

ENVIRONMENTAL IMPACT ASSESSMENTS – 10 CONCEPTS

1. Purpose and Need

- Why are we doing this project?
- Energy production
- Resources: Water, Minerals, Wood
- Infrastructure: Roads, Buildings, Powerlines
- Aesthetics: Parks or Recreational facilities
- Maintenance/Repair of Existing facilities
- Removing old facilities
- Also make sure to investigate: Who gets the benefits? Who must deal with the consequences?

2. Scoping

- Preliminary inquiry into potential impacts. **Big Picture**
- Send out letters to people, agencies and companies that may be affected by project.
- Ask how they may be affected.
- Ask if there are any alternatives to the proposal (see next concept).
- Ask what can be done to eliminate or minimize the impacts.

3. Alternatives

- What are the different ways we could fulfill the Purpose and Need? Examples:
- Energy: Solar, Dams, Wind, Coal, Gas, Nuclear, Conservation, etc...
- Timber: Big Clearcuts, Re-use old wood, small clearcuts (group selection), individual trees, use different materials such as steel and concrete...
- Roads: Dirt, pave with concrete, pave with stone. One lane, two lanes, four lanes....
- Creating Parks: Forests? Football pitch? Bicycle trail?
- Old facilities: Maintain, Repair or Replace?

4. Affected Environment

- What is the **area** that will be affected?
- Specific forest, river, coral reef, township, country.
- The area downwind from a coal burning power plant.
- Can be an ecological or political area.
- What **issues** or **resources** will be impacted?
- Water pollution, air pollution, deforestation, soil loss, fish or animals will lose habitat, water flow changes rate or timing, etc.

5. Significance

- What are the biggest impacts?
- Examples of issues that can be significant: water/air pollution, endangered species, public health and safety, food production, historic or cultural sites, or precedent-setting projects.

6. Environmental Consequences

- There must be a discussion of Environmental Consequences .
- How will this project affect the environment?
- Focus on Significant issues.

7. Cumulative Effects

- How will this project, with other related projects, CUMULATIVELY affect the environment?
- Is this (dam, road, logging, park) part of a bigger program?
- Are there plans for a series of dams, or a highway system, or several parks?
- Cumulative effects are often on a larger scale.
- One mine/clearcut/dam may affect only a small place, but several can affect a large region.
- Cumulative effects can be inter-related.
- A dam or a mine may include logging to clear the area.

8. Public Participation

- It is essential that the people affected by a project have a say in the analysis.
- Some EIA laws demand that the public can participate.
This means ANYONE: Women, children, old, poor.
- The people near a project have important knowledge about the area, and can predict what kinds of impacts will be important.
- Public participation can take many forms:
- Public Meetings, Letters, Pictures
- Video, Phone calls, Email
- Radio or TV programs.
- Any form of communication will do.

9. Mitigation and Monitoring

- After a project is approved and construction has started, the builder must do his best to prevent or fix (**MITIGATE**) the impacts, and the public must make sure that the impacts predicted in the EIA are near those that are actually occurring.

- The project developer must **MONITOR** the impacts (i.e. pollution levels, amount of logging, count fish species in the river) to see if the predictions in the EIA are correct.
- If some impacts are worse than the EIA said, the mitigation should be adjusted to reduce those impacts. This is known as **ADAPTIVE MANAGEMENT**.

- What should be monitored? Look at Significant Issues.
- Dams – water flow and quality.
- Logging – top soil, tree cover, wildlife.
- Mines: Chemicals, heavy metal pollution, sediment.

10. Enforcement

- Who makes sure the EIA laws are followed? Many options.
- The Government – field checks, with fines or jail.
- The People – sue the Government for violations.
- Maybe no one – with no accountability, the EIA process is merely a game.