

# Navigating the Environment: Managing Risks and Sustaining Benefits



# The 1970's: The Decade of Acute Environmental Problems

- National Environmental Policy Act of 1969
- Clean Water Act 1972
- Marine Protection, Research, and Sanctuaries Act of 1972
- Coastal Zone Management Act of 1972
- Endangered Species Act of 1973
- Resource Conservation and Recovery Act of 1976
- Comprehensive Environmental Response, Compensation and Liability Act of 1980

# European Union

- Bird Directive, 1979
- Habitats Directive, 1992
- Water Framework Directive, 2000
- Marine Strategy Framework Directive, 2008

# USACE

## Environmental Operating Principles

1. Strive to achieve environmental sustainability. An environment maintained in a healthy, diverse and sustainable condition is necessary to support life.
2. Recognize the interdependence of life and the physical environment. Proactively consider environmental consequences of Corps programs and act accordingly in all appropriate circumstances.
3. Seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
4. Continue to accept corporate responsibility and accountability under the law for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems.
5. Seeks ways and means to assess and mitigate cumulative impacts to the environment; bring systems approaches to the full life cycle of our processes and work.
6. Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work.
7. Respect the views of individuals and groups interested in Corps activities, listen to them actively, and learn from their perspective in the search to find innovative win-win solutions to the nation's problems that also protect and enhance the environment.

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## Environmental Operating Principles

1. ...sustainability...
2. ...interdependence...
3. ...balance... economic and environmental solutions that support and reinforce one another.
4. ...responsibility and accountability
5. ...cumulative impacts ... systems approaches  
... full life cycle...
6. ...integrated scientific, economic, and social knowledge...
7. Respect the views of ...[others]...

# When moving from standards- to objectives-based environmental management...

- More emphasis on science required
  - Standards-based
    - Science determined upfront
    - Standards resist change
  - Objectives-based
    - Science developed along the way
    - “How to use the science” is part of the process
- Trade-offs gain attention
  - How to balance competing objectives
    - Deliberative, stakeholder processes become more important
  - How to balance competing risks
    - Every action will produce multiple reactions

