



**Future Ocean Challenges:
Presented to the
Commission on Ocean Policy**

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State of Our Oceans

Priority Coastal Problems

- Nutrient overloading
- Pathogen contamination
- Toxic chemical pollution
- Alteration of natural flow regimes
- Habitat loss and degradation
- Decline of native flora, fish, and wildlife populations
- Introduced species
- Overfishing
- Marine Debris

Our coasts are in fair
to poor condition

(Interagency *National Coastal
Condition Report*, pre-publication)

Challenges

Underlying problem is that more than half of the population in the continental U.S. lives in the coastal zone -- only 17% of the land area.

As a result, we face:

- Increased impervious surfaces
- Competing uses - habitat, recreation, industries, shipping, homes, fisheries, energy
- Increased demands – space, energy, waste disposal, recreation

Challenges

Environmental Issues:

- Nonpoint Source Pollution
 - agriculture and urban runoff
 - air deposition
- Direct Impacts
 - point sources (e.g., combined sewer overflows, sanitary sewer overflows, concentrated animal feeding operations)
 - habitat alteration
- Invasive Species
- Environmental Information



The zebra mussel,
Dreissena polymorpha



Challenges

Other Environmental Challenges:

- Jurisdictional Issues
 - legal authorities extend a variety of distances into ocean waters
- International Scope
 - U.S. environment affected by other nations
- New Threats
 - potential for terrorism
 - deep sea activities (e.g., bioprospecting)





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U.S. Capitol Building and Grand Princess shown same scale.

The Environment and The Economy

A Healthy and Productive Environment is a Key Element of the Nation's Economic Vitality

- Economies of coastal communities -- and the country -- depend on healthy ocean and coastal resources.
- Human health can be adversely affected by a degraded environment.
- Coastal communities and natural resources are physically at risk from increased frequency and severity of destructive storms, flooding, erosion, and drought.
- Coastal habitat and marine organisms depend on the protection of healthy coastal and ocean resources.

Opportunities

- Promote better stewardship through local (watershed-based) and voluntary programs.
- Promote habitat restoration.
- Provide international leadership in protecting our oceans.
 - Promote monitoring, pollution prevention, and tech transfer -- apply lessons learned and research from existing programs.
 - Support comprehensive research/monitoring for all parameters in order to support science-based decision making.



Working together

