Near Shore Environmental Concerns

Jim Gibson
Devine Tarbell & Associates, Inc.

October 27, 2005



Near Shore Impacts

Near Shore

- Region of sea between but not including the shoreline and the off shore
- Combination of riparian, beach, and tidal zones
- No official definition cannot be distance based
- Includes Estuaries
- Complex and Productive Systems
- Defined by vegetative zone



Near Shore Impacts

Near Shore

Substrate

Vegetation, Mineral Nutrients,
 Gravel, Sand, Silt, Mud, Rock, Water

Producers

Wetland Flora, Algae, Phytoplankton

Converters

 Aquatic Invertebrates, Fish, Birds, Marine Mammals, Lowland Wildlife, Bacteria

Off Shore

Substrate

Sand, Mud, Detritus, Water

Producers

Phytoplankton

Converters

 Aquatic Invertebrates, Fish, Birds, Marine Mammals



Near Shore Functions

- Primary Production
- Nutrient Processing
- Wave and Current Buffering
- Fish and Invertebrate Habitat
- Food for Birds
- Substrate for Secondary Production
- Water Quality
- Floodwater Attenuation
- Recreation and Aesthetics
- Navigation and Transportation
- Ecological Buffer







Near Shore Concerns

- Food Web Impacts
- Phytoplankton and Zooplankton
- Forage Fish
- Vegetation Impacts
- Essential Fish Habitat
- Threatened and Endangered Species
- Increased Turbidity and Scour
- Increased Predation
- Migration Routes and Patterns



Near Shore Concerns

- Visual Impacts
- Cultural and Historical Impacts
- Recreational Resources
- Erosion and Sedimentation
- Sediment Contamination
- Hydraulic Alternations
- Noise and Temperature Pollution
- Diving Birds and Mammals
- Creating and/or Altering Habitats
- Invasive Species





Questions:

Jim Gibson

Devine Tarbell & Associates, Inc.

James.Gibson@devinetarbell.com

315.641.1624 (O)

315.415.2729 (C)

315.396.2581 (B)

