Project Management for Risk MAP
CTP’s
Define, Plan & Execute:
The Keys to Delivering Quality Projects on Time and on Budget

ASFPM - Hartford, CT
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Session G8 – Risk Map

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Alisa M. Sauvageot, CFM
Overview

- Why Use These Tools?
  Overview of PM Tools
- So you Want a Project?
  Project Planning
- Now you Have a Project!
  Project Initiation
- Staying on Track!
  Managing Projects
- Keeping FEMA Happy!
  EV from FEMA Perspective
Why should CTPs use Project Management Tools?

- **Help Keep Your Scope, Schedule and Budget in Balance**
  - Optimal planning and control
- **Why Track Earned Value?**
  - Measures, accomplishments and success
- **Why Should You, as a CTP, Care?**
  - Performance Success = Potential future funds
Why should CTPs use Project Management Tools?

- Federal Mandate

- Objective Contract Status

- It Works!

Concerted Effort Needed to Improve Federal Performance Measures”

GAO-10-159T  October 29, 2009

“Agencies Need to Improve the Implementation and Use of Earned Value Techniques to Help Manage Major System Acquisitions”
So You Want a Project? – Project Planning

Annual Process with Community Input

* On going at all Times
  * Coordinate with the FEMA RE
* Project Planning and Purchasing Portal (P4)
  * Funding is Planned 18-24 months in advance
* CNMS
* CAVs/ CACs
* Discovery Meetings
* Email & Letters
Mapping Activity Statement

- Developed by Community & FEMA
- Includes General Scope/ Milestone Schedule
- Contains Guidance and Requirements
- Can be Amended with FEMA Approval
- Who Must Maintains Data
- Certify Work
- Provide Outreach

Each MAS Is Different!
Non-Disaster Grants Management System

* Partners must be trained and registered in the use of the Grants Management System in order to receive a Grant

Performance Reporting

* Quarterly Performance Reports will be submitted through the ND-Grants system
* Different from EVM reporting

Financial Reporting

* Obligations and expenditures must be reported through the Federal Financial Report (FFR), Standard Form (SF) 425
Now You Have a Project! - Planning Scope – Schedule - Budget

Identify Your Scope
* Scope out your work using WBS
* List of activities to be performed, in the order they need to be accomplished

Develop Your Schedule
* Use your WBS to identify Baseline start and end dates for each task, including QA/QC

Estimate your Budget
* Scope + Schedule = Cost Baseline for each activity
## Now You Have a Project! - Key Principles of Scope Management

<table>
<thead>
<tr>
<th>Collect Requirements</th>
<th>Define Scope</th>
<th>Create Work Breakdown Structure</th>
<th>Verify Scope</th>
<th>Control Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principles</strong></td>
<td>Define Project Objectives</td>
<td>Develop a Project Scope Statement: Description, deliverables, acceptance criteria</td>
<td>Define Project tasks: project activities decomposed to manageable level (PWBS?!?)</td>
<td>Assess individual tasks and final project for completeness</td>
</tr>
<tr>
<td><strong>RM Tools and Processes</strong></td>
<td>✓ FEMA P4 Tool ✓ Mapping Activity Statement ✓ Scoping Activity</td>
<td>✓ Mapping Activity Statement (MAS) ✓ Scoping Activity</td>
<td>✓ MIP Workflow defines the tasks based on the MAS and scoping activity ✓ MIP Worksheet</td>
<td>✓ Mapping partners track completed work in MIP Workflow</td>
</tr>
</tbody>
</table>
# Now You Have a Project! – Standard Scope Tasks

<table>
<thead>
<tr>
<th>Project Scope Task</th>
<th>MIP Task</th>
<th>Tracking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited Detailed Hydraulic Analysis</td>
<td>Develop Hydraulic Data</td>
<td>Use Task Description field to identify type</td>
</tr>
<tr>
<td>Approximate Hydraulic Analyses</td>
<td>Develop Hydraulic Data</td>
<td>Use Task Description field to identify type</td>
</tr>
<tr>
<td>FR Notice Publication</td>
<td>Post Preliminary Processing</td>
<td>(1) Task for all intermediate tasks</td>
</tr>
<tr>
<td>Appeal Resolution</td>
<td>Post Preliminary Processing</td>
<td>(1) Task for all intermediate tasks</td>
</tr>
<tr>
<td>Wave Run Up Analysis</td>
<td>Coastal Analysis</td>
<td>Use Task Description field to identify type</td>
</tr>
</tbody>
</table>
Managing Non-Traditional Projects

- Creative use of traditional data development activities
- Using task description field in the MIP

Examples
- Open Pacific Coast
- Tsunami Current Mapping
Now You Have a Project! - Key Principles of Schedule Management

<table>
<thead>
<tr>
<th>Principles</th>
<th>Define Activities</th>
<th>Sequence Activities</th>
<th>Estimate Activity Resources</th>
<th>Estimate Activity Duration</th>
<th>Develop Schedule</th>
<th>Control Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify actions necessary to complete project</td>
<td>• Determine logical relationships between project activities</td>
<td>• Determine the types and amounts of resources required to complete the project activities</td>
<td>• Forecast time to complete project activities with the estimated resources</td>
<td>• Consider activities, resources, duration, dependencies and constraints</td>
<td>• Monitoring work and update schedule</td>
<td>• Identify and manage changes</td>
</tr>
</tbody>
</table>

RM Tools and Processes

| ✓ Mapping Activity Statement | ✓ Mapping Activity Statement | ✓ MIP Workflow | ✓ MIP Workflow | ✓ MIP Workflow | ✓ Update MIP Workflow |
| ✓ Scope Statement | ✓ Scope Statement | ✓ Scope Statement | ✓ Scope Statement | ✓ Change Control Plan |
| ✓ MIP Workflow | ✓ MIP Workflow | ✓ MIP Workflow | ✓ MIP Workflow | ✓ Re-baselining Guidance |
Now You Have a Project! – Schedule Tasks

Independent Tasks
* Base Map
* Topography

Dependent Tasks
* Field Survey
* Hydrology
* Hydraulics
* Floodplain Mapping
Now You Have a Project! – Schedule Tasks

Allow Time for Outside Factors
* Weather
* Community Input
* Third Party Data

Allow Time for Reviews
* Holiday/ Vacations
* Level of Review
* Review Resources
**Now You Have a Project! - Key Principles of Cost Management**

<table>
<thead>
<tr>
<th>Principles</th>
<th>Estimate Cost</th>
<th>Determine Budget</th>
<th>Control Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Estimate costs for project activities</td>
<td>• Total the cost estimates for project activities to establish a cost baseline</td>
<td>• Track Project costs relative to the cost baseline</td>
<td></td>
</tr>
<tr>
<td>✓ Mapping Activity Statement ✓ Scope Statement ✓ Bluebook</td>
<td>✓ Schedule ✓ Mapping Activity Statement ✓ Scope Statement ✓ Bluebook</td>
<td>✓ Update MIP to include actual costs ✓ Change Control Process</td>
<td></td>
</tr>
</tbody>
</table>
Includes all FEMA Funds
• Establish Baseline Budget (per task)
• Include Risk MAP non-regulatory products
• Does not include Community funds in Baseline

CTP Community Funding and Data
• Capture as Leverage
• MIP Champion, MIP Black Belt or RPML can assist
Staying on Track! – Managing for Success in the Mapping Information Platform

**Budgets and Schedules**

* Planned in advance & “Baselined” in the MIP
* Work is divided into discrete activities (PWBS)
* Each activity is assigned
  * Baseline Start Date
  * Baseline End Date
  * Baseline Budget

**Earned Value**

* As work is executed, “earned value” is calculated from baselined budgets associated with the activities that have been completed
Staying on Track! – Manage Project Workflow

Manage Data Development: Task Status

Update the cost and schedule information for each data development task. Click "Update Status" to recalculate the estimated CPI and SPI. When all tasks are 100% complete, click "Continue".

* indicates a required field.

Expand All  Collapse All

Project Information

- Perform Floodplain Mapping: 100% Complete, Estimated SPI: 1.0, Estimated CPI: 1.0
- Perform Floodplain Mapping: 100% Complete, Estimated SPI: 1.0, Estimated CPI: 1.0
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Staying on Track! – Manage Project Workflow

**Develop DFIRM Database:** 99% Complete, Estimated SPI: 0.99, Estimated CPI: 0.99

**Task Information**

<table>
<thead>
<tr>
<th>Task Description</th>
<th>DFIRM for all 13 Studies (no Willow or Rodger)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Negotiated Cost $:</td>
<td>22000</td>
</tr>
<tr>
<td>Baseline Task Start Date:</td>
<td>02/27/2013</td>
</tr>
<tr>
<td>Baseline Task End Date:</td>
<td>04/30/2013</td>
</tr>
</tbody>
</table>

**Production Status**

Update production status, cost and schedule information for this task.

<table>
<thead>
<tr>
<th>Task Area</th>
<th>Workflow Status</th>
<th>Area Complete</th>
<th><em>Projected Preliminary Date</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mancopa County-wide</td>
<td>Develop DFIRM Database: In Progress</td>
<td></td>
<td>08/30/2013</td>
</tr>
</tbody>
</table>

- QA Comments
- Metaman Validation Results
- DFIRM DB
- QA Results
- Workflow History
## Staying on Track! – Manage Project Workflow

<table>
<thead>
<tr>
<th>Maricopa County-wide</th>
<th>Develop DFIRM Database : In Progress</th>
<th>Complete</th>
<th>Preliminary Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>08/30/2013</td>
</tr>
</tbody>
</table>

### Cost and Schedule Information

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Cost to Date or Final Cost $</td>
<td>22000</td>
</tr>
<tr>
<td>As Of</td>
<td>05/24/2013</td>
</tr>
<tr>
<td>Percent Complete</td>
<td>99</td>
</tr>
<tr>
<td>Actual Start Date</td>
<td>02/27/2013</td>
</tr>
<tr>
<td>Actual End Date</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td>Project at internal review/ QR1 (5/24/13)</td>
</tr>
</tbody>
</table>
Manager Task Ownership

* Update cost / schedule information
* Update projected milestones
* Enter leverage information
* Project oversight

CTP Consultant MIP User ID

* Requested by CTP Agency
* Regional MIP Black Belt, or Champion submits
Manager Tips
* Update Monthly
* Set Calendar Reminders
* Reviewed By FEMA

Earned Value Changes Every Day
• Best dates 20\textsuperscript{th} - 28\textsuperscript{th} = Recent (Good) EVM
• Worst dates 1\textsuperscript{st} - 15\textsuperscript{th} = Old (Bad) EVM
EVM is Reviewed Every Month
- Reports are run on the first day of the month
- The data is from the previous day

Projects and Tasks Tolerance
- SV: +/- as close to $0 as possible
- SPI: in Tolerance 0.95 – 1.05
Keeping FEMA Happy! – EV Reporting and Analysis

MIP data is a key input into EV Reporting, which objectively and quantitatively measures cost and schedule deviations (in dollars). When a project begins to deviate from the baseline, an indicator draws management attention to the errant project or task.

**Schedule Variance (SV)**
* Difference between the value of the work earned to date (BCWP) and the plan (BCWS)
* \[ SV = BCWP - BCWS \] ($)

**Schedule Performance Index (SPI)**
* Schedule efficiency, how well you are meeting your baseline schedule
* \[ SPI = \frac{BCWP}{BCWS} \]
Keeping FEMA Happy! – EVM In the MIP

EVM is Also Reviewed Quarterly
* Joint Program Review
* All Regions Together
  * End of the 1st Month in Each Quarter

Top Five List
* Each Region - Highest SV
* Reason/ Response is Displayed
Keeping FEMA Happy! – EVM In the MIP

Region 0 - All Projects Q1 FY2010
- Active: 79
- On-hold: 4
- Completed/Closed: 91
Total Projects: 174

Region 0 - Active and On Hold Projects
- Q3-09: 95
- Q4-09: 82
- Q1-10: 91
- Active
- On-hold

Region 0 - Active and On Hold Projects - SPI
- Q3-09: 0.88
- Q4-09: 0.91
- Q1-10: 0.95
- Active SPI
- On-hold SPI
- Total SPI
EVM is Required and Key for Continued Funding.

Accurate Project Baselines Makes EVM Reporting Easier

EVM is Tracked in the MIP/ Reported From the MIP

EVM is Reviewed Monthly by FEMA Regions

EVM Schedule Variances are Reviewed Quarterly by FEMA Leadership
Project Management for Risk MAP CTP’s

SUMMARY

- Use FEMA Tools to Manage CTP Projects
- Understand FEMA’s Planning Process & Timeframe
- Coordinate with FEMA on Project Scope
- Keep Project Status Current
- Communicate Project Delays and Provide Justification
Project Management for Risk MAP CTP’s  

Questions

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