

# Lesson 10

## USACE Civil Works Direct Program Program Development Part II

# Introduction

- As discussed in Lesson 9, program development is the process by which work is defined and scheduled for execution.
- Again, “scheduled” means assignment of all necessary resources, including time, funding, manpower, land, plant, equipment, and material, for successful accomplishment of work.

# Agenda

- In this lesson we will cover:
  - The general CWDP development process;
  - The players and their roles in the process; and
  - The process, involving development, by “Business Line,” and by “systems approach.”

# Overview

- For any given cycle, development of the CWDP occurs over a period of about 32 months:
  - beginning in the Executive Branch with resolution of “passback” for PY-1, and proceeding through the Executive Branch, with submission of the President’s Budget to Congress;
  - proceeding through the Legislative Branch, with congressional appropriations for PY; and
  - ending with agreement of Congress and the President and the resulting signing of the appropriations into law.

PROGRAM AND FUNDING TIMETABLE

Calendar Year	2006				2007				2008				2009				2010																						
Month	Q	N	D	J	F	M	A	M	J	J	A	S	C	N	D	J	F	M	A	M	J	J	A	S	C	N	D	J	F	M	A	M	J	J	A	S	C	N	D
Fiscal Year	FY 06				FY 07				FY 08				FY 09				FY 10																						

Current FY

**FY 08 PROGRAM**  
 DEVELOP      DEFEND      EXECUTE

**FY 09 PROGRAM**  
 DEVELOP      DEFEND      EXECUTE

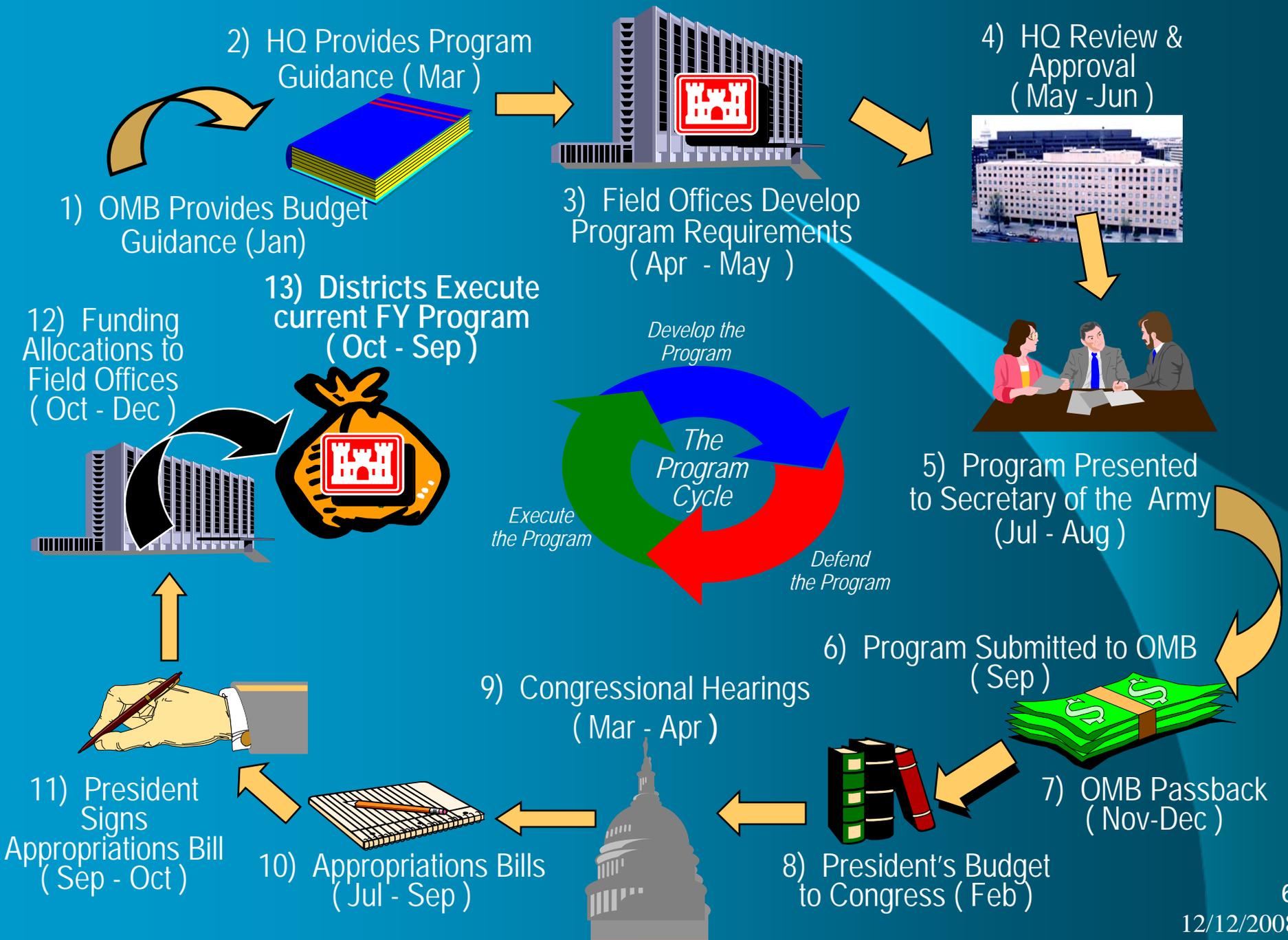
**FY 10 PROGRAM**  
 DEVELOP      DEFEND      EXECUTE

Budget Cycle = 32 Calendar Months

Program Year	PY-3				PY-2				PY-1				PY			
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PY = CFY+2

NOW



# Overview (cont'd)

- During the program development process HQ consolidates and prioritizes the budget in two official versions of the recommended program for the Executive Branch – Army's and OMB's.
- Within the Legislative Branch there are, 3 principal versions, specifically, those of the:
  - House,
  - Senate, and
  - Conferees.

# Overview (cont'd)

- The mutually agreed upon version of Congress and the President, becomes the actual CWDP for any given year.

# Vocabulary – Part 1

- **Purpose** – one of 8 purposes that Congress has authorized the Corps to address through CWDP projects.
- **Regional System** - generally, an area in which water and related land resources might be managed to serve multiple purposes in order to provide comprehensive integrated solutions.
- **Regional System Approach** – view that service to all purposes based on proportional importance is preferable to service to single purposes, to the exclusion of others, in water resources development and management.

# Vocabulary – Part 1 (cont'd)

- **Business Line** – one of 8 programs of the CWDP, each one designed to serve just one of the 8 purposes that Congress has authorized the Corps to address through CWDP projects, e. g., flood protection.
- **Business Line Manager** – person responsible for management, including program development, of one of the 8 Business Lines.

# Vocabulary – Part 1 (cont'd)

- **Function** – a specialty or related specialties of work, e. g., investigations, which cut(s) across any or all purposes.
- **Functional Program** – a program of the CWDP, designed to accomplish a specific function, e. g., investigations.
- **Functional Program Manager** – person responsible for management of one of the functional programs.

# FY09 CWDP Development Guidance

- **Engineer Circular (EC) 11-2-187**  
(<http://www.usace.army.mil/inet/functions/cw/cecwb/index.html>) provides guidance for development and submission to OMB of the CWDP for FY09.
- The EC applies to all headquarters elements, major subordinate commands (MSCs), districts, and field support activities having CWDP responsibilities.
- This guidance departs significantly from previous guidance.

# FY08 CWDP Development Guidance

(cont'd)

- The EC comprises 3 parts:
  - Main Part, providing overall guidance;
  - Appendices I - VIII, providing guidance for development of each of the 8 Business Lines:
    - Emergency Management (EM);
    - Environment (EN);
    - Flood and Coastal Storm Damage Reduction (F&CSDR);
    - Hydropower (H);
    - Navigation (N);
    - Recreation (RC);
    - Regulatory (RG); and
    - Water Supply (WS)

# FY08 CWDP Development Guidance

(cont'd)

- 6 Annexes, including A - D, providing generic guidance on:
  - Investigations (I),
  - Construction (C), and
  - Operation and Maintenance (O&M) Program matters, cutting across all business lines, as applicable.
  - Expenses (E);
  - Revolving Fund (RF) (Plant Replacement and Improvement Program (PRIP)); and
  - Automation Program (AP).

# CWDP Development - History

- Formerly, we developed the CWDP by 9 “functional programs,” namely:
  - Investigations (I);
  - Construction (C);
  - Operation and Maintenance (O&M);
  - Flood Control and Coastal Emergencies (FC&CE);
  - Expenses (E);
  - Regulatory Program (RP);
  - Revolving Fund (RF) (Plant Replacement and Improvement Program (PRIP));
  - Automation Program (AP); and
  - Formerly Utilized Sites Remedial Action Program (FUSRAP).

# CWDP Development - Current

- Now, we develop the CWDP by the 8 “Business Lines,” and
- 3 functional programs\*, namely:
  - E;
  - RF (Plant Replacement and Improvement Program (PRIP)); and
  - AP.

\*Two former functional programs, EM and RG, are now called Business Lines.

# FY09 CWDP – Performance Measures

- For the CWDP, there are 8 sets of performance measures – one for each Business Line.
- For each of the 8 sets there are 2 subsets of performance measures, namely:
  - a general subset, tied to CWDP objectives in the Civil Works Strategic Plan; and a
  - a specific subset, defined by CWDP objectives and functional program budgeting objectives of the FY09 EC (Ranking Criteria).

# FY08 CWDP – Performance Measures – F&CSDR Example

- **General subset** (derived from Strategic Plan)
  - (PED) Keep ongoing studies or PEDs going if likely to produce recommendation for project (I) or start new phase of studies or PED (I) to address critical needs
  - (C) Complete ongoing construction to start getting benefits and reduce future flooding impacts with new construction
  - (C) Initiate and complete dam safety projects
    - (C) Conduct dam and levee safety, seepage or static instability studies
  - (OM) Operations - Assure that projects perform as designed
  - (OM) Maintenance - Assure that projects perform as designed

# FY09 CWDP – Ranking Criteria

## F&CSDR Example (cont'd)

- **Specific subset** (defined in BL appendix III):
  - Planning Engineering & Design (**PEDs**)
    - Date of agreement – executed or expected
    - Population at Risk (*PAR*)
    - Combined flood risk factors (depth, velocity and warning time, *PAR* or *TPAR*)
    - Estimated average annual damages (without project)
    - Benefit to Cost Ratio – only for PED
    - System/Watershed study score

# FY09 CWDP – Ranking Criteria

## F&CSDR Example (cont'd)

- **Construction (C)**

- Benefits Cost Ratio (*BCR*) for project
- Net Benefits
- Other purpose outputs by BL (ENR REC WS)
- Combined risk factors (depth, velocity and warning time, *PAR* or *TPAR*)
- Life safety – Y or N (describe in remarks)

# FY09 CWDP – Ranking Criteria

## F&CSDR Example (cont'd)

- **Construction (C) Dam Safety**
  - Relative Risk of failure – risk compared to other Corps dams (*DSAC* Classification)
  - Condition Classification, Consequence Category, Relative Risk Matrix Value
  - Population at Risk (*PAR*)

# FY09 CWDP – Ranking Criteria

## F&CSDR Example (cont'd)

- **Operations (O&M)**

- % of design level available (may be less than 100% due to reduced conveyance, pool restrictions or storage limits, seepage, or other reduced level of protection)% of design level available (reduced conveyance, pool restrictions, seepage (levees), reduced level of protection)
- O Index as total damages prevented divided by cumulative O costs (HQ will calculate)
- % of all required inspections, surveys that can be accomplished with a given budget increment

# FY09 CWDP – Ranking Criteria

## F&CSDR Example (cont'd)

- **Maintenance (O&M)**

- Condition Classification, Consequence Category, Relative Risk Matrix Value
- % of design level available (may be less than 100% due to reduced conveyance, pool restrictions or storage limits, seepage, or other reduced level of protection)
- M Index as total damages prevented divided by cumulative M costs (HQ will calculate)
- Special legal mandates – Y or N (describe in remarks)
- Safety issues – Y or N (describe in remarks)

# Vocabulary – 2<sup>nd</sup> Installment

- **Business Line Increment** - any mutually exclusive collection of one or more items of “essential work,” defined and prioritized by any MSC for any of its Business Lines.
  - The increment is prioritized based on its value in terms of performance measures.
  - It is added to the program in order of its priority among all candidate increments.
  - Its priority is based on its relative efficiency and effectiveness in accomplishing performance objectives, goals, and missions.

# Vocabulary – 2<sup>nd</sup> Installment (cont'd)

- **Essential Work** – for any Business Line, a collection of work that must be accomplished in order to avoid unreasonable repercussions, e. g., nonpayment of earnings under a continuing contract.
- **Initial Business Line Increment** – the highest priority program increment, usually comprising principally essential work. Criteria for developing initial line increments are defined, by function, for each Business Line.

# Vocabulary – 2<sup>nd</sup> Installment (cont'd)

- **Initial CWDP Business Line** – for any Business Line, the Corps-wide initial Business Line derived through synthesis of all region-wide initial Business Line Increment.
- **Initial CWDP** – the Corps-wide initial program by “system approach,” or multiple purposes, derived through synthesis of all Corps-wide initial Business Lines, across all purposes.

# Vocabulary – 2<sup>nd</sup> Installment (cont'd)

- **Ceiling CWDP** – Presidential Policy Program, specifically, the initial CWDP incremented with high performance outputs and complying strictly with Presidential policy.
- **Recommended CWDP** – the ceiling program incremented or decremented to provide the program that Army would prefer to implement.

# FY09 CWDP – Initial Program Criteria – F&CSDR Example

- Investigations
  - Only Studies and PED specifically authorized
  - Seamless PED's are considered New Phase
  - New starts must be economically justified

# FY09 CWDP – Initial Program Criteria – F&CSDR Example

- Construction

- Includes specifically authorized, replacement, initial beach fill, dam safety, deficiency correction, and dam seepage studies
- New Starts must be economically justified
- Continue existing Contracts
- Contracts must be fully funded if total estimated value less than \$20M

# FY09 CWDP – Initial Program Criteria – F&CSDR Example

- O&M
  - Operations and Maintenance requirements must be separated
  - Includes “minimum level of service”, on-going major maintenance, critical routine maintenance, infrastructure security, rehabs of high risk projects, and dam safety
  - Detailed project descriptions and justifications strengthen funding request
  - Dam Safety work prioritized by HQ and based on DSAC
  - Inspection of Completed Works based on systems approach
  - Joint activities – Joint Costs by BL (multi use Hydropower)
  - Dist Req'd to screen risk portfolio 35% of inventory in FY09

# FY09 CWDP – Program Development

- Under the program development process, MSCs develop program increments, including initial program increments – **Initial Business Lines**.
- HQUSACE, in close collaboration with OASA(CW), reviews the MSCs' initial programs and program increments, by Business Line, then, for each Business Line, develops the **Initial CWDP Business Line** through, valuation and prioritization of program increments across all MSCs, and selection of program increments in highest priority order.

# FY09 CWDP – Program Development

(cont'd)

- HQUSACE, in collaboration with OASA(CW), develops the Corps-wide initial program by “Regional System - Watershed Budget” – multiple purposes, namely, the **Initial CWDP** through, valuation and prioritization of program increments across all Business Lines, and selection of program increments in highest priority order.
- HQUSACE and OASA(CW) develop a Corps-wide ceiling program by “Regional System ,” namely, the **Ceiling CWDP**, generally, by adding, in highest-return priority, Business Line increments remaining nationwide, to the initial CWDP.

# FY09 CWDP – Program Development

(cont'd)

- A Corps-wide recommended program is developed with OASA(CW) by “Regional System ,” namely, the **Recommended CWDP**, generally, by adding, again in highest-return priority, Business Line increments remaining nationwide, to the ceiling CWDP.

# FY09 CWDP – Program Development

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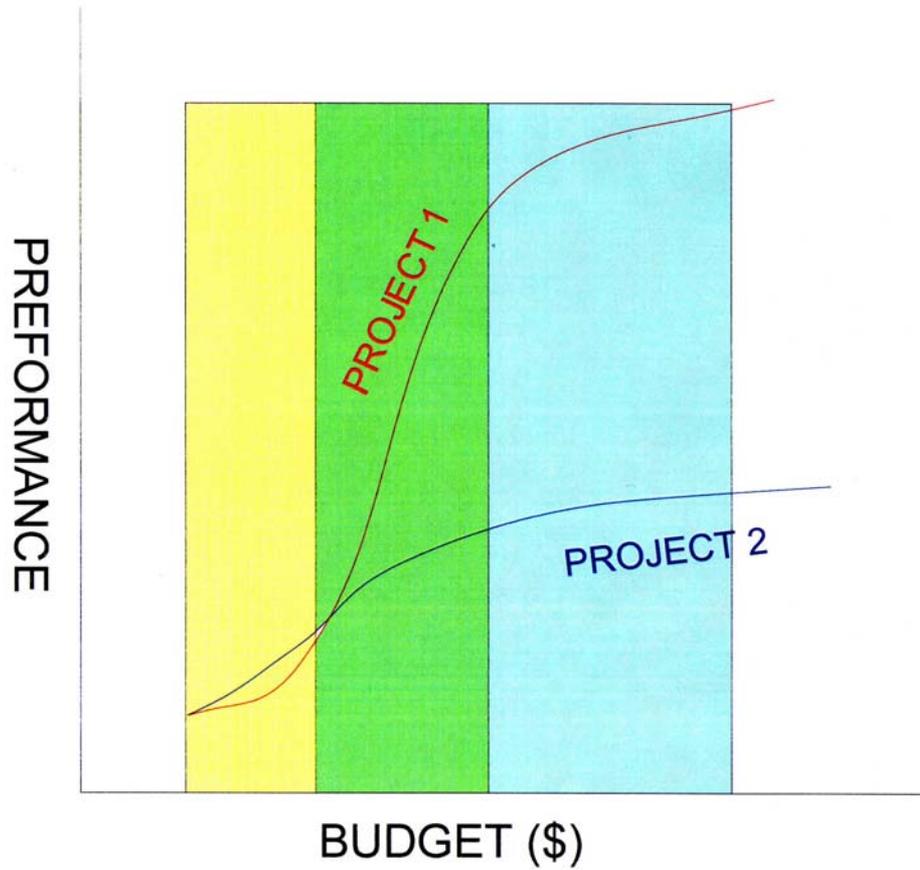
- OASA(CW) submits the Army's recommended CWDP to OMB.
- OMB, in collaboration with OASA(CW), finalizes the recommended CWDP for the President's Budget.

# FY08 CWDP – Program Development

(cont'd)

Analysis  
for  
Prioritizing  
Program Increments

# PREFORMANCE VS. BUDGET



# FY08 CWDP – Program Development

(cont'd)

Illustration  
of  
Program Development,  
by  
Business Line,  
by  
Program Increment

## BUSINESS PROGRAM DEVELOPMENT BY PERFORMANCE INCREMENTS

<b>INCREMENTAL COST (k\$)</b>							
	Inc 6						FUNCTIONAL PROGRAM
	Inc 2						O&M
	Inc 5						Const
	Inc 4						Invest
	Inc 3	Inc 3					
	Inc 2	Inc 2	Inc 3				
	Intial	Inc 2	Inc 2				
	Intial	Inc 2	Inc 2				
		Intial	Inc 2				
	Intial	Initial	Initial	Inc 2	Inc 2		
		Intial	Intial	Intial	Intial	Intial	
Intial	Initial			Initial			
	Nav	FDR	Env	Hydro	Rec		
<b>BUSINESS PROGRAM</b>							

# Program Development – Quiz

- What does CWDP abbreviate?
- Where can you find the FY09 EC?
- We develop the CWDP by programs of what kinds?
- How many programs are there of each kind?
- How many parts does the EC have?
- What are they called?
- What kind of programs do the annexes cover?

# Program Development – Quiz (cont'd)

- What kind of programs do the appendices cover?
- How many sets of performance measures are there for the CWDP?
- How many subsets are there within each set?
- Where are they found?
- What are the sources of the subsets?
- What is a “Business Line Increment”?
- How is it prioritized?
- What is “essential work”?

# Program Development – Quiz (cont'd)

- Where are the criteria for developing initial program increments found?
- What comprises the “initial CWDP Business Line”?
- Who develops it?

# Summary

- We've covered:
  - The general CWDP development process;
  - The players and their roles in the former process; and
  - The players and their roles in the current process, involving development by
    - “Business Line,” and
    - “Systems Approach.”

# Summary (cont'd)

- For those involved in development of the CWDP, this lesson should help you contribute to development of more successful programs. For others, it should help you better prioritize and plan your work.
- Again, if you have any questions or comments you'd like to share, please feel free to ask or make them now.
- As before, you'll have an opportunity to comment privately, later, when you complete the course questionnaire.