Marine Mammal Health and Strandings: Implications for Ecosystems and Human Health
Strandings Are Increasing
Increased Papers on Marine Mammal Diseases
Animal Welfare
Marine Mammal Biology
Marine Mammals and Human Health

• Direct transmission of infections
• Similarly affected by ocean change
Zoonoses

- Avian Influenza
  - H3N8: 168 seals in 2011
  - H1N1: carrier seals

- Brucellosis
  - 25% Gulf dolphin strandings

- Leptospirosis

- Arctic Unusual Mortality Event?
Marine Mammal Health as an Indicator of Ocean Change

- Coastal development
- Ocean utilization
- Climate change
PCBs are Associated with Cancer in 17% Adult California Sea Lions

Coastal Urbanization: Pathogen Run-off
Coastal Urbanization: Harmful Algal Blooms
Domoic Acid and Sea Lions
Indian River Lagoon UME
Strandings Reveal Efficacy of Mitigation Measures
1992 Title IV of the MMPA
Marine Mammal Health and Stranding Response Program

- Collect and disseminate data on health and health trends
  - Correlate health data with biological, physical, and chemical environmental data
  - Coordinate effective responses to unusual mortality events