planners to network and to meet other people in the Corps organization.

Discussion:

- Meetings of the MSC planning chiefs are held twice a year. Once a year, each of the MSC planning chiefs is also accompanied by a district planning chief. These meetings could provide an opportunity for each MSC to send an emerging planning leader. These emerging leaders would be assigned a task and report back to the chiefs near the end of the meeting.

- MSC planning chiefs also hold meetings and conference calls with the district planning chiefs, often on a regular basis. Similar participation of emerging planning leaders could also be accomplished with meetings of district planning chiefs.
- Some MSCs hold annual planning conferences that include staff members as well as the planning chiefs. These conferences usually include participation from HQUSACE, other divisions and invited guests. An invitation was provided last year for each MSC to send a representative to the annual SPD Planning Conference and it is expected that this same invitation will be provided for the 2001 conference.
- One of the initiatives that came out of the MSC Planning Chiefs Meeting in Oxnard was the reestablishment of the "Study Managers Workshop", to be re-designated as a Principle Planners Workshop to avoid potential conflicts with the project management business process. SPD has taken this initiative and will be hosting the first workshop in the spring of 2001, in the Sacramento area. Each district in the Corps will be invited to send a participant. The proposal is to hold these workshops on an annual basis and it is envisioned that the responsibility for hosting the workshops would be rotated among the MSCs.
- From a regional perspective, interaction on a regular or special basis through joint division conferences can open avenues for growth through sharing of information between divisions and districts across the country. They need not be large conferences where all the divisions and districts are present, but they could be done jointly between two divisions and their districts. The divisions could be adjacent or from across the country to provide sharing of information.
- In addition to the Division/District interface, have an annual Civil Works Conference or Workshop where planners from across the Corps can present success stories or just absorb what others have done and thereby strengthening their own skills. This could be an opportunity for HQ and Divisions to provide the latest developments, philosophies and goals for the district planning staff.

d. Planning Mentoring

Need:

There is a need for Planners to be home grown. As such, we need to get the brightest recent college graduate and have them mentored by the senior staff.

Discussion:

- Mentoring is practiced under the same principles as training and development opportunities, and develops with the planner. Mentoring

should evolve from a supervised formal activity for the Novice Planner to one that is increasingly self directed and uniquely suited to the Journeyman and Expert Planner's goals and psyche.

- Both the mentor and the protégé need to be trained in the practice of giving as well as receiving advice.
- As the planner matures, he/she is expected to take the initiative to approach and select mentors as career plans develop. Each activity commander could appoint an independent mentor to assure that any planner who wants mentoring will receive it and to counsel employees who need additional help in establishing career goals.
- "Adopt a geezer" – new employees bring technology skills etc. This may be more of a two way street. Collaboration on special projects – Team on special projects as a two-way training exercise. Mentoring is usually looked at as an adoption of a younger person by an older person. Maybe this paradigm needs to be adjusted. Invite emerging leaders to planning chief's conference, etc.

e. Planning Organization

Need:

In some districts, planning expertise has been weakened through reorganization. As such, we need to ensure that district planning expertise is organized efficiently and effectively. An optimal district planning organization, as a minimum, would include plan formulation economics and environmental elements. A regionally/nationally compatible, planning organization/division should be established in each district.

Discussion:

- The planning function is critical to development of a strong Civil Works program and is important to the Civil Works future of each District. A strong planning function and capability can best be developed, sustained, and enhanced in an independent planning organization where there is a chief dedicated primarily to the responsibility and accountability of the quality of Planning's technical products.
- The planning function must have leadership independent from other functional elements in order to focus resources (both locally and regionally) on identifying and developing new water resource opportunities, as well as, the optimal execution of existing, ongoing planning studies.
- The lack of an independent organization dilutes the planning function with other functions and results in a less than optimal

utilization of resources. In other words, the role of planning is too important and too complex to have it diffused within the organization, co-mingled with other functions and responsibilities.

- The chief of the planning function is to be responsible for developing and maintaining a professional, technically competent workforce; establishing and maintaining the necessary systems, technical processes, and working environment to produce quality products; providing the technical oversight to assure production of quality products; and serving as a principal member of the district corporate board.
- The district Planning Chief must become the confidant of their district commanders when it comes to program building and expertise in the civil work process and policies. The Chief of Planning must be looked on as the political landscape assessors and problem solvers within their organization. The planning function also must have independence from other organization elements to assure that Planning can continue to be the "honest broker" for Civil Works studies and projects. The Commander must be allowed to receive independent and unbiased views from the planning perspective.
- A disintegrated or subjugated planning function will never be viewed as an opportunity for career development

f. Planning Division Chief

Need:

There is a need that the District Commanders include the Planning Division Chief as a principle member of the District Corporate Board.

Discussion:

- The Planning function is critical to development of a strong Civil Works program and is important to the Civil Works future of each District. Most of the actions, successes and failures of the civil works planning program directly impact the future of the District.
- Planning studies, in general, have high visibility and invoke emotions and strong opinions from a variety of publics, resource agencies, political interests, etc. Many of the headaches that the District Commander has to contend with are in response of others to actions and studies ongoing in the planning arena. Often issues and impacts associated with critical planning studies/projects must be identified and acted upon by the Corporate Board. As such, the Planning function must be involved in these discussions by having direct access to the District Engineer and having sufficient level of authority to sit on the District Project Review Board and other

Corporate Boards within the District which have influence over such items as operating budgets, approval of district overhead expenditures, and development or utilization of limited resources. Such action contributes to the planning capability of the district and the region by reinforcing the perceived importance of the role of planning, and their mission, to the others in our organization.

g. Simplify the Hiring Process

Need:

Current hiring practices and procedures are not effective in getting new people into the Corps. We need to be able to get people into the Corps faster. There is a definite need to improve our appeal to those soon to be graduating by stream lining (or obtaining direct hire authorities) our hiring practices and touting the opportunities and challenges that planners have in the water resources area.

Discussion:

- For the last several years, intake of interns has been centrally managed by HQUSACE. All participants are submitted to the CPOC in Rock Island. For DA interns, the applications are retained until there is a group. A panel is then convened that rates the applications and matches them against requirements that have been identified by the Districts as compared to our allocation from the Army.
- The problem is that many new graduates are not willing to work through such a cumbersome process. First, our system is not user friendly. Second, it is not timely. It is not uncommon for our job offers to be tendered several months after graduation. The top-level graduates do not have to wait and will not wait. They will take the offer from private industry, which is often tendered within a week or two of the interview. Why do local interns have to go through the central process? Why cannot a District, which has a slot and money, place an advertisement through its own CPOC; do some local recruiting; and hire the best candidate that applies?
- The corps must be able to compete with all other private firms hiring college students. Our entry salary is not at the top of the ladder. We can't change that. What we must do is build relationships with students before they get out of college. How do we do that? Co-op, Interns, summer hires, visit and support schools with speakers, meet with deans of Engineering, etc. This latter thought is well worth doing (talk to the deans of engineering department about establishing or supporting curriculum in water resources planning). The environmental and water related problems facing our country and all

the other problems that the Corps is involved with, are going to be far larger than we can imagine. We need to go after creative Planners.

h. Career Opportunities and Progression

Need:

A reasonable career path for non-engineers is imperative.

Discussion:

- No effort to develop and maintain planning capability will be effective unless we solve the grade discrepancy problems. No one would (especially at the district level) want to leave Planning, where the work is exciting and fast moving, to go to PPM (or to the division or HQ for that matter) where the work is not what they went to college to do. They leave planning because PM pays better.
- The Corps must have its best young people attracted to Planning as a career just as we attract them to Engineering and Construction and Project Management and Real Estate. We must demonstrate a strong and vigorous career path that is desirable and favored for the recruitment of tomorrow's leaders. If we do not preserve Planning then we are cutting the flow of civil works projects off at the beginning of the pipeline.
- Key to maintaining planning technical expertise is the recognition of its value. In recognizing the importance of planning, we also need to recognize that the ability to keep the best people involved in planning activities requires fulfilling growth and development activities/opportunities as well as grade parity between planners and project managers. Technical specialist or team leader GS-13 positions would provide career progression for experts in a given technical area. These type of positions could also provide regional technical review capability, be assigned to complicated projects, and assist in the overall mentoring and development of staff.

i. Roles and Responsibilities

Need:

The roles of planners, as well as all PDT members, must be clearly defined. This entails a general direction from HQ that is supported by HQ through directives, policies and funding. In some districts, the role of the plan formulator has been diluted with a large exodus of plan formulators

to the PM organization, which have higher graded positions. Though a good planner may like what he/she is doing, the message from the organization may indicate that planning is not the place to be if you want to progress in your career.

Discussion:

- The lead planner is the leader for the planning study team work in the study process: defining the problem, formulating the future without project condition, the various alternatives being made up of measures, evaluation of those alternatives, and the selection of the plan that best meets the objectives. He/she facilitates the team as it goes through the study process. He/she has responsibilities for coordination with the various technical elements, other agencies and contractors, as well as the sponsor. These are different from that coordination and overall project responsibility that falls within Project Management. The Planner is the keeper of policy and procedure for civil works studies and sees that the Network Analysis is correctly put together.
- Since the Planner is involved at the very beginning of studies, he/she develops relationships with sponsors and potential sponsors. He/she is the one who describes the process of how to request the study, how to phrase the request or how to ask the congressman. He/she must know all of the missions and cost sharing relationships that will come to play and be able to describe to the potential sponsor how the corps program differs from a grant program. The nature of this early involvement means that the planner is the front line marketer for the Corps. He/she represents the district and the corps for these people and needs to do it in a manner that is professional and demonstrates competence.

j. Use of Recruitment, Relocation and Retention Allowances

Need:

In some cases, in hard to fill planning positions (e.g., positions requiring special planning knowledge, skills and abilities, or those in undesirable locations, etc.) the Corps planning leadership may need to more seriously consider using recruitment, relocation and retention allowances as allowed by EC690-1-710, 1 January 2001.

Discussion:

- Per the referenced EC, recruitment and relocation bonuses will be approved locally, provided they meet a critical need, are adequately documented, and comply with regulatory and procedural requirements. Retention allowances will be authorized by major subordinate commanders/directors.

k. Technically Challenging Work

Need:

There is a need to provide meaning and purpose to an employee's life. The best and the brightest thrive on new challenges and responsibilities

Discussion:

- Clearly identify new challenges and opportunities. Assign complex, challenging work for professional development.
- We must continue to provide challenging opportunities through a growing Planning program as well as opportunities in support of others in the SFO and military programs to provide an array of challenges in various areas for our planners.
- Although the Planning Assistance to States Program may not have the funding or emphasis due to the fact that these are planning studies that do not result in project implementation, this is an excellent way to provide interesting studies to be done in-house by the planning staff and to allow the staff to hone their planning skills.

l. Give Our Customers Our"A" Team in Initial Contacts

Need:

There is a need to include planning expertise in initial and ongoing formulation meetings with sponsors to ensure that opportunities for creative project development are not missed.

Discussion:

- The key to program outreach and development is to have an experienced cadre of people who have worked on the program growth end. That usually means people that have substantial Planning experience. This experience provides them with an in-depth knowledge of our civil works authorities, cost sharing, study and NED requirements, working with water resources issues, interfacing with sponsors and elected officials, and generally what it takes to make a

project happen. When you are standing in a field surrounded by landowners and congressional staffers, you have to be able to tell them what we can do to help and what the congressman needs to do to help. You do not have time to go look it up and get back later, if you want to maintain credibility.