RNRF - Response of Educational Institutions

- Trends
- Skill sets
- Training programs
  - Emerging graduate program
  - Professional development programs
- Training gaps and challenges
RNRF - Response of Educational Institutions

- Workforce trends in resource management
  - Ecosystem-based management
  - Mobile workforce
  - Information rich environment
  - Public involvement
  - Advanced technology
    - earth observing systems
RNRF - Response of Educational Institutions

- **Skill sets required for resource managers**
  - Interdisciplinary
  - Synthesis/interpretation skills
  - Advanced technology
  - Communication skills
RNRF - Response of Educational Institutions

• Existing and emerging programs
  – Graduate program in operational oceanography
    • linked research and operational earth observing systems
    • environmental sampling and sensing with diverse platforms
    • information management/information provider
    • information transfer to users?
NOAA’s National Estuarine Research Reserve Program

- State-federal partnership
- Network of 26 protected area sites
- Promote science-based decision-making through an integrated program of research, education and stewardship
RNRF - Response of Educational Institutions

- Coastal training program
- Graduate research fellowship program
- Teacher professional development
NERR Professional Development Programs

– Coastal Training Program
  • training for existing coastal decision-makers
  • content areas identified in response to needs assessment
  • training provides access to current science-based information
  • enrichment of interpretation skills
  • identify management applications from lessons learned, case studies, or innovative BMPs
NERR Professional Development Programs

• Graduate research fellowship program
  – 2-3 year duration
  – partnership program
  – applied research directly relevant to ecosystem management
  – direct career path
NERR Professional Development Programs

– Teacher enrichment
  • integrate research and education communities
  • enhance teaching of basic and critical thinking skills
  • bring real-world science into the classroom
  • provide access to advanced technology
  • enhance comfort level in presenting science
  • align activities with science standards
  • be sensitive to constraints faced by teachers
  • MARE, COSEE, Cool Classroom
Training Gaps and Challenges for Resource Management Training

– Formal training programs
  • prepare information users to work in today’s science and technology-based environment
  • partnerships for research/management experience
  • link classroom instruction to real-world science
  • Incorporate research translation and data visualization skills into training programs
  • require hands-on internship experiences
Training gaps and challenges for educators

• Precollegiate programs
  • raise awareness of career opportunities
  • sustain partnership with the research/higher education community/COSEE
  • enhance pre-service teacher training
  • provide internship experiences