

**NATIONAL SEA GRANT COLLEGE PROGRAM  
RESEARCH, OUTREACH, AND MANAGEMENT PROJECT CATEGORIES**

**I. ECONOMIC LEADERSHIP**

**A. Advanced Technology for Commercial Products and Processes**

**Commercial Biotechnology**

- (11) Molecular Genetics
- (12) Natural Products: Chemistry and Biological Activity
- (13) Bioprocessing, Bioreaction, Cell and Tissue Culture

**Environmental Technology**

- (21) Enhancement of Environmental Monitoring and Assessment
- (22) Pollution Control and Prevention
- (23) Remediation

**B. Seafood Production**

**Revitalize the Nation's Commercial Fisheries**

- (31) Ecosystem-Based Management
- (32) Anticipating Social and Economic Impacts
- (33) Minimizing Bycatch
- (34) Enhancing Wild Stocks through Aquaculture

**Develop Sustainable U.S. Aquaculture**

- (41) Administration and Coordination
- (42) Developing and Improving Grow-out Systems
- (43) Improving Husbandry
- (44) Enhancing Aquaculture through Biotechnology

**Enhance Competitiveness through Advances in Seafood Technology**

- (51) Product Quality and Safety
- (52) Processing Technology and Practices
- (53) Waste Management and Byproduct Recovery
- (54) Product Development

**C. Coastal Economic Development**

**Coastal Business Development**

- (61) Fishing Industries
- (62) Coastal Recreation Businesses
- (63) Marine Trades Industry

**Coastal Community Development**

- (71) Coastal Tourism Development
- (72) Communities in Transition
- (73) Coastal and Waterfront Redevelopment
- (74) Ports and Harbors
- (75) Planning and Decision-Making Information

**Revitalizing Marine Infrastructure**

- (81) Inspection and Condition Surveys
- (82) Environmental and Operational Loadings
- (83) Structure Performance Assessments
- (84) Rehabilitation, Repair, and Recycling Procedures

## **II. COASTAL ECOSYSTEM HEALTH AND PUBLIC SAFETY**

### **A. Coastal Ecosystem Health**

#### **Coastal and Great Lakes Water Quality**

- (91) Toxics
- (92) Biological Contaminants
- (93) Nutrients
- (94) Sedimentation
- (95) Biotoxins/Harmful Algal Blooms
- (96) Nonpoint Source Pollution
- (97) Chemical and Oil Spills

#### **Coastal and Great Lakes Habitats**

- (101) Habitat Structure and Function
- (102) Habitat Restoration
- (103) Aquatic Nuisance Species
- (104) Cumulative Impacts

#### **Sustainable Development**

- (111) Socioeconomic Dimensions of Environmental Change
- (112) Coastal Management Policy Tools
- (113) Multiple Use Management and Conflict Resolution
- (114) Water Availability
- (115) Cumulative Impacts

### **B. Public Safety**

#### **Coastal and Natural Hazards**

- (121) Severe Storms
- (122) Earthquakes and Tsunamis
- (123) Coastal Planning and Building Construction Techniques
- (124) Shoreline Processes and Erosion

#### **Safety at Sea**

- (131) Vessel Stability Research
- (132) Equipment Design and Testing
- (133) Survival and Safety Training
- (134) Recreational and Commercial Diving

## **III. EDUCATION AND HUMAN RESOURCES**

### **A. Education**

- (141) Education - Pre-college
- (142) Education - University
- (143) Education - Informal

### **B. Marine Advisory Service**

- (151) Marine Advisory Service - Core
- (152) Marine Advisory Service - Special Projects

### **C. Communications**

- (161) Communications - Core
- (162) Communications - Special Projects

**IV. PROGRAM MANAGEMENT**

- A. (170) Program Administration
- B. (180) Program Development

**V. (190) OTHER**