Practical Management of NEPA Projects
What is a Project?

- A temporary endeavor undertaken to create a unique product or service.

Characteristics of Projects
- Defined start and end point
- Specific goals and deadlines
- Identified desired result
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

Defining Scope
- Define Tasks
  - Schedule
  - Budget
- Team
  - Coordination
  - Monitoring
- Completion
- Action
- Periodic Reports
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
   — need for action
   — technical alternatives
   — geographic alternatives
   — administrative/procedural alternatives

2. Identify authorizations needed for action:
   — sponsor’s authority & budget to proceed: legislative, presidential & judicial
   — non-sponsor authority: budget; approval of specific parts of the action; permitting, licensing & special enabling action (as may be obtained by interagency land transfers, agreements, etc.)

B. Scoping

3. Develop mailing/notification list
   — federal agencies
   — state agencies
   — local authorities & Indian tribes
   — citizen & environmental groups
   — private parties with major stake in outcome

4. Prepare information package
   — describe proposed action & alternatives
   — describe potential environmental concerns
   — describe proposed scope of DEIS

5. Notify interested parties & invite comments:
   — publish notice of intent in Federal Register
   — mail notice and information package to selected government and private parties
   — make information package available to public at designated locations

6. Obtain and consider comments:
   — collect comments (public meetings optional, if so announced in item 5)
   — consider all comments

7. Develop EIS preparation strategy
   — incorporation by reference
   — tiering of NEPA documents
   — integration of other federal & state laws (i.e., concurrent compliance plan)
   — participation of other federal & state agencies
   — role of Indian tribes & local governments
   — preliminary assessment of motivations for judicial review
   — preliminary 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

6. 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
   — enlarge 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
## Budget Estimate for NEPA Project

<table>
<thead>
<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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**Fringe Benefits**  
(35% of labor cost)

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<tr>
<th>Fringe Benefits</th>
<th>Task</th>
<th>Personnel</th>
<th>Rate</th>
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<th>Materials/Travel</th>
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**Indirect Costs**  
(75% of Costs)

<table>
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<tr>
<th>Indirect Costs</th>
<th>Task</th>
<th>Personnel</th>
<th>Rate</th>
<th>Hours</th>
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**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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<thead>
<tr>
<th>Natural resource</th>
<th>Subcomponent</th>
<th>Specialist</th>
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<tbody>
<tr>
<td><strong>Air</strong></td>
<td>Air quality</td>
<td>Air quality/pollution analyst</td>
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<td></td>
<td>Wind direction/speed</td>
<td>Air pollution control engineer</td>
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<td></td>
<td>Precipitation/humidity</td>
<td>Meteorologist</td>
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<td></td>
<td>Temperature</td>
<td>Noise expert</td>
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<tr>
<td></td>
<td>Noise</td>
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<tr>
<td><strong>Land</strong></td>
<td>Land capability</td>
<td>Agronomist</td>
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<tr>
<td></td>
<td>Soil resources/structure</td>
<td>Soils engineer</td>
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<tr>
<td></td>
<td>Mineral resources</td>
<td>Soils scientist</td>
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<td></td>
<td>Tectonic activity</td>
<td>Civil engineer</td>
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<tr>
<td></td>
<td>Unique features</td>
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<tr>
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<td></td>
<td>Geotechnical engineer</td>
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<tr>
<td></td>
<td></td>
<td>Mineralogist</td>
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<td></td>
<td></td>
<td>Mining engineer</td>
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<td>Engineering geologist</td>
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<td>Groundwater regime</td>
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<td>Hydrologic balance</td>
<td>Water quality/pollution analyst</td>
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<td>Drainage/channel pattern</td>
<td>Marine biologist/engineer</td>
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<td></td>
<td>Flooding</td>
<td>Chemist</td>
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<td></td>
<td>Sedimentation</td>
<td>Civil/sanitary engineer</td>
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<td>Hydrogeologist</td>
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<td><strong>Flora and fauna</strong></td>
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<td>Ecologist</td>
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<td>Species inventory</td>
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<td>Productivity</td>
<td>Wildlife biologist</td>
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<tr>
<td></td>
<td>Biogeochemical/nutrient cycling</td>
<td>Botanist</td>
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<tr>
<td><strong>Human</strong></td>
<td>Social infrastructure/institutions</td>
<td>Ecologist</td>
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<td>Cultural characteristics</td>
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<td>Physiological and psychological well-being</td>
<td>Sociologist</td>
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<td>Economic resources</td>
<td>Archaeologist</td>
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<td>Transportation planner</td>
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<td>Economist</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
Project Management - Questions

- What is the purpose of the project?
- What will the outcome look like?
- What is my responsibility?
- What is my authority?
- What is my budget?
- What is the schedule?
Supporting Documentation

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