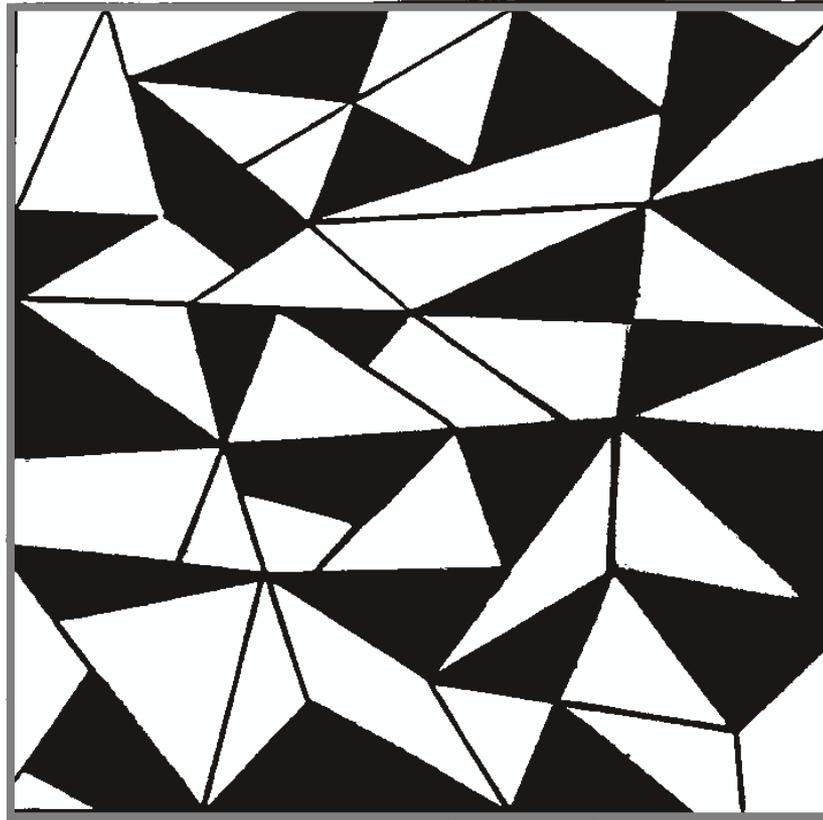


Hidden Star

Find the hidden star in the pattern.



Overview

- Master Plan Study
- National Environmental Policy Act (NEPA)
- Project Need
- Alternatives Analysis
- Environment



Affected Environment

SUCCINCTLY describe area

Use of maps recommended

Use of other documents as reference recommended

Only describe resources to be affected

Affected Environment

- All resources identified?
- Information is for the site?
- Description of site?
- Maps and/or photos?





CEQ UNIVERSAL REQUIREMENTS

- 1) Land Resource**
- 2) Water Resources**
- 3) Air**
- 4) Living Resources**
- 5) Cultural Resources**
- 6) Socioeconomic Conditions**
- 7) Resource Use Patterns**
- 8) Other Value**



Environmental Consequences

- **The environmental impacts of the proposed action and alternatives.**
- **Identification of adverse environmental effects that cannot be avoided.**
- **The relationship between short-term use of the environment and the maintenance and enhancement of long-term productivity.**



Effects

- **Direct**
- **Indirect**
- **Cumulative**



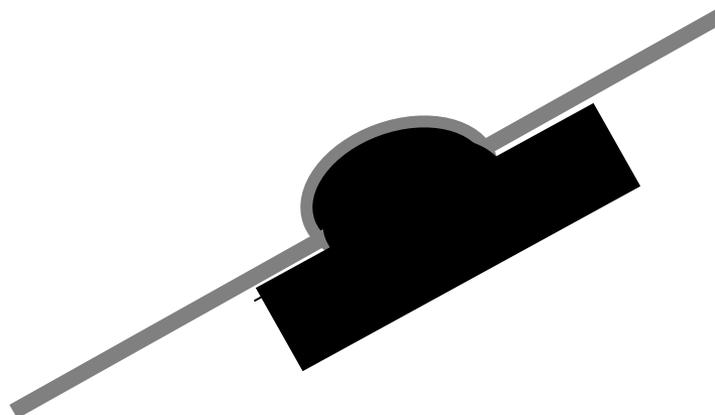
Environmental Consequences

- Direct.



- Indirect.

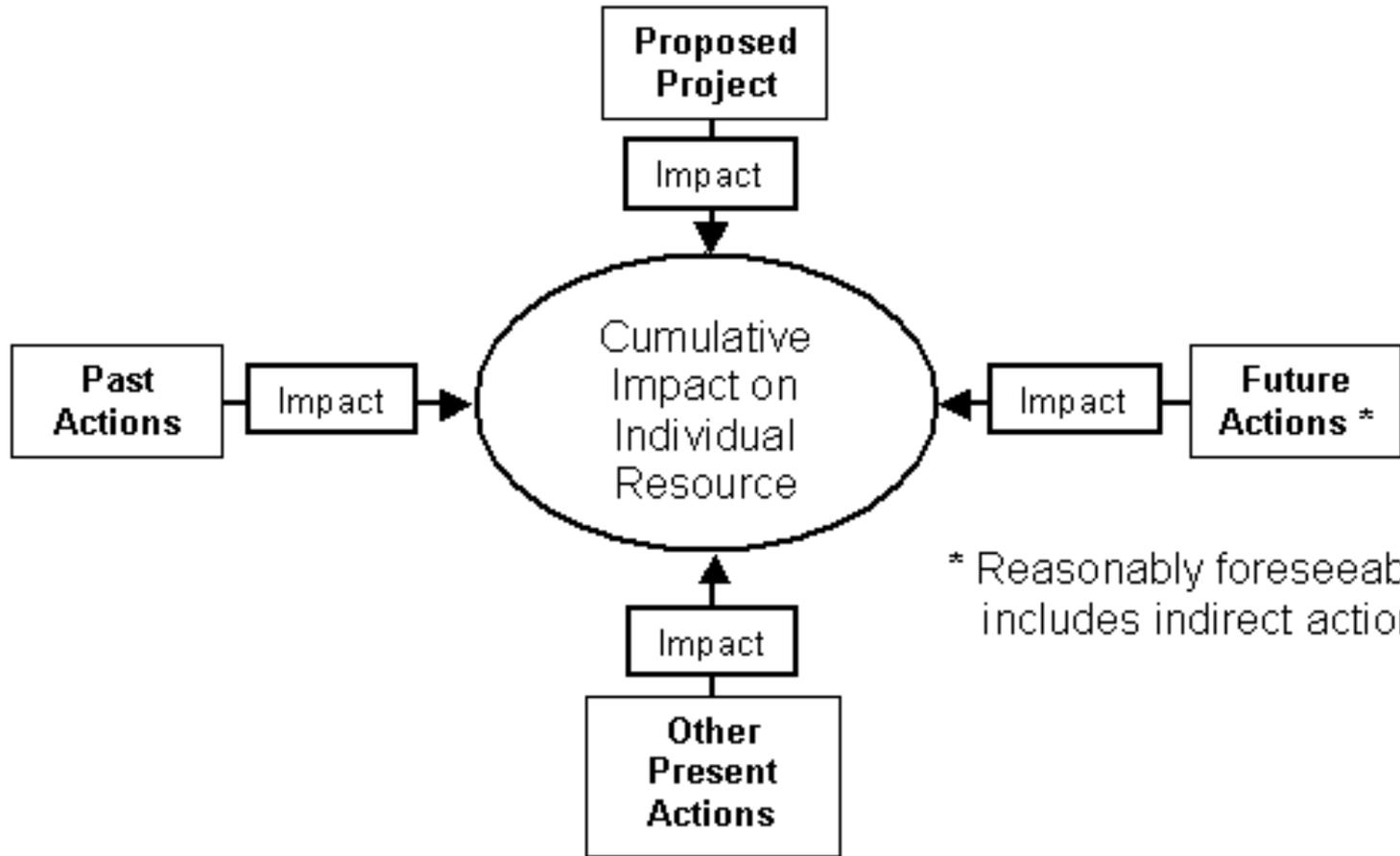




What is this



Cumulative Impacts



* Reasonably foreseeable; includes indirect actions



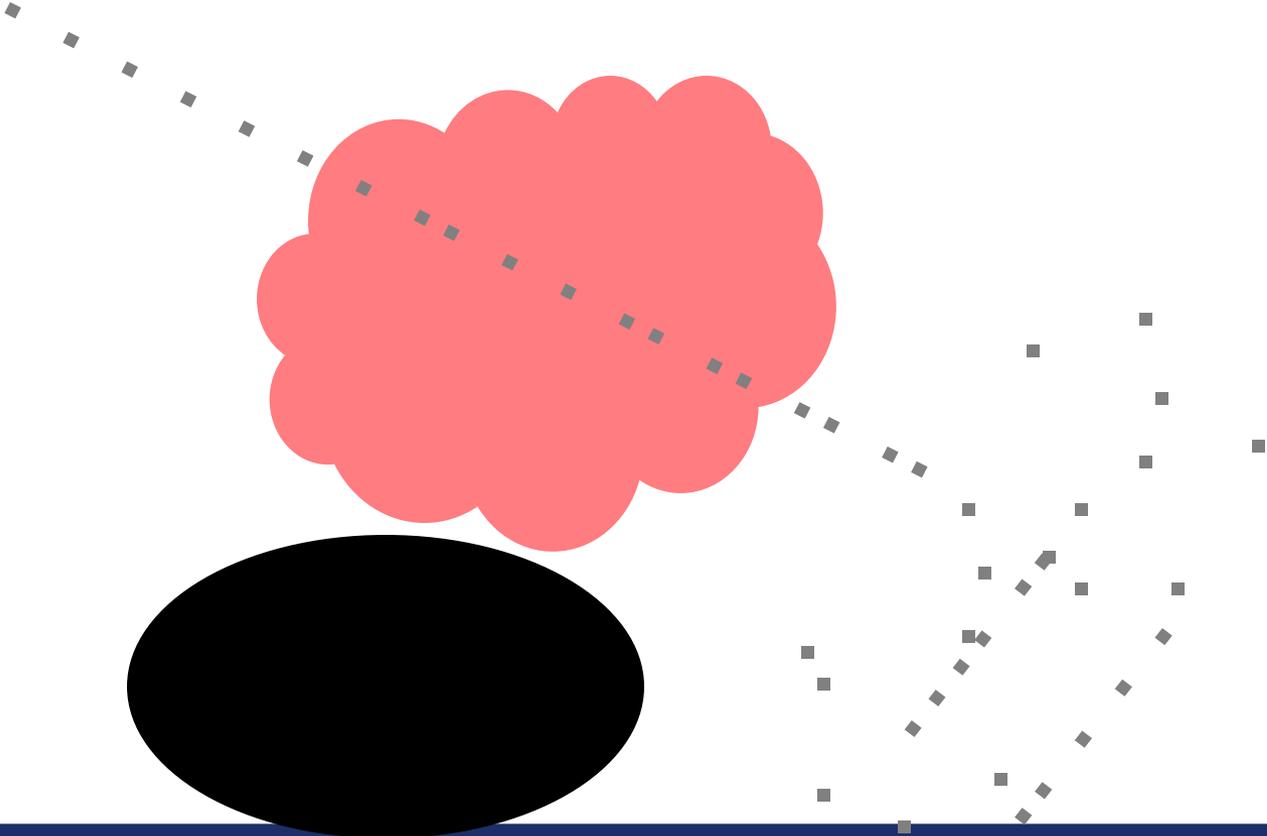
Cumulative Impacts

“Cumulative Impact ... the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

40 CFR 1508.7



What is this



Cumulative Effects – Key Points



Cumulative impact is the most important aspect of effects analysis.



Ignoring cumulative effects, does not give the deciding official or the public the information about the real environmental consequences at stake and makes us vulnerable during appeals and litigation. If we can't defend our analysis, we can't implement our decision.

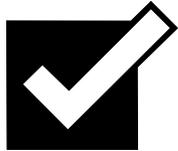


Make some assumptions, make your best estimate of effects and document your rationale.



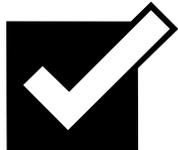
Take the required hard look. If your analysis indicates that there are no cumulative effects, that is all right; just remember to document how you arrived at this finding.

Important Aspects of Cumulative Effects



Identify the resource, social, economic situations of concern, using key cause-and-effect mechanisms.

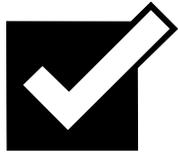
- .. Identify the element of each situation to be analyzed that are affected by the proposal and alternatives
- .. Identify measures for each element
- .. Identify values (thresholds) for each measure



Define the time and space scales for the analysis.

- .. Bound the effects in time (and provide rationale for the bounds)
- .. Bound the effects in space (and provide rationale for the bounds)

Important Aspects of Cumulative Effects



Identify past, present, and expected future activities in the area of concern and evaluate the relative impact of past, present, and expected future activities.

.. Describe the cumulative effects for each element using the identified measures

.. Interpret the result relative to values (thresholds) by answering the question: So what?

MITIGATION

- Several types
 - Avoid
 - Minimize
 - Rectify
 - Reduce
 - Compensate
 - Modify
- Based on Analysis in Document
- Can be Regulation Driven

