

Alternatives Analysis: Satisfying NEPA, Public Interest Review & 404b1

Chandler Peter
Technical Specialist
Regulatory Division

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NEPA, Public Interest & 404b1 Alternatives Integration

- Regulatory strives to integrate requirements of all 3 into one analysis
- Generally, they match relatively well
 - ▶ However, NEPA and PI can have broader range of alternatives (reasonable) than the 404b1s (practicable)
- 404b1s recognize that NEPA documents prepared for other agencies may need to be revised to address Guideline requirements



Intensity of Alternatives Analysis

- NEPA – Adaptability recognized for EA or EIS
 - ▶ EAs provide brief discussions of need, alternatives and impacts
 - ▶ Courts hold level of alternatives analysis (both range and intensity) for EA less than for EIS.
- PI – Level of controversy drives level of review
 - ▶ Considers both practicability and reasonability
- 404b1 - Alternatives analysis is adjustable
 - ▶ Level of analysis is to be commensurate with the impacts/scale/cost of the project
 - See 8/23/93 Joint EPA/USACE memo



Equal Treatment

- Treat all alternatives equivalently
 - ▶ NEPA require the degree of analysis devoted to each alternative is to be substantially similar to the proposed action.
 - ▶ NEPA states is to include alternatives not necessarily desirable from applicant's perspective
 - ▶ 404b1s require apples to apples comparison
 - Critical to appropriately determining Least Environmentally Damaging Practicable Alternative (LEDPA)
 - **Must demonstrate proposed action is LEDPA**
 - **USACE cannot issue permit for anything else**



Types/Range of Alternatives

- NEPA & 404b1s require that alternatives analyses include consideration of:
 - ▶ Proposed action
 - ▶ Geographic options including changes in location or alignment
 - Some actions may be site specific & do not have off site options
 - ▶ Site specific alternatives/configurations
 - Different layouts
 - Reduction in size or area to be developed
 - ▶ No Action alternative
- Display options on maps/plans



No Action Alternative

- Regulations specify 2 options for Regulatory
 1. Formulate option that does not involve regulated discharge (e.g. avoid on site, use upland off-site location, etc.)
 2. Permit denial – what will applicant do
- If property to stay as is or sold, describe
 - ▶ Discuss consequences of other likely uses of project site
 - ▶ Need to not include speculative statement/analysis
- Evaluate No Action to extent necessary (variation on equal treatment allowed)



Screening Criteria

- 404b1s specify 5 categories to screen alternatives
 1. Environmental consequences to waters of the US
 2. Project purpose
 3. Logistics
 4. Costs
 5. Technology
- NEPA, in general terms, identifies 4 factors
 1. Project purpose
 2. Common sense
 3. Economics
 4. Technology
- Documentation justifying screening criteria, thresholds, & how applied to options critical



Waters of the US Impact Screen

- Typically easiest screen to develop/apply
- Addresses “Least Environmentally Damaging” portion of LEDPA
 - ▶ Comparison of impacts to waters of the US between alternatives should be shown
 - Normally based on acreage/linear feet (similar functions)
 - ▷ Can also include indirect, secondary and cumulative impacts
 - Off site options compared to proposed site
 - ▷ Delineations not required for all sites but methods of comparative assessment must be the same. Use proposed site delineation to validate off site method accuracy
 - ID differences in impacts with on-site configurations
 - Can display in tabular form



Waters of the US Impact Screen

- 404b1 Guidelines sequencing requirement must be followed
 - ▶ Cannot consider compensatory mitigation actions in the alternatives analysis for determination of LEDPA (e.g., no buying down of impacts)
 - ▶ Re-emphasized in 1990 EPA/USACE Mitigation MOA
- Avoidance & minimization must be considered and is utilized



Project Purpose Screen

- Overall project purpose must be met by any alternative to be practicable
 - ▶ Either an alternative satisfies purpose or doesn't
 - ▶ Not a “better addresses purpose” determination
- **Simplified Example** – Project purpose is to safely accommodate current & future traffic between town X and city Y.
 - ▶ Alt. 1 - 2:1 side slopes w/ guardrails – 2 acres impacted
 - ▶ Alt. 2 - 4:1 side slopes no guardrails – 3 acres impacted
 - ▶ Both carry traffic & are safe (based on AASHTO standards) but 1 not as safe as 2
 - ▶ USACE can only permit option #1



Project Purpose Screen

- Additionally, it's not whether an alternative “more fully or better addresses” management plans, goals, desires, political issues (non project purpose aspects)
 - One practicable alternative provides greater social benefits (with greater aquatic resource impacts) compared to another w/ less aquatic resource impacts & less social or economic benefits, USACE can only approve the lower aquatic resource impact alternative



Logistics Screen

- Typically government, other impediments that eliminate ability to implement an alternative
 - ▶ Categories usually similar for project types but applicability is very case specific
 - Land availability and potential designation(s)
 - Denial of zoning, access, variance or other development changes
 - Timeliness (for some public works actions)
 - Other
 - ▶ Factors normally not legitimate as logistics screens
 - Funding streams
 - Zoning



Cost Screen

- Normally screen of last choice due to amount of effort to develop, conflict & other factors
- 404b1s specify costs rather than economics
 - ▶ Term “economic” eliminated from original 404b1s
 - Applicant financial standing, market share not germane
- Need to establish cost “thresholds” & are to be based on:
 - ▶ Type of project and applicant
 - ▶ Costs associated w/ comparable type projects in area/region



Technology Screen

- Typically a cost screen
 - ▶ Aspects of project/area may require innovative use of technologies that add significant costs (e.g., geotechnical issues at dam site)
- Can result in substantial effort to determine if emerging technologies can be applied to project or alternative



Second Look

- 404b1s require Corps only approve LEDPA
 - ▶ Impacts to aquatic resources drive Corps decision
- However, can consider whether LEDPA has other significant adverse environmental consequences
 - ▶ Allows for considering other significant effects and damage to other ecosystems
 - ▶ EPA/Corps 8/23/93 guidance furthers that these “other consequences” are to involve natural environmental values

