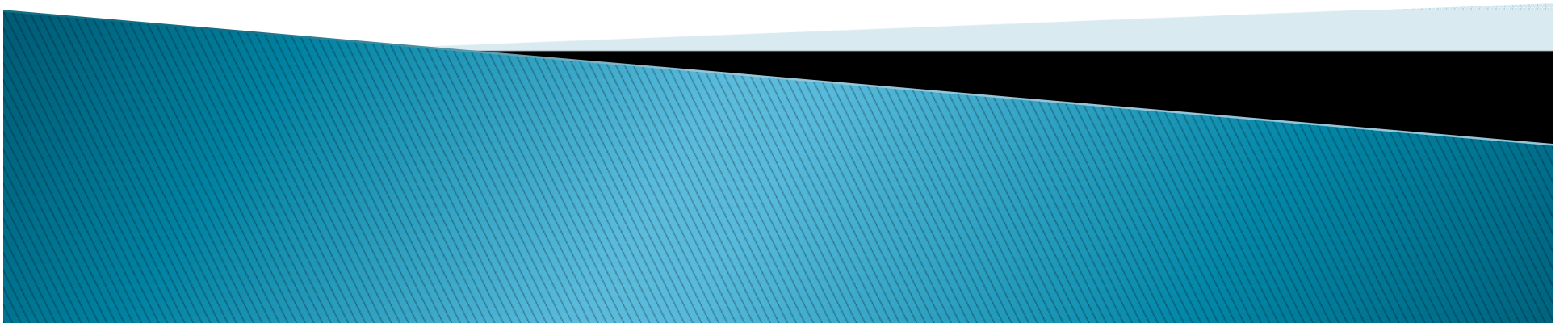


EMO Assessment Form and Alternatives Analysis



Assessment Form

- ▶ Is based on US Army Corps Statement of Findings (SOF)
- ▶ Coalesced from SOF, checklist, permit application, and previous assessment form
- ▶ Guide for General Permit preparation (at this time)



Microsoft Word
Document



Alternatives Analysis

- ▶ Alternatives analysis is a part of the Corps regulatory requirements (Section 404(b)(1) Part 230.10)
- ▶ Each alternative documented in the SOF
- ▶ Ensures options having less impacts to Waters of the US have been considered and evaluated



Alternatives Analysis

- ▶ Ensures selected alternative equals Least Environmental Damaging Practicable Alternative (LEDPA)
 - Part 230.3(q) The term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
- ▶ Incorporate cost, existing technology, and logistic evaluations into each alternative



Adobe Acrobat
Document



Adobe Acrobat
Document

Alternatives vs Avoidance

- ▶ Analysis is the macro view
- ▶ Avoidance and minimization is the micro view
- ▶ Avoidance and minimization applies to the selected alternative
 - Demonstrates measures taken to avoid and reduce impacts
 - Reduces need for additional mitigation



Alternatives vs Avoidance

▶ AA Examples

- Relocating road to avoid waters of US
- Shifting an alignment to avoid waters of US
- Evaluate various routes for new alignment

▶ A&M Examples

- Tightening shoulder slopes
- Reducing median widths (can be tied to alignment)
- Reducing pipe extension lengths



How Do We Improve

- ▶ Recognize importance of AA and A&M
- ▶ Coordinate–NEPA/permitting Managers
- ▶ Document, document, document
- ▶ Take credit for measures already used
 - Slope reduction
 - Reduced pipe and riprap lengths
 - Cleaning versus reshaping
- ▶ Ask questions

