



**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

