Practical Management of NEPA Projects

Constraints of NEPA Projects

- Results
- Budget
- Time
NEPA Project Life Cycle

- Initiation
- Develop Detailed Plan
- Execution of Plan
- Produce Deliverables
- Final Approval

NEPA Project Initiation

- Conceptualize Project
  - Establish Project Objectives
  - Establish Deliverables
  - Estimate Costs
  - Estimate Schedule
- Obtain Project Authorization
Develop Detailed Plan of Project

◆ Describe Objectives
◆ Describe Scope
◆ Define and Sequence Activities
◆ Estimate Duration and Resources
◆ Develop Schedule
◆ Develop Budget
◆ Develop Formal Quality Plan
◆ Develop Formal Communication Plan

Executing the Project

◆ Organize and Acquire Staff
◆ Periodically Summarize Results
◆ Identify Changes in Scope
◆ Identify Changes in Schedule
◆ Identify Changes in Budget
Produce Deliverables

- Create Prototypes
- Create Partial Deliverables
- Complete Integrated Deliverables
- Obtain Approval of Deliverables

Finishing the Project

- Scope Verification
- Formal Acceptance of Deliverable
- Formal Acceptance of Project
- Administrative Closure
- Plan for Follow-up
Project Management Activities

Define Scope
Define Tasks
Schedule
Budget
Team
Coordination
Monitoring
Action
Periodic Reports
Completion

Define Scope of NEPA Project

- Specific Project Objectives
- Secondary Project Objectives
- Project Outcome
- Clarify Assumptions
- Document Decisions
Define Tasks

- Breakdown Project into Phases
- Visualize All Tasks by Phase
- Breakdown Tasks into Subtasks
- Sequence Activities
  - Network
  - Critical Path Method (CPM)
  - Program Evaluation and Review Technique (PERT)

Tasks in a NEPA Project

A. Preliminary Activities
1. Identify basic issues:
   - impact of action
   - geographic alternatives
   - administrative/procedural alternatives
2. Identify authorizations needed for action:
   - sponsor's authority & budget is required (legislative, presidential & judicial)
   - agencies & jurisdictional authority (approval of specific parts of action; permits, easements, construction authority, etc.)
   - other federal & state agencies
   - federal & state laws & regulations
   - consultation with Native American tribes
   - approval of right-of-ways

B. Scope
3. Develop mailing/notification list:
   - federal agencies
   - state agencies
   - citizen & environmental groups
   - tribal authorities & Indian tribes
   - private parties with major stake in outcome

4. Prepare information package:
   - summary of issues & alternatives
   - brief history of project
   - description of project
   - description of procedures
   - description of scope of project

5. Notify interested parties:
   - publication of notice in Federal Register
   - mailing of notification to affected programs

6. Obtain and consider comments:
   - collect comments (public meetings optional, refer to item 1)
   - consider all comments

7. Develop NEPA preparation strategy:
   - develop a strategy
   - prepare detailed NEPA
   - consider state & local agencies
   - consider state, federal, & local governments
   - prepare a strategy to avoid judicial review (e.g., agreements, mitigation measures, etc.)
   - plan to manage public communications & to respond to public concerns
Tasks in a NEPA Project

C. Draft EIS (DEIS) Preparation
   8. Prepare EIS implementation plan:
      — work breakdown structure (WBS)
      — budget & schedule
      — responsibilities for preparation
      — page limits
   9. Prepare prelim. DEIS (Prepare checklist per WBS)
10. Comply with internal agency review procedures
11. Finalize DEIS
12. Publish notice and invite comments:
      — mailing list
      — availability in public places
      — optional scheduling of public meetings
13. Obtain comments
      — correspondence
      — public meetings (optional)
      — coordination meetings with government agencies
14. Respond to comments
      — make changes
      — refine EIS scope (new WBS elements)
      — negotiate & adopt mitigation measures
      — prepare written record of response to comments
D. Final EIS
15. Produce final EIS (Expand checklist per new WBS)
16. Comply with internal agency review procedures
17. Distribute final EIS & invite comments
18. Receive & consider comments on final EIS
E. Record of Decision (ROD)
19. Prepare draft ROD
20. Follow internal agency review procedures
21. Publish ROD in Federal Register


Develop Schedule

- Use Project Task Sequence
  - Dependent Tasks
  - Independent Tasks
- Plan Start Dates
- Estimate Duration of Each Task
- Meet with Team
- Modify Schedule to Achieve Completion Date
- Prepare Gantt Chart
Prepare Budget

- Prepare Budget by Phase and Task
- Preliminary Labor Estimate
- Materials/Travel
- Overhead
- Consult with Team
- Modify Budget
- Prepare Budget

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Budget Estimate for NEPA Project

<table>
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<tr>
<th>Phase</th>
<th>Task</th>
<th>Personnel</th>
<th>Rate</th>
<th>Hours</th>
<th>Labor Cost</th>
<th>Materials/Travel</th>
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Total

Fringe Benefits (35% of labor cost)

Indirect Costs (75% of Costs)

Project Total
Organizing Your Team

- Identify Project Needs by Phase and Task
- Identify Potential Problem Areas
- Request Team Members
- Involve Team in Planning
- Get Team’s Commitment
- Set Out Clear Responsibilities/Time/Budget

### Expertise Needed for NEPA Projects

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<tr>
<th>Natural resource</th>
<th>Subcomponent</th>
<th>Specialist</th>
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<tr>
<td>Air</td>
<td>Air quality</td>
<td>Air pollution analyst, air pollution control engineer, meteorologist</td>
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<td>Wind direction/speed</td>
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<td>Precipitation/humidity</td>
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<td>Temperature</td>
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<td>Noise</td>
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<tr>
<td>Land</td>
<td>Land capability</td>
<td>Agronomist, soils engineer, soils scientist, geologist, geotechnical engineer</td>
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<td>Soil resources/structure</td>
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<td>Mineral resources</td>
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<td>Tectonic activity</td>
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<td></td>
<td>Unique features</td>
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<tr>
<td>Water</td>
<td>Surface waters</td>
<td>Hydrologist, water pollution control engineer</td>
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<td>Groundwater regime</td>
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<td>Hydrologic balance</td>
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<td>Drainage network pattern</td>
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<td>Flooding</td>
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<td>Sedimentation</td>
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<td>Flora and fauna</td>
<td>Environmentally sensitive areas, wetlands, marshes, wildlife, grasslands, etc; Species inventory, productivity, biogeochemical and nutrient cycling</td>
<td>Ecologist, forester, wildlife biologist, botanist, zoologist, conservationist</td>
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<tr>
<td>Human</td>
<td>Social infrastructure/Institutional</td>
<td>Social anthropologist, sociologist, archaeologist, architect, town planner, geographer, demographer, urban planner, transportation planner, economist</td>
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<td></td>
<td>Cultural characteristics</td>
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<td>Physiological and psychological well-being</td>
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<td></td>
<td>Economic resources</td>
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Coordination

◆ Provides Critical Links - team, information
◆ List of Team Members - e-mail/fax/phone
◆ Inform Other Managers - before/during project
◆ Meet with Team Member
  – Review Schedule
  – Review Budget
◆ Resolve Conflicts - other priorities
◆ Relay Exactly What is Expected

Monitoring

◆ Develop Quality Plan
  – Define Standards of Performance
  – Schedule
◆ Review On-Going Work
◆ Review Budget
◆ Review Schedule
◆ Identify Conflict Between Team Members
◆ Solve Problems as They Arise
Periodic Reporting

- To Team
  - Key Phases of Project
- To Management
  - Regularly with Accurate Information
  - Include Bad News with Solutions
- To Client
  - Regularly
  - Warn of Bad News Before It Happens

Supporting Documentation

- All Team Members Need It
  - Sequence of Phases and Tasks
  - Schedule
- Narrative Instructions
- Change in Schedule/Budget
- Change in Scope