



Improving the NEPA Process through Project Management Best Practices

November 1, 2018

Marie Campbell

NAEP President



- President, Sapphos Environmental, Inc.
- 35 years experience with environmental compliance
- Served as Acting Chief, Environmental Resources Branch, U.S. Army Corps of Engineers
- Firm received 2012 Recipient California Governor's Environmental and Economic Leadership Award and California Air Resources Board Climate Action Leader Award
- MA, University of California, Los Angeles, Geography
- BA, University of California, Los Angeles, Ecosystems



What is NAEP?

- The multidisciplinary association for professionals dedicated to the advancement of the environmental professions
- A forum for state-of-the-art information on environmental planning, research and management
- A network of professional contacts and exchange of information among colleagues in industry, government, academia, and the private sector
- A resource for structured career development from student memberships to certification as an environmental professional
- A strong proponent of ethics and the highest standards of practice in the environmental professions



What does membership include?

- Subscription to the peer-reviewed, quarterly journal Environmental Practice
- The NAEP National e-news, an exchange of short topics of interest, news and information
- The NAEP National Desk, an informative bi-weekly publication
- Discounted registration fees for NAEP's Annual Conference
- Discounted registration fees to our Educational Webinar Series
- Opportunities to advance personally and professionally through leadership positions in NAEP working groups, committees, and the National Board of Directors
- Access to various reports completed by our Committee and Working Groups
- Access to a Career Center specifically targeted toward environmental professionals
- Avenues to network with professional contacts in industry, government, academia, and the private sector
- Members sign the Code of Ethics and Standards of Practice for Environmental Professionals
- Access to the NEPA Online Forum



Join NAEP!

- For additional membership details and to become a member, please visit our website, www.naep.org and fill out the Membership Application.

Questions?

- Contact Candace Bynder at membership@naep.org.



Today's Presenters

Moderator

Shannon Stewart, NEAP Board Member & Education Committee Chair
Los Angeles, CA

Speakers

- **Laura Thorne, B.S., PMP**, Performance Improvement Consultant & Environmental Career Coach
- **Kaitlin McCormick, M.B.A., CEP**, Senior Project Manager and Environmental Scientist



Moderator / Speaker



Shannon Stewart

NEAP Board Member & Education Committee Chair
Los Angeles, CA

- 20+ years of experience in NEPA and land use planning
- Board Member NAEP 2016-2019
- NAEP Education Committee Chair
- Senior Advisor, Regulatory Affairs, Southern California Edison
- Owner & Principal of Stewart Consulting, LLC
- Former National NEPA Program Lead Bureau of Land Management
- Professional NEPA Certification, Duke University Environmental Leadership Program and Council on Environmental Quality
- M.S., Urban and Regional Planning, Florida State University; B.A., Environmental Science and Public Policy, University of Miami

Contact:

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The Need for Project Management

- The ultimate goal of the NEPA process is to foster excellent action that protects, restores, and enhances our environment.
- As with any process, NEPA requires someone to balance the various moving parts, though NEPA project managers may not come in to the position with the expertise, experience or tools to manage complex projects.



The Need for Project Management

- Benefits of successful project management include:
 - Minimize cost and schedule overruns
 - Successful implementation and sequencing of agency actions
 - Foster stakeholder/public relationships
 - Informed decisions that protect the environment and meet agency purpose and need



The Need for Project Management

- Environmental compliance is frequently cited as a reason for overall project delays, making it more important to engage in effective project management.
- Engineering design and construction often have well-defined milestones, while an environmental analysis process can be continuous and dynamic.
- Inefficiencies and delays are not inherent in the NEPA process; there are effective project management methods and tools that should be – and are often – utilized by NEPA project managers.



Speaker



Contact: laurajeanthorne@gmail.com

Laura Thorne, B.S., PMP

Performance Improvement Consultant & Environmental Career Coach
Syracuse, NY

- 26+ years professional and management experience
- Former lead of Hillsborough County Artificial Reef Program
- Former grant manager of \$2M in environmental projects large wetland creations to small community led projects
- Past-president Tampa Bay Association of Environmental Professionals
- NAEP committees: permanent conference committee, education committee, branding committee
- Owner and performance improvement consultant at Laura Thorne Consulting
- Owner and coach at The Environmental Career Coach
- B.S. Biology, University of South Florida, PMP certified 2016

Speaker



Contact:

kmccormick@trcsolutions.com

Kaitlin McCormick, M.B.A., CEP

Senior Project Manager and Environmental Scientist
Williamsville, NY

- 13 years of experience in NEPA and environmental impact evaluation
- Co-Founder of the New York State Association of Environmental Professionals
- Board Member for the Society of American Military Engineers, Buffalo Post
- Senior Project Manager for TRC
- M.B.A., Executive Program, University At Buffalo; M.S. Environmental Science and Policy, Johns Hopkins University; B.S. Environmental Science, Allegheny College

Who is this training for?

Emerging and experienced professionals who work with the NEPA process and would like to learn more about using project management best practices to improve project outcomes.



Agenda

- Review Project Management Basics
- Review of the Basics of the NEPA Process
- NEPA, examples through each Project Management Step
- Improving the NEPA Process through Critical Areas of Project Management
 - Managing Roles and Responsibilities
 - Managing Schedule
 - Managing Budget
 - Managing Risk
 - Navigating Change
 - Need for Continuous Improvement
- Q&A Session



Objectives, by the end of this training you will...

- Understand the principles of project management and where it aligns with the NEPA process
- Identify ways to help keep your NEPA project on schedule and on budget using project management concepts and tools
- Have some ideas to take back and improve key areas of your NEPA project implementation (see the handout)



Using the handout during this training

- 1) NEPA Performance Evaluation
- 2) Capture ideas throughout the training
- 3) One big takeaway idea



Review: Principles of Project Management



What is a Project?

According to the Project Management Institute (PMI) -

*“It’s a **temporary** endeavor undertaken to create a unique product, service, or result.”*

That means:

- It has a defined start and end point with defined scope and resources
- It is unique and not part of continuous or ongoing operations



What is Project Management?

- Per the PMI, it is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements.
- Mindtools.com: Project management is the process of organizing the way that changes are implemented efficiently within an organization.



Project Management Basics (as per PMI)

5 Process Groups (*not mutually exclusive*)

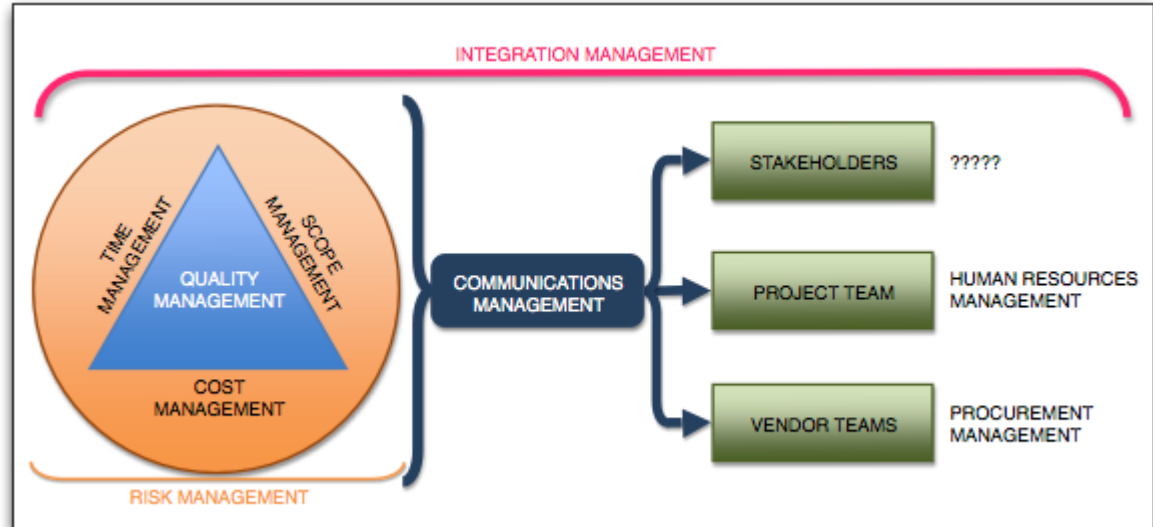
- **Initiating** – The process of outlining your project and obtaining proper approval to begin.
- **Planning** – The process of developing your project management plan to reach your project goals.
- **Executing** – The process of completing work as defined in your project management plan.
- **Monitoring and Controlling** – The process of reviewing and tracking the progress of predetermined work while accounting for unplanned changes.
- **Closing** – The process of completing the project work and receiving approval from the stakeholder.



Project Management Basics (as per PMI)

Project management knowledge draws on ten areas:

- Integration
- Scope
- Time
- Cost
- Quality
- Procurement
- Human resources
- Communications
- Risk management
- Stakeholder management



Crane, Geoff. *The Papercut Project Manager*,
<http://edge.papercutpm.com/ten-knowledge-areas-went-out-to-dine-one-got-ignored-and-then-there-were-nine/>. Web, 10/28/2018



| Knowledge Areas | Process Groups | | | | |
|------------------------------------|-------------------------|--|---|---|------------------------|
| | Initiating | Planning | Executing | Monitoring & Controlling | Closing |
| Project Integration Management | Develop Project Charter | Develop Project Management Plan | Direct and Manage Project Work | Monitor and Control Project Work Perform Integrated Change Control | Close Project or Phase |
| Project Scope Management | | Plan Scope Management Collect Requirements Define Scope Create WBS | | Validate Scope Control Scope | |
| Project Time Management | | Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule | | Control Schedule | |
| Project Cost Management | | Plan Cost Management Estimate Costs Determine Budget | | Control Costs | |
| Project Quality Management | | Plan Quality Management | Perform Quality Assurance | Control Quality | |
| Project Human Resources Management | | Plan Human Resources Management | Acquire Project Team Develop Project Team Manage Project Team | | |
| Project Communications Management | | Plan Communications Management | Manage Communications | Control Communications | |
| Project Risk Management | | Plan Risk Management Identify Risks Perform Qualitative Risk Analysis Perform Quantitative Risk Analysis Plan Risk Responses | | Control Risks | |
| Project Procurement Management | | Plan Procurement Management | Conduct Procurements | Control Procurements | Close Procurements |
| Project Stakeholder Management | Identify Stakeholders | Plan Stakeholder Management | Manage Stakeholder Engagement | Control Stakeholder Engagement | |



Project Manager Roles

- A project manager must be a “Jack of all trades.”
- Project managers keep projects on schedule and within budget, while taking on an acceptable level of risk, in order to produce high quality, scientifically accurate, and legally defensible documentation and recommendations for decision makers.



NEPA Process Review



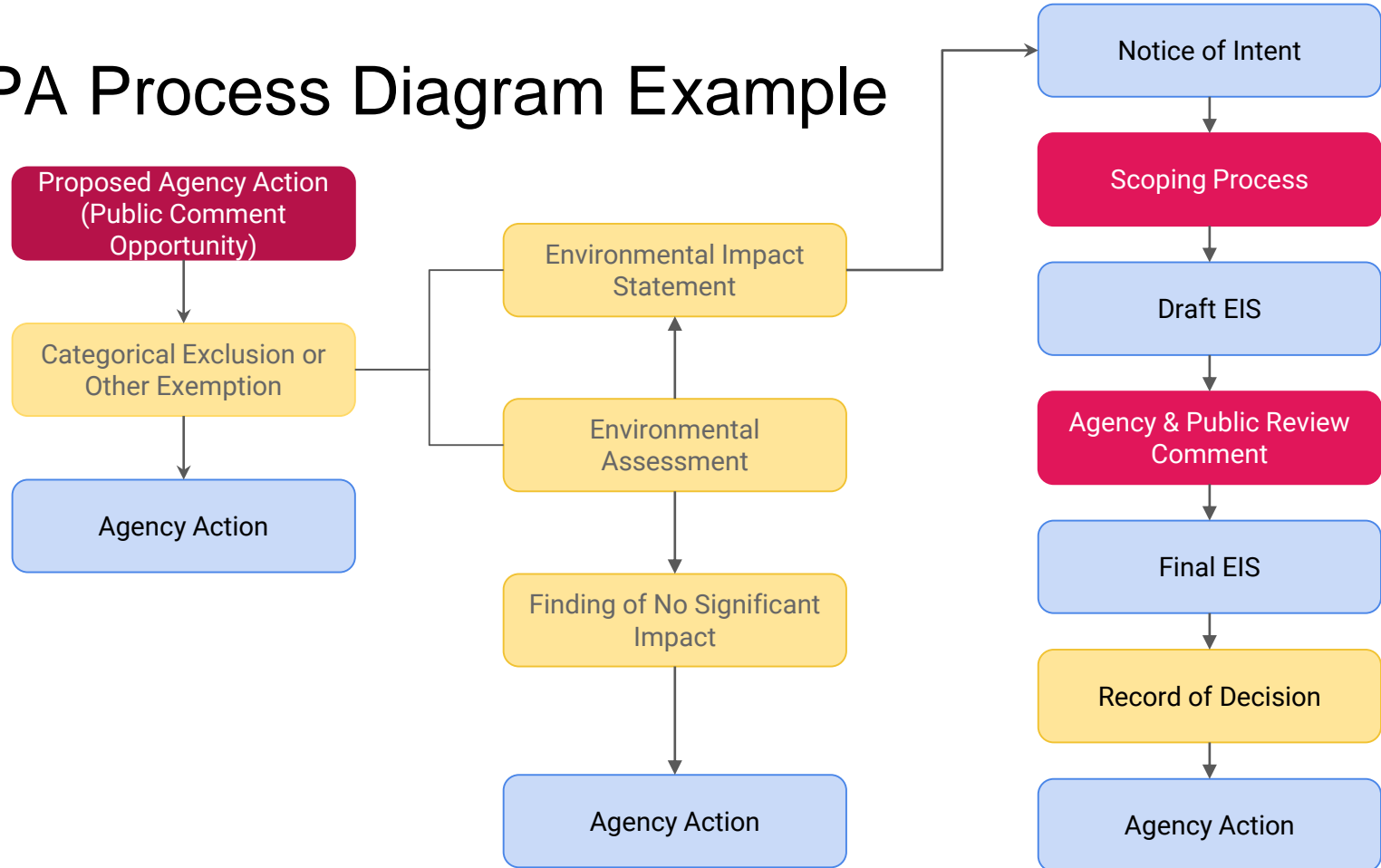
National Environmental Policy Act (NEPA)

From the Council on Environmental Quality: “The ultimate goal of the NEPA process is to foster excellent action that protects, restores, and enhances our environment. This is achieved through the utilization of environmental assessments (EAs) and environmental impact statements (EISs), which provide public officials with relevant information and allow a "hard look" at the potential environmental consequences of each proposed project.”

...as Project Managers we have to do that while meeting the project schedule and staying on budget.



NEPA Process Diagram Example



Just because a project has been managed, doesn't mean it has been managed well.



How does Project Management help with NEPA Projects?

Benefits of successful project management include:

- Provides structure and organization
- Minimizes cost and schedule overruns
- Helps to successfully implement and sequence agency actions
- Helps ensure fostering of stakeholder/public relationships
- Provides structure to facilitate change management
- Prevents scope creep

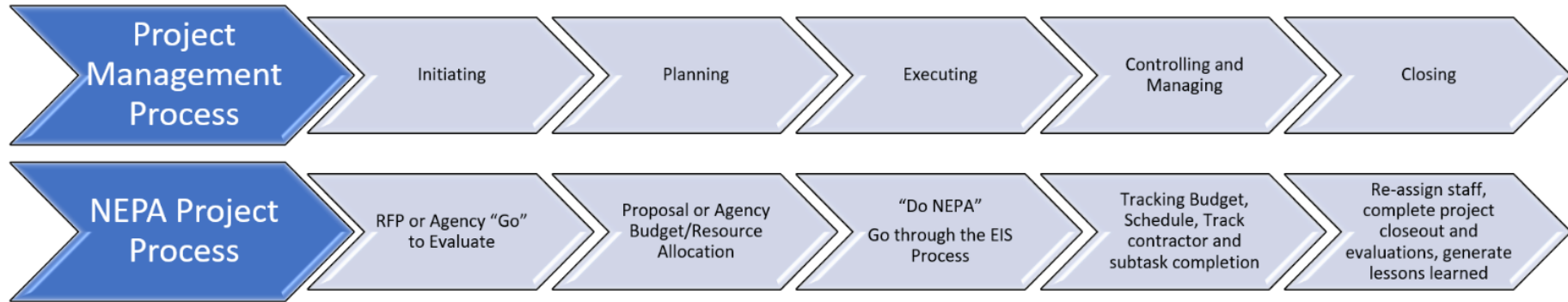


Aligning Project Management Lifecycle and the NEPA Process

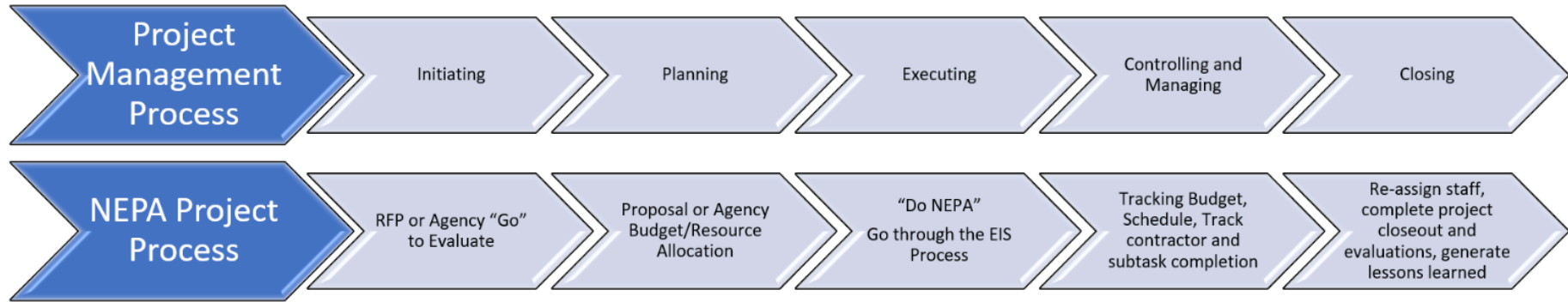
- It is important to remember that your project management lifecycle does not go in parallel with the NEPA process.
- Executing the NEPA process is only one of the management processes.
- Issuance of a Notice of Intent (NOI) under NEPA is not the same as initiating a Project.
- Planning and execution of the overall project for the NEPA process begins before the NOI is issued - that is part of execution.



NEPA Project vs Project Management Process



NEPA Project vs Project Management Process



...and then add in scope changes, revised schedules, updated budgets, requests for additional study, public comments...



Project Initiation – starting out right!

Project development begins before a Notice of Intent (NOI) is issued. At project initiation, a project team should start developing:

- 1) An agreed upon vision for the project:
 - Well-defined Purpose and Need, Proposed Action, Alternatives.
 - General idea of resource areas to be evaluated, existing data, study needs.
 - Public involvement opportunities (early and often).
- 2) A rough project schedule:



Project Initiation

- 3) An evolving prototype of the document.
 - May use Agency style guide, template language, set page limits

- 4) A comprehensive list of NEPA project tasks & start to assign project team roles. Include:
 - Project Manager(s)
 - Interdisciplinary Team (IDT)/Product Team (IPT) members
 - Contractor support tasks
 - Stakeholders/Cooperating Agencies



Your Role as the Project Manager

- Need to recognize what your “Project” is – will vary based on your organization or hierarchy
 - Lead Agency vs. Cooperating Agency
 - Contractor or Subcontractor
- Need to recognize that your “project” is not necessarily the same as what someone else’s “project” is, even if you are all supporting a great goal together
- Responsible for:
 - Monitoring and tracking progress
 - Holding team members accountable
 - Maintaining relationships with stakeholders and project partners
 - Communicating expectations, changes, needs - as well as responding to outside concerns or forces



Example - Definitions of “Project” by Team Members

- Lead agency - serving as an umbrella organization with a “project” that other smaller projects fit into
- Specialty biology firm - the “project” is to do surveys and execute a report
- USFWS - the “project” is to review both the overall project and individual study plans and deliverables provided within the Section 7 process
- Cultural resource contractor - the “project” is to do the study and execute a report
- Prime consultant - the “project” is to prepare the EIS integrating the information from other players to be reviewed
- Engineering firm - the “project” is to design the facility or infrastructure to be created



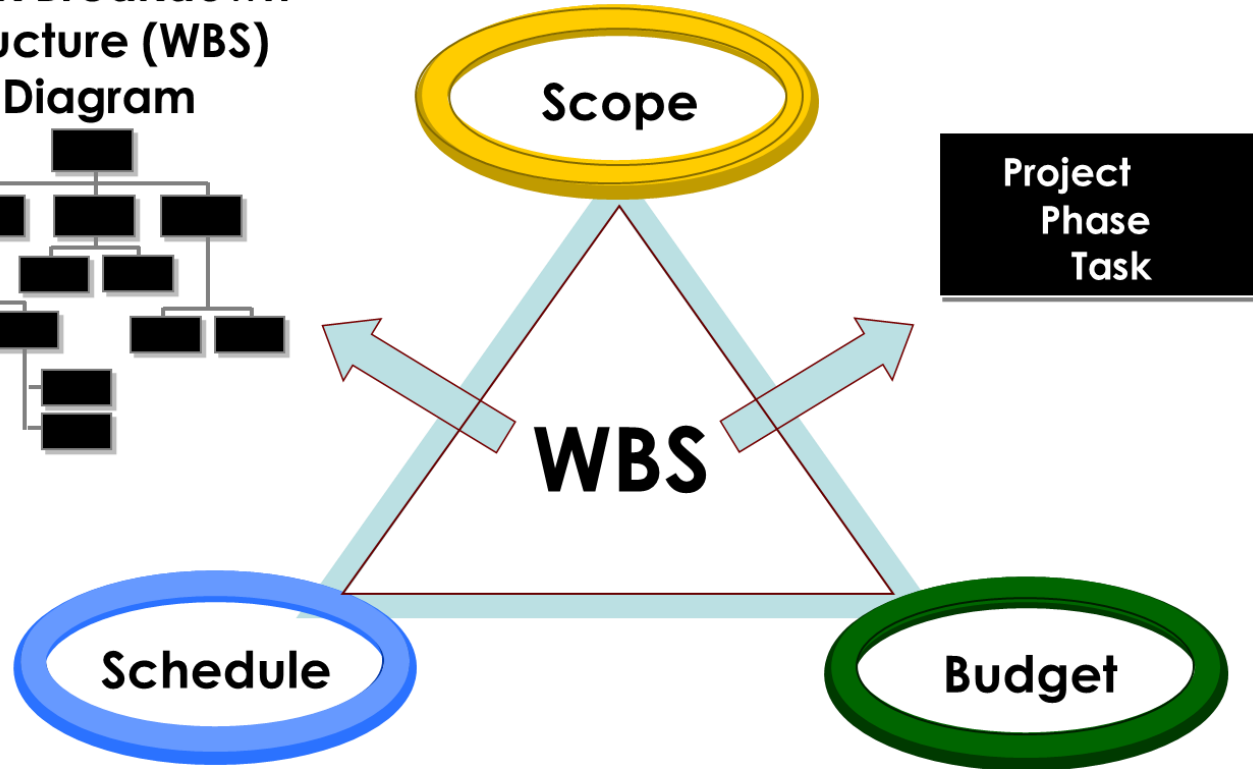
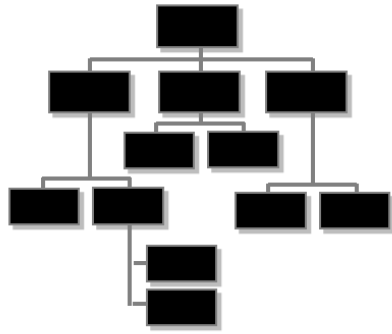
Project Planning

- A Project Plan, which should be updated throughout the life of a project, assists in executing and managing a project via agreed-to documentation of:
 - Decisions & Assumptions
 - Schedule
 - Team Roles
 - Communication & Public Involvement Plan
- Assumptions that provide a basis of the plan should be laid out (e.g., number of public meetings, studies to be included)



Work Breakdown Structure

Work Breakdown
Structure (WBS)
Diagram



Work Breakdown Structure: Formats

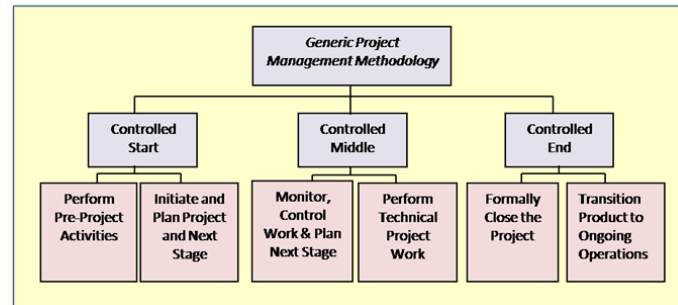
Outline:

1. Widget Management System
 - 1.1 Initiation
 - 1.1.1 Evaluation & Recommendations
 - 1.1.2 Develop Project Charter
 - 1.1.3 Deliverable: Submit Project Charter
 - 1.1.4 Project Sponsor Reviews Project Charter
 - 1.1.5 Project Charter Signed/Approved
 - 1.2 Planning
 - 1.2.1 Create Preliminary Scope Statement
 - 1.2.2 Determine Project Team
 - 1.2.3 Project Team Kickoff Meeting
 - 1.2.4 Develop Project Plan
 - 1.2.5 Submit Project Plan
 - 1.2.6 Milestone: Project Plan Approval
 - 1.3 Execution
 - 1.3.1 Project Kickoff Meeting
 - 1.3.2 Verify & Validate User Requirements
 - 1.3.3 Design System
 - 1.3.4 Procure Hardware/Software
 - 1.3.5 Install Development System
 - 1.3.6 Testing Phase
 - 1.3.7 Install Live System
 - 1.3.8 User Training
 - 1.3.9 Go Live
 - 1.4 Control
 - 1.4.1 Project Management
 - 1.4.2 Project Status Meetings
 - 1.4.3 Risk Management
 - 1.4.4 Update Project Management Plan
 - 1.5 Closeout
 - 1.5.1 Audit Procurement
 - 1.5.2 Document Lessons Learned
 - 1.5.3 Update Files/Records
 - 1.5.4 Gain Formal Acceptance
 - 1.5.5 Archive Files/Documents

Table:

| Phase No. | Task No. | WBS |
|-----------|----------|--------------------------------------|
| 001 | | 1.0 Conceptual Engineering |
| | 110000 | 1.1 Obtain Client Input |
| | 111000 | 1.1.1 Client Survey |
| | 112000 | 1.1.2 Client Meeting No. 1 |
| | 113000 | 1.1.3 Client Tech Memo |
| | 114000 | 1.1.4 Client Meeting No. 2 |
| | 120000 | 1.2 Develop Alternatives |
| | 121000 | 1.2.1 XXXXXXXX |
| | 122000 | 1.2.2 XXXXXXXX |
| | 123000 | 1.2.3 XXXXXXXX |
| | 124000 | 1.2.4 XXXXXXXX |
| | 125000 | 1.2.5 XXXXXXXX |
| | 130000 | 1.3 Screen Alternatives |
| | 131000 | 1.3.1 YYYYYYYY |
| | 132000 | 1.3.2 YYYYYYYY |
| | 133000 | 1.3.3 YYYYYYYY |
| | 140000 | 1.4 Recommend Conceptual Alternative |
| | 141000 | 1.4.1 ZZZZZZZZ |
| | 150000 | 1.5 Develop Conceptual Alternative |
| | 160000 | 1.6 Approve Conceptual Alternative |
| 002 | | 2.0 Preliminary Engineering |
| 003 | | 3.0 Final Engineering |
| 004 | | 4.0 Bid |
| 005 | | 5.0 Construction |
| 006 | | 6.0 Startup |
| 006 | | 7.0 Project Close-Out |

Diagram:



Work Breakdown Structure: Steps

- List Major Tasks.
- Break Major Tasks into Subtasks.
- Break Subtasks into Sub-subtasks (component tasks).
- Repeat until tasks are small enough for one person or small group of people to complete.
- May want to define components (may be more effective if using a table format; will help in developing schedule).
- Estimate timeframes for each component task and responsibilities for each.



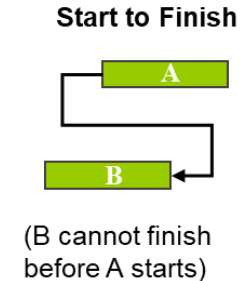
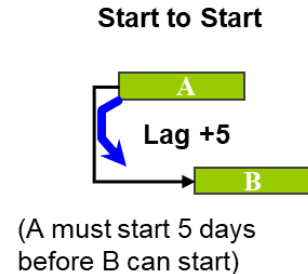
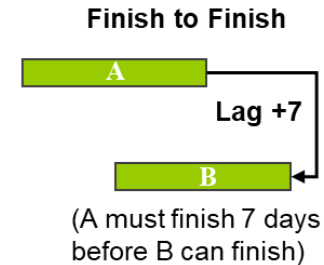
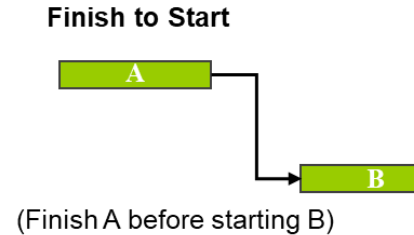
Work Breakdown Structure: Tips

- PMs must understand the NEPA process
- Must include both analysis and documentation tasks.
- Not all tasks need to be subdivided to the same level.
- Don't include more detail than will be tracked.
- Consult team to ensure accurate tasking & timeframes.
- An agency work breakdown structure might include less detail than a contractor might use for project bidding or management.



Schedule Management

- Use Work Breakdown Structure tasks to further develop a schedule by providing the following for each task/subtask/sub-subtask:
 - Activity Definition
 - Activity Duration
 - Activity Sequencing & Logic
 - Assign Roles & Responsibilities



Schedule Management: Formats

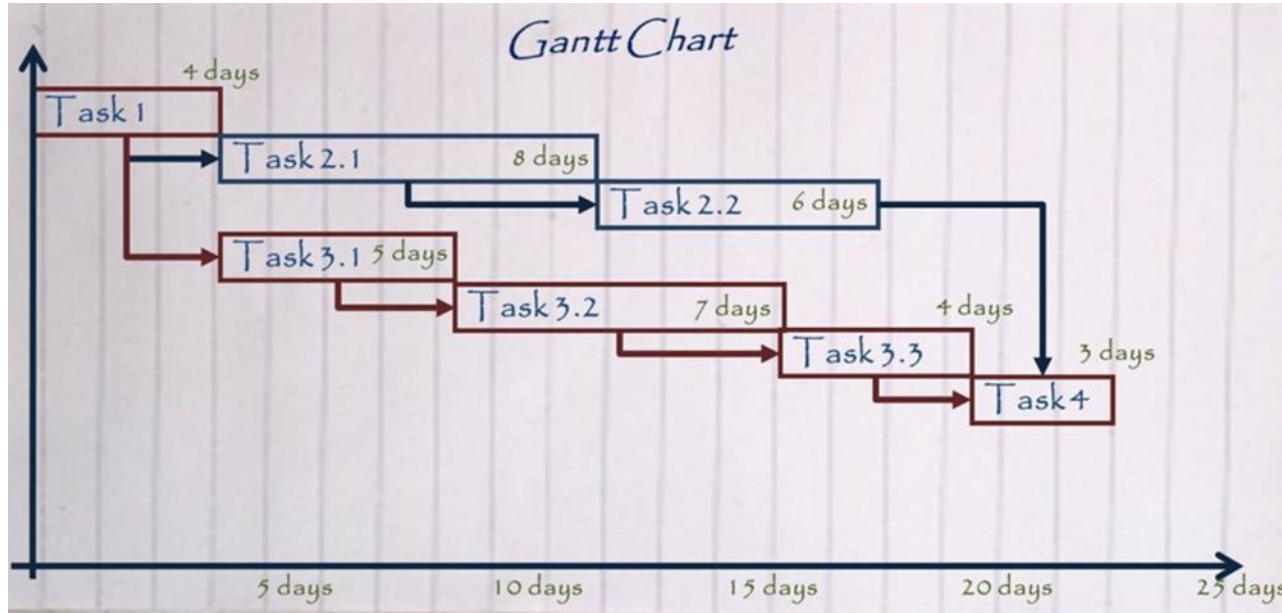
- Milestone Table – Most basic format. Lists activity and start and end date for each activity. Could also show responsible party for each activity.

| Milestone | Due Date | Who's Responsible | Details |
|--|-------------------|-------------------|---|
| Reconfigure social media accounts | Completed | Terry | |
| Investigate Inventory Turns | Completed | Garrett & Leslie | |
| Meet with Caroline to review Market Strategy | Completed | Garrett and Terry | |
| Top 10 customer list | November 13, 2014 | Terry | |
| Social media program | January 14, 2015 | Terry | Let's make sure we're all on the same page with the new year. Social media priorities, content, emphasis, specific plans. |
| Monthly review | February 19, 2015 | Garrett | |
| Spring promotion plans | March 18, 2015 | Terry | Bicycle season coming again. Review general marketing, specific sales and event schedules. |
| Host bike repair workshop | May 02, 2015 | Terry | |



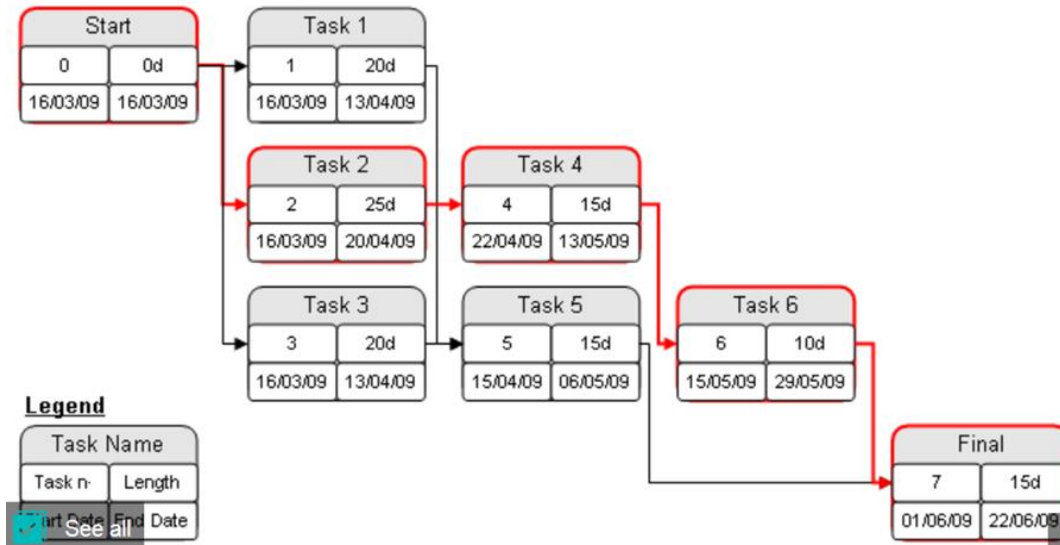
Schedule Management: Formats

- Gantt Chart – A basic "bar chart" project schedule, but in its most general form does not show interdependencies between activities



Schedule Management: Formats

- Critical Path Method (CPM) – A scheduling technique that identifies those activities that must be completed on time to maintain the defined project end date (i.e., those activities "critical" to the project's completion).



Schedule Management: Tips

- Get clarity and agreement on scope and schedule elements – internally and with external stakeholders – at the beginning of the project and ensure they support the project objectives.
- Consider urgency of project and competing priorities when developing a schedule and allocating resources (every project does not need to be fast-tracked).
- Use a Work Breakdown Structure to detail all project steps/sub-steps before adding dates and timelines.
- Include schedule efficiencies, including parallel processes, by using correct scheduling logic.



Budget Management: Tips

- Continually track/forecast budget and resource use: Prevents budget from getting too far off track. It is easier to change course to correct smaller overruns.
- Keep larger team informed of budget status (% executed vs. % spent): Can help them have a sense of ownership over project and their contribution to the bottom line, which may mean fewer unnecessary charges.
- Manage project scope: Scope creep causes budgetary overruns. While Project Managers should be flexible, tracking and communication of changes and cost/time implications may limit scope changes.



Staffing Projects for Success

- Section 102(2)(A) of NEPA directs agencies to “utilize a systematic, **interdisciplinary approach** which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man’s environment;”
 - **Interdisciplinary** = prepared and reviewed by specialists representing each of the resource areas potentially affected by a proposed action; specialists interface and work together on the same issues. Team members should not work in silos.



Staffing Projects for Success

- Considering an **Interdisciplinary Team** for complex projects:
 - Bring together all key stakeholders in an interdisciplinary team environment to address the most important decision points throughout the project lifecycle.
- Steps to developing an interdisciplinary team:
 1. Define the need
 2. Select leadership and membership
 3. Map team and stakeholder involvement (use WBS and/or RACI)
 4. Develop or review internal processes (e.g. charter, SOPs)
 5. Understand and allocate for resource requirements



Resource & Team Management

- Ensure available staff have the training they need to work effectively in a team environment:
- Invest in Coaching and Job Shadowing to train staff to fill key roles and provide coverage, where needed.
- Develop and implement customized training plans for NEPA team members, who often come to the profession from a wide range of backgrounds.
- Align teams by project type or customer focus to cultivate expertise.
- Ensure staff with the required skill sets can be located and utilized throughout the organization.



Resource & Team Management

- May want to develop a **RACI** chart to map team/stakeholder roles & responsibilities (RACI = Responsible, Accountable, Consulted, and Informed):
 - Responsible is “the doer” who actually completes the task (implementation). Responsibility can be shared.
 - Accountable is the person/organization ultimately answerable for the activity or decision (“yes” or “no” authority and veto power). Only one A can be assigned to an action.
 - Consult role is individual(s) to be consulted prior to a final decision or action. Involves two-way communications. Input from the person or organization is required.
 - Inform individuals when a decision or action is taken. Typically one-way communication.



RACI Chart

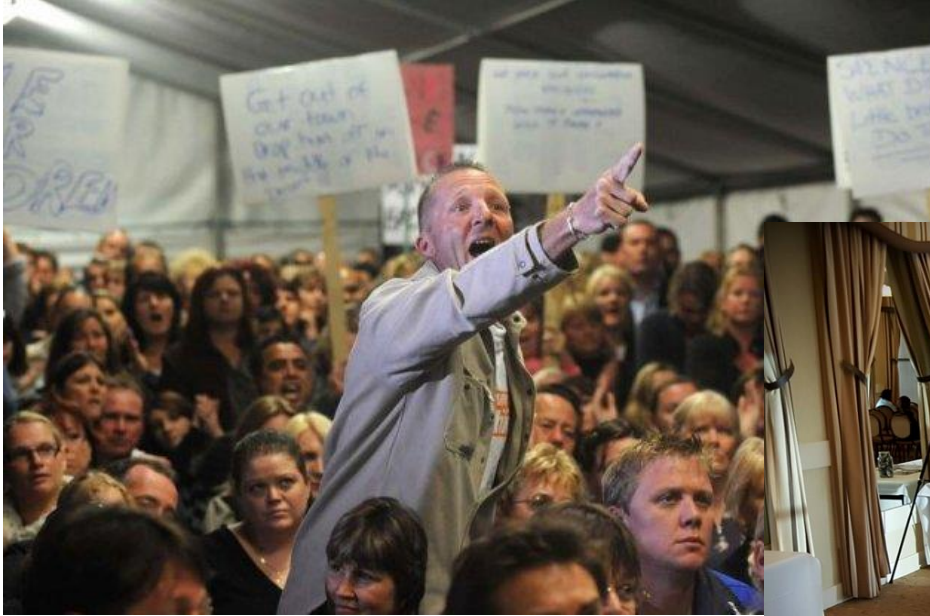
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Key Challenges for NEPA Project Managers

- Scope Creep - additional alternatives or alternate site locations
- Change in Assumptions - more stakeholder/public input than expected
- Change in Schedule - delays at the agency or project proponent level due to design or other challenges
- Budget overruns or re-allocations - often based on changing assumptions
- Project Team Changes - interdisciplinary team with multiple “project managers”
- Internal Team Changes - new hires, retirements, job transfers, temporary duty assignments, etc
- Other random acts of nature - project site or team affected by natural disaster or changing site assumptions



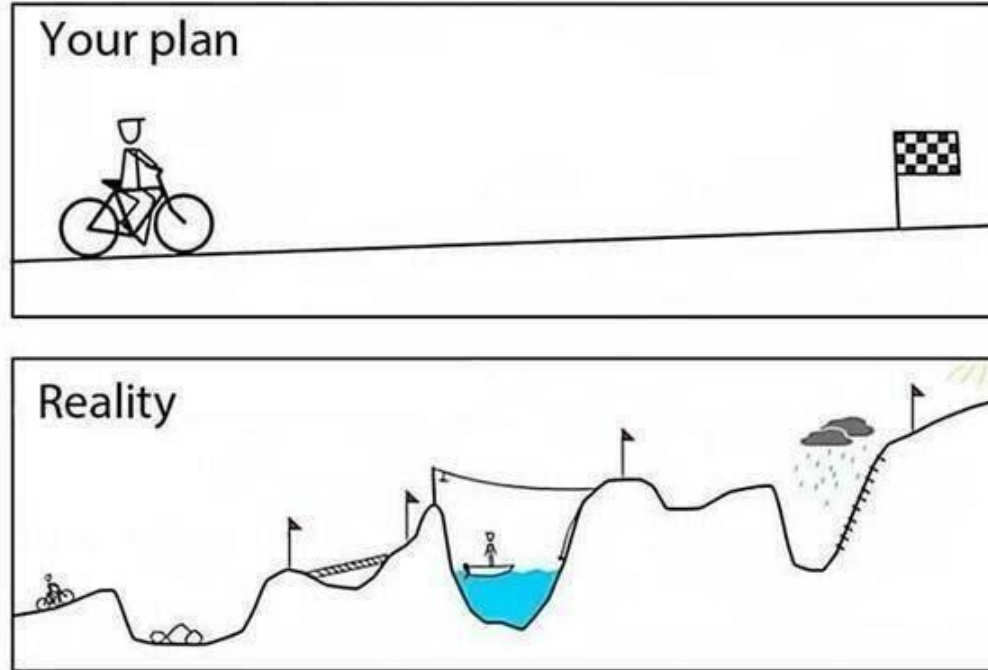
Example 1: Uncertainty - Public Scoping



Source Left: Network Dispatches; source below: National Park Service



Example 2: Uncertainty - Schedule



Source: <http://web.colby.edu/cogblog/files/2017/04/planning-fail.jpg>



Benefits of Scheduling Tools

- Identify critical path items – what has the potential to derail the overall schedule
- Identify proper sequencing of tasks to minimize delays
- Reveal opportunities for parallel tasks to expedite the schedule
- Opportunities to integrate resource scheduling
 - Determine if additional team members or other resources are needed
 - Identify bottlenecks for resources

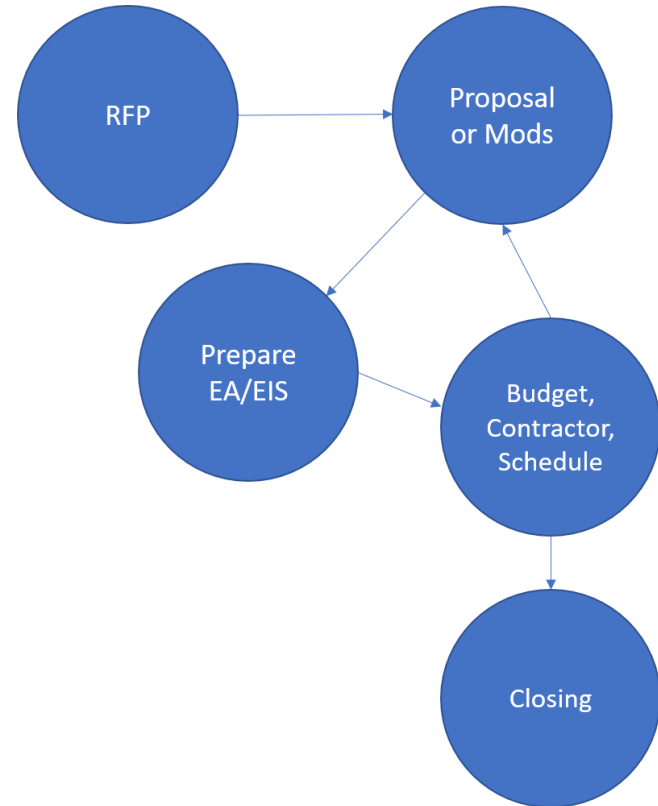
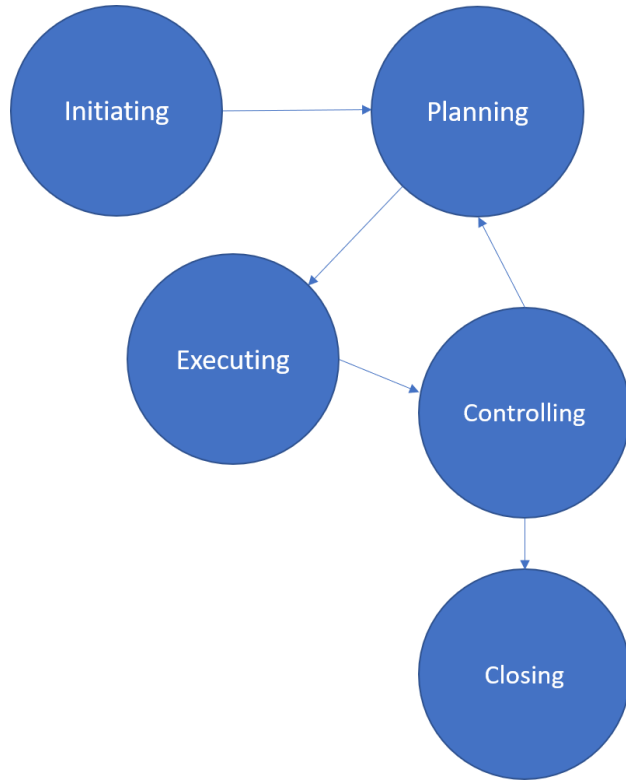


NEPA Project Management Uncertainty

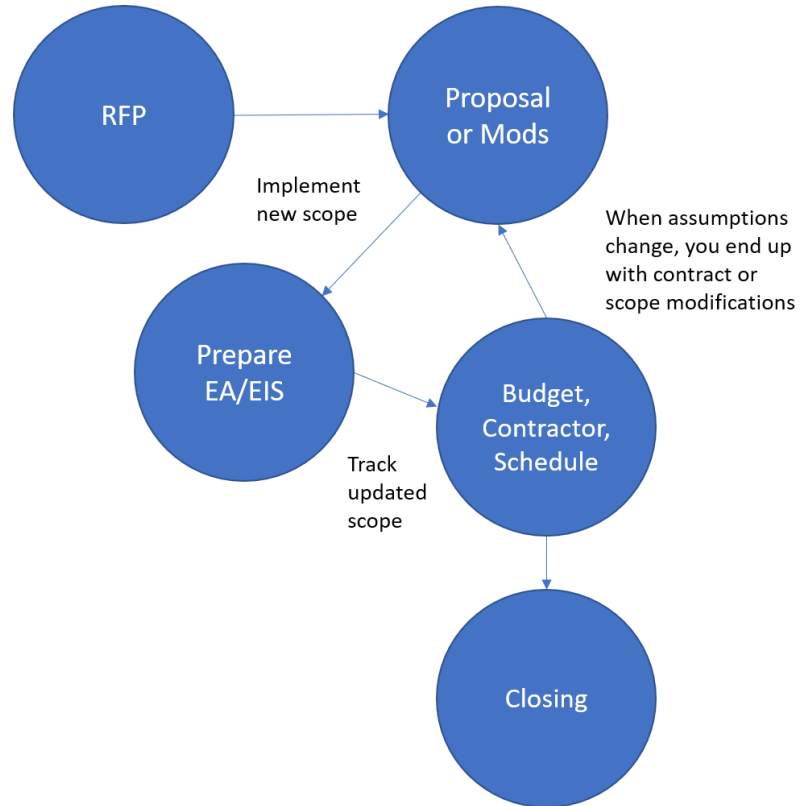
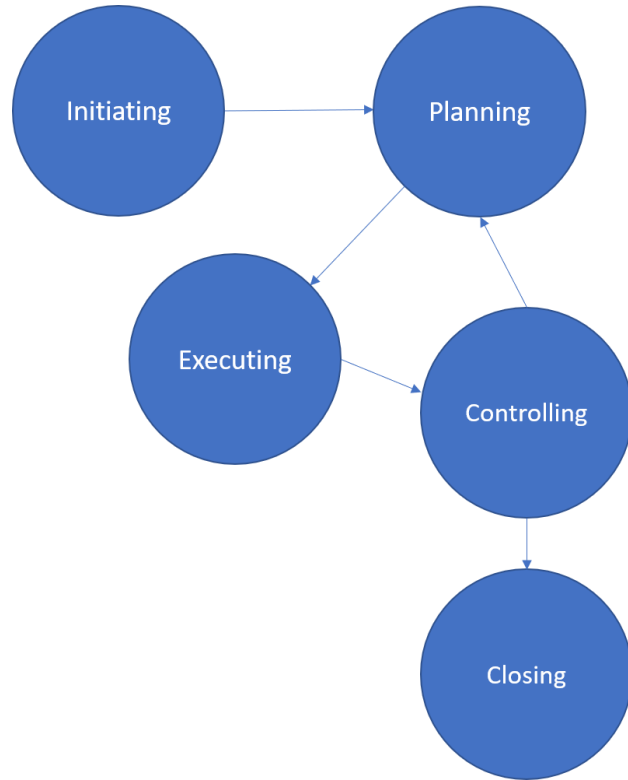
- Building a solid Project Management strategy starts before the Project starts when developing a proposal or internal plan for the work
- At some point:
 - Funding is allocated
 - Staff resources are assigned
 - Base assumptions are made about the scope and extent of the project
- In the development of an approach there are many unknown factors
- Critical to document:
 - Basis and rationale for assumptions
 - Key points for uncertainty that would affect the assumptions
 - Ways to manage risk and uncertainty



How the Process Looks



How the Process Looks



How to Plan - and Manage - for Project Success

- Initial staffing, scheduling, budget need to consider the project holistically
 - From scoping to final decision documents
- Then - stick with the plan...
- ...except when you know the plan:
 - No longer matches the initial assumptions
 - No longer matches the project's evolving scope or purpose
 - No longer matches the agency or client's needs
- Then it is time to take a step back and revisit your initial plan before moving forward wasting valuable project resources

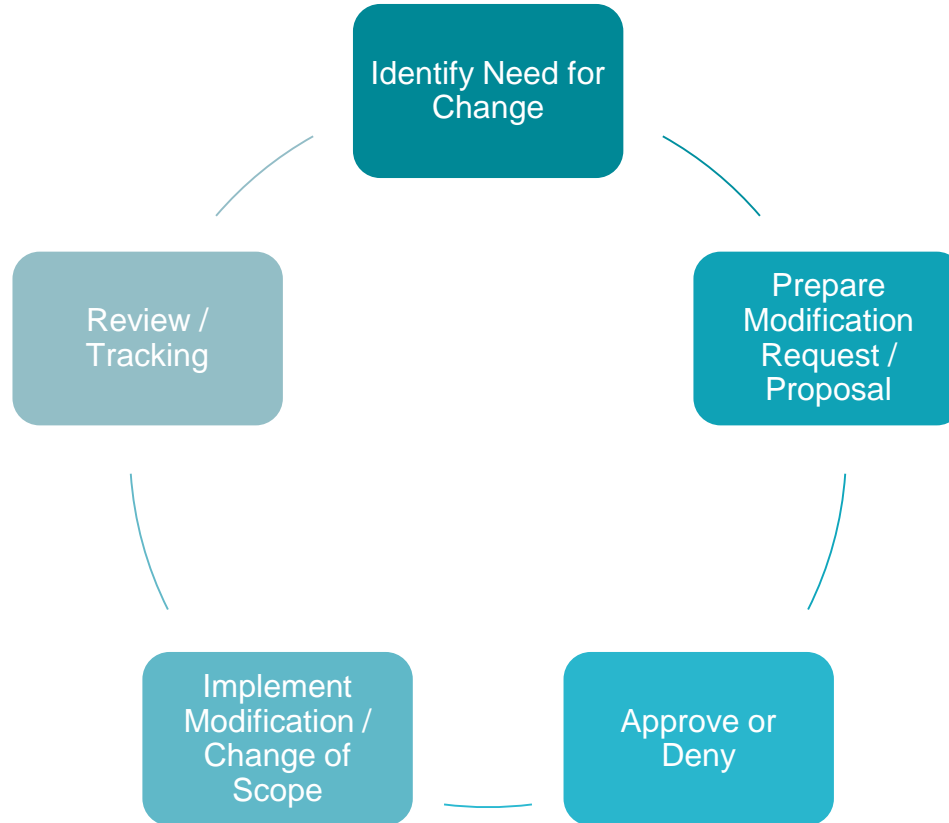


Examples - Project Scope Change

- These happen on every project
 - An additional study
 - An additional alternative
 - A change to the project layout or footprint
 - Public feedback or comments
 - Project goes “viral”
- At the planning stage - need to decide:
 - How much contingency and uncertainty you can accept without a new plan
 - What level of change requires a new plan and cycling through the process again is it driven by dollar value? Labor time? Or other factors?



Example - Change Management



Executing

- For NEPA Projects it is important to recognize that large interdisciplinary teams made of multiple entities are each operating their own “project”
- Lead Agency - the overarching owner of the Project and their “project management” will often include many consultants and potentially some other agencies who they may oversee or have little control over
 - The lead agency may or may not be the project proponent -- in case where a regulatory approval is required, the lead agency may be completing NEPA in response to an application from a private entity
- Project Proponent - trying to complete an action; may or may not be responsible for NEPA



Monitoring and Controlling

- Monitoring and controlling is all about managing risk
- Techniques to manage risk:
 - Scheduling
 - Budget tracking
 - Communication
 - Clear definition of tasks and roles
 - Picking the right team



Source: Dave Duke, [Medium.com/HighAlpha.com](https://medium.com/HighAlpha.com)



Communication Management: Internal

- Manage Team / Leadership communication via frequent, standardized check-ins:
- Brief leadership on project status, risks, and key points for decision making.
 - Must remain plugged in and regularly report up and out to all levels.
 - Must have buy-in and support in all aspects of the project.



Communication Management: Internal

- Manage Meetings:
 - Hold a project Kickoff Meeting and regular project meetings
 - Know meeting purpose and desired outcomes
 - Develop and stick to an agenda
 - Facilitate and document discussions *and* decisions
- Manage Conflict:
 - Communicate effectively
 - Minimize the 'blame game'
 - Give team members some control over process/product
 - Foster a problem-solving culture



Communication Management: External

- Public Participation:
 - Plan for and manage a public participation process, including development of a Public Involvement Plan.
 - Continually update public-facing outreach and project updates/schedules (e.g. project website).
- Government Stakeholders:
 - Ensure other federal, state, local, tribal requirements are known up front and incorporated into project schedule.
 - Provide regular updates and opportunities for feedback.



Example - Communication Success Story



Risk Management

Anticipating issues before they happen and inputting triggers

Typical NEPA Project Risks:

- “Scope Creep” including Proposed Action changes late in the NEPA review/consultation process that requires new studies
- Quality Control
- Ignoring viable alternatives or including too many alternatives (which requires more time and effort at every stage of the process)
- Omitting stakeholders or failing to get decision maker buy-in throughout the process
- Mid-project change in team personnel and/or at the resource agencies and accompanying changes in interpretations of environmental regulations
- Internal and external conflict
- Legal challenge



Closing

- Project close out means:
 - Paying the final bills
 - Issuing final invoices
 - Archiving and submitting deliverables
 - Completing internal project close out reviews
 - Meeting with the internal project team and/or subconsultants to discuss lessons learned
 - Setting yourself up for success on the next opportunity (continual improvement)



Summary

- NEPA is a process of discovery that attempts to impose an orderly process on projects that may be complex and iterative, pulling the various 'moving parts' of the project together.
- While project managers and teams must remain flexible, effective project management is essential to:
 - Ensure project timelines and budgets stay on track
 - Produce legally sufficient, quality documentation
 - Adequately involve and inform the public
 - Promote collaboration, interdisciplinary analysis, and informed decision-making
 - Protect the environment



Key Project Management Takeaways

1. Have Clear Roles and Responsibilities
2. Manage the Schedule from the start and throughout the project lifecycle
3. Manage the Budget - beware of scope creep
4. Manage Risk - “an ounce of prevention is worth a pound of cure”
5. Manage and Navigate Change – avoid just letting things happen, rely back on assumptions from the plan
6. Strive for Continuous Improvement - it can be hard to formalize lessons learned but the better you can do this, even if it's just one thing per project, it will be in the right direction



Resources Available

- Project Management Info
 - Project Management Institute/PMBOK
 - Brain Sensei
- Learning Sites
 - Lynda.com
 - Coursera.com
 - Mindtools.com
- Books
 - *The Five Dysfunctions of a Team: A Leadership Fable* by Patrick Lencioni
 - *The Leadership Challenge* by Barry Posner and James Kouzes
- Google!
 - Search: NEPA Best Practices, NEPA Project Management



Q&A



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