

# Elements of Successful Project Planning Initiatives

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# Overview & Purpose

- Goal of presentation: Provide overview of project planning by illustrating use and common presentation in various initiatives. Discuss future revisions to Corps of Engineers guidance Engineer Manual (EM) 200-1-4 Technical Project Planning



# Strategic Planning vs. Systematic Planning

- Program or organization level
  - Defines purpose of organization, envisions its future
  - Develops Goals and objectives
- Project level- involves team and stakeholders
  - Defines problem and desired end state
  - Identifies project goals & objectives

**Mission, Vision,  
Strategy, Measures**

**Project Objectives,  
Scope of Work,  
Conceptual Site Model**



# Technical **Systematic** Project Planning Engineer Manual EM 200-1-2

## **Provides Guidance and Worksheets for Project Planning**

- **Define Project Objectives**
- **Determine Data Needs**
- **Develop Data Collection Options**
- **Design Data Collection Plans**
- **Define Data Quality Objectives (DQOs)**

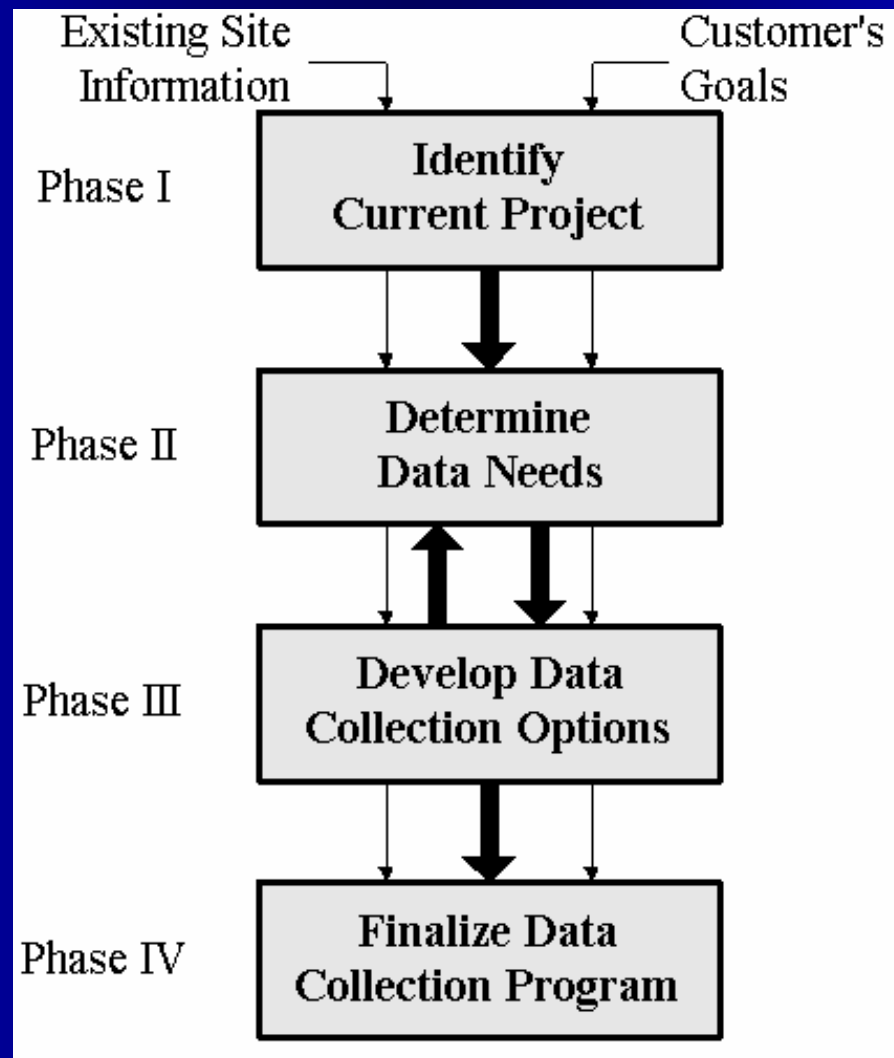


# Technical Project Planning Engineer Manual EM 200-1-2

- Promotes Identification of *Type* and *Quality* of Data Required for Progress to Site Closeout
  - Investigations/Feasibility Studies
  - Design/Site Remediation
  - Operation/Maintenance and Monitoring



# TPP Summary



**IDENTIFY CURRENT PROJECT**

**SITE CONSTRAINTS AND DEPENDENCIES**

EM 200-1-2, Paragraph 1.3.1

- Administrative Constraints and Dependencies
  
- Technical Constraints and Dependencies
  
- Legal and Regulatory Milestones and Requirements

**CURRENT EXECUTABLE STAGE**

EM 200-1-2, Paragraph 1.3.3

(Also list project objective numbers and attach Project Objectives Worksheet with descriptions.)

Basic (current project)	Optimum (future projects)	Excessive (objectives that do not lead to site closeout)



**DATA NEED WORKSHEET- RISK PERSPECTIVE (examples)**

Data Need <sup>a</sup>		Project Objective(s) <sup>b</sup> & Data Need Group	Data Use(s) <sup>c</sup>			Number of Samples <sup>d</sup>			Risk Action Level(s) <sup>e</sup>		Exposure Area(s) / Sample Location(s) and Depth <sup>f</sup>
Contaminant of Concern, or Characteristic of Interest	Media		Current or Future Use	Receptor Group(s)	Receptor's Exposure Route(s)	CL (%)	P (%)	MDRD (%)	Human Health	Ecological	
Vinyl Chloride	GW	1 Basic	Current Use	Industrial Workers	Incidental Ingestion, Dermal, & Inhalation		2		N/A	N/A	The 2 worst case downgradient wells found @ PA/SI
Vinyl Chloride	GW	2 Basic	Future Use	Resident	Incidental Ingestion, Dermal, & Inhalation		2		0.019 ug/L (RBC)	N/A	The 2 worst case downgradient wells found @ PA/SI
Lead and Cadmium	Soil	1 Basic	Current Use	Industrial Workers	Ingestion & Dermal	CL = 80% P = 90% MDRD = 20%			1,000 and 1,000 mg/kg	N/A	within area outlined on attached figure and @ 0" to 24"
Lead and Cadmium	Soil	2 Basic	Future Use	Resident	Ingestion & Dermal	CL = 80% P = 95% MDRD = 20%			400 and 39 mg/kg	0.1 and 2.5 mg/kg	within area outlined on attached figure and @ 0" to 24"
Total Organic Carbon	Soil	2 Basic	Future Use	GW Model	(fate & transport)		2		+/- 0.1%		w/ screen interval of the 2 new wells on attached figure
Hydraulic Conductivity	GW	2 Basic	Future Use	GW Model, aquifer viability and classification	(fate & transport)		2		(rising head slug test using data logger and transducers)		At the 2 new wells shown on the attached figure





# Flavor of the Month?

- NO--All projects plan to varying degrees, is a standard practice
- Frequently inadequate documentation is a problem
- USACE TPP manual provides guidance and considerations and means for documenting outcomes



# Project Management Processes

## Project Management Process Groups:

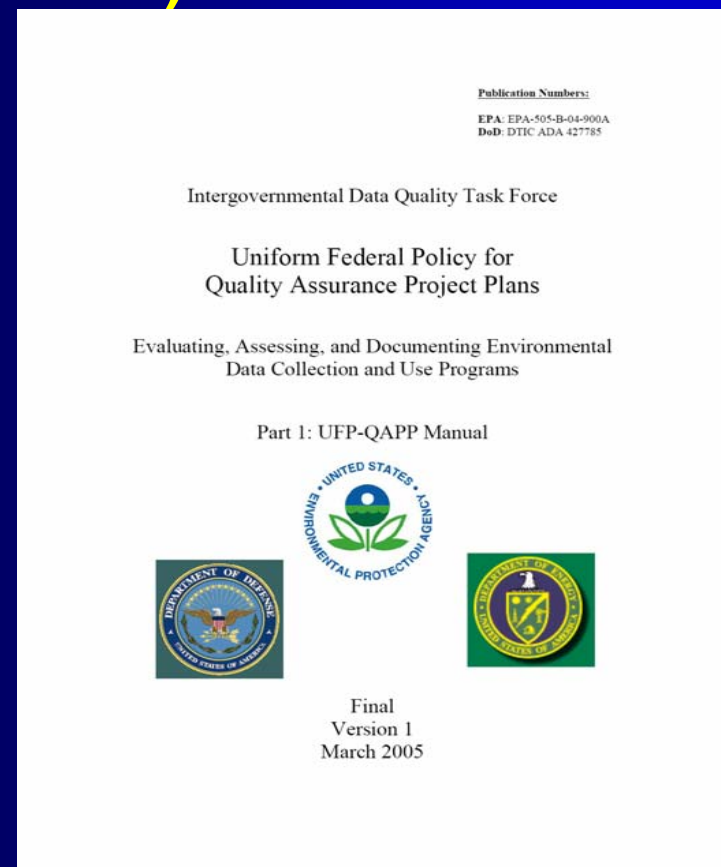
- Initiating Processes
- *Planning* Processes
- Executing Processes
- Monitoring and Controlling Processes
- Closing Processes

*Project Management Institute*



# Uniform Federal Policy for Quality Assurance Project Plans (UFP QAPP)

- Intergovernmental Data Quality Task Force
- Signed by Assistant Deputy Undersecretary of Defense ESOH, Alex Beehler  
3-17-05



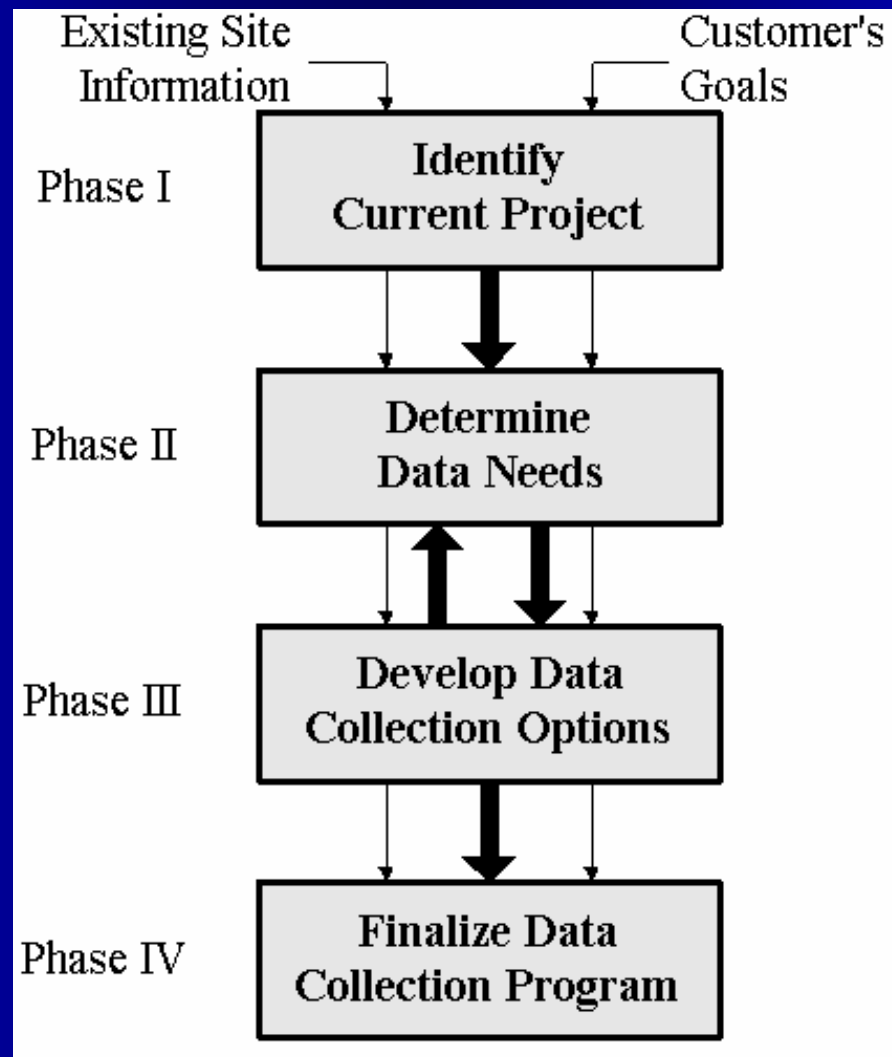
# Systematic Project Planning Elements

- Team based approach to planning
- Project goal, objectives, questions and issues
- Project schedule, resources, milestones and applicable requirements
- Data collection and analysis process matched to project objectives
- Collection and analysis requirements
- Process for generation, evaluation and assessment of collected data

*Uniform Federal Policy for Quality Assurance Plans*

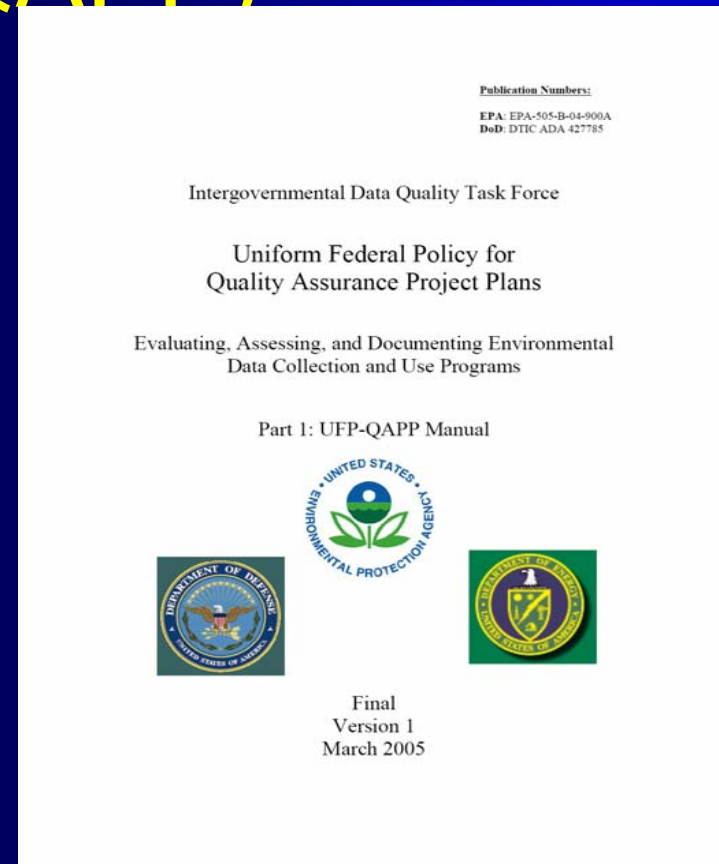


# TPP Summary



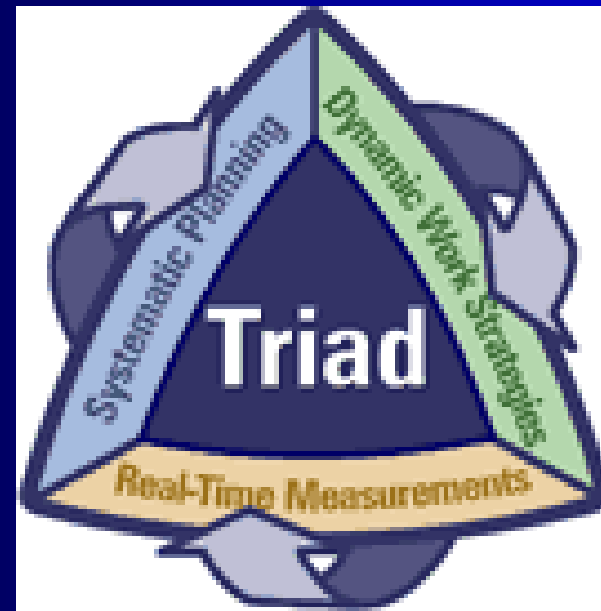
# Uniform Federal Policy for Quality Assurance Project Plans (UFP QAPP)

- Data User sheets from EM 200-1-2 utilized
- Detailed QA/QC worksheets
- Links to electronic tools



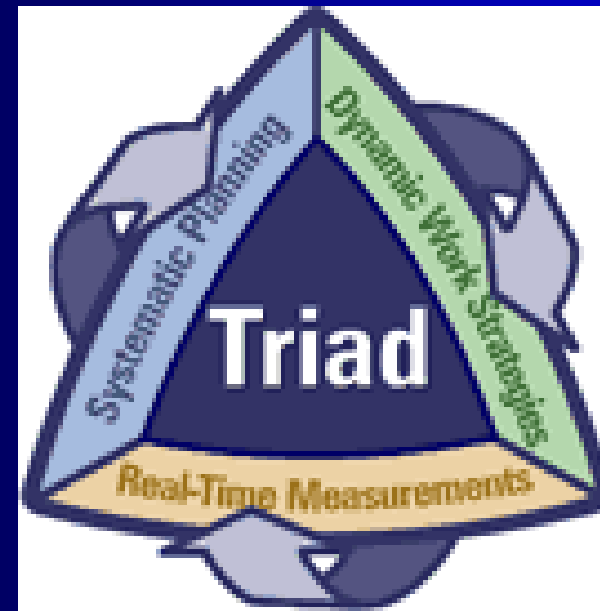
# EPA Triad Approach

- EM 200-1-2 referenced for planning
- Workplan developed with “If-Then” statements
- Real time decisions with field measurements



# EPA Triad Approach

- Management of decision uncertainty
- Framed by conceptual site model
- Dynamic work strategies





# ISO 14001

## Lean Six Sigma

- Iterative design
- Focus on core processes and insure they run smoothly
- Continuous process improvement
- Plan, Do, Check



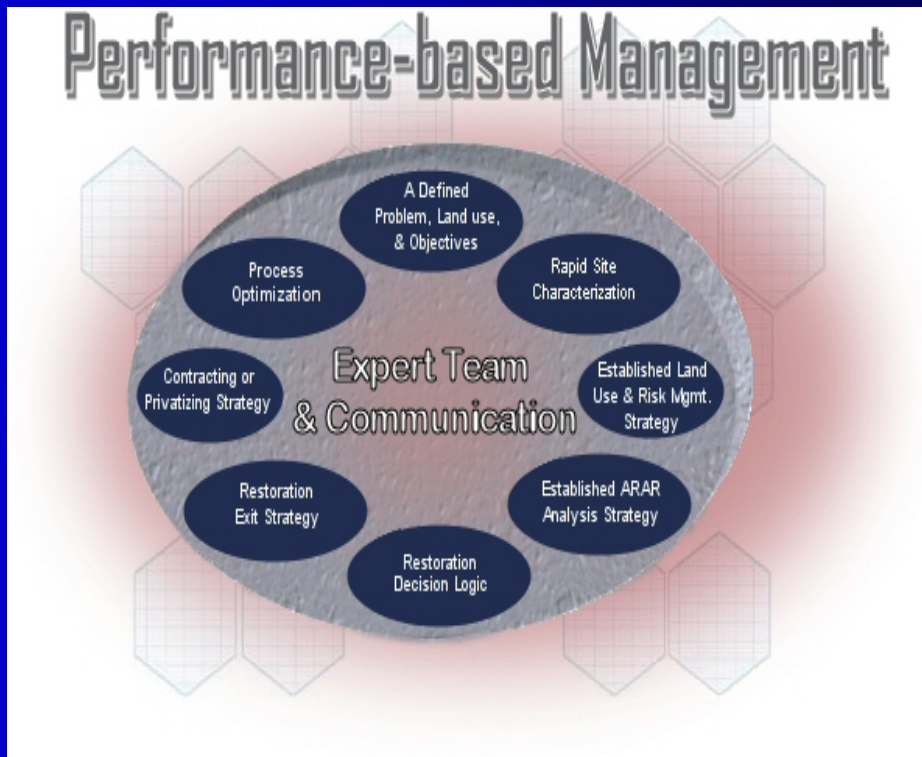
# The Home Stretch...Remedial Action in Place

- Systematic Project Planning focuses on desired end state and defines exit strategies
- Concepts not abandoned post remedy in place
- Remedial process optimization expedites site closure
- Five year reviews



# Air Force Center for Environmental Excellence (AFCEE)

- References EPA Triad Approach
- Addresses Performance Based Contracts
- Process Optimization



# Proposed Additions to EM 200-1-2

- Development of performance measures
- Use CSM(s) to full extent in planning
  - Identify and manage project uncertainty
- Triad as an approach selected during planning
- Dynamic workplans
- Information relative to full project lifecycle
- Cross-reference UFP QAPP guidance
- Links to electronic planning tools
  - E.g. Visual Sampling Plan, SADA, Army Risk Assessment Modeling System

