

# Center for Excellence in Integrative Fisheries Science



UF/IFAS Department of Fisheries and Aquatic Sciences

## What is a Center for Excellence?



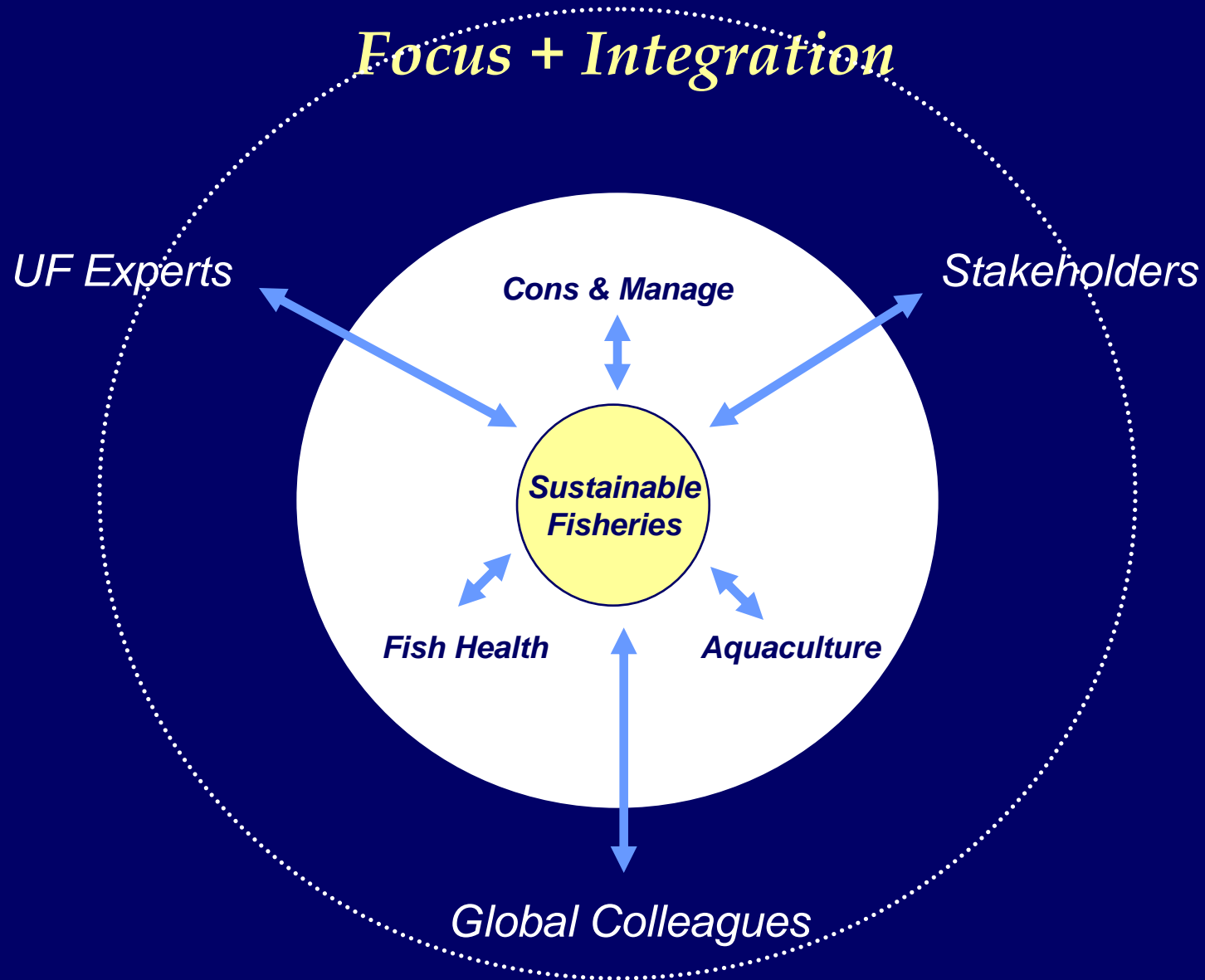
- A Center for Excellence can occur within a single academic unit, across units, can span multiple institutions, and some centers occur in agencies.
- The State of Florida has designated certain academic units as Centers for Excellence in recent years and provided up to \$1M in start-up funding.
- Our Center will focus on Integrative Fisheries Science.

# 'Integrative Fisheries Science'



- Existing programs in the Department of Fisheries and Aquatic Sciences occur in four core areas:
  1. Sustainable Fisheries
  2. Conservation and Management
  3. Aquatic Animal Health
  4. Aquaculture
  
- Integrative Fisheries Science will harness this broad expertise, and additional expertise at UF beyond the Department, to address critical issues in Sustainable Fisheries.

# IFS Conceptual Model of Collaboration



## Why This Center is a Critical Need



- \$50 billion US marine and freshwater fisheries
- Impacted by over fishing, habitat loss, water quality degradation, changes in water flow, etc.
- Need for objective science to address key issues and help guide solutions
- Need for highly competent graduates, skilled in quantitative methods of stock assessment, modeling, fish ecology, and fisheries management

## Why UF ?



- Broad Departmental expertise, spanning freshwater to marine continuum
- Strong commitment by the University to support water-related initiatives
- Proven track record of providing objective science and competent graduates to support fisheries management in Florida and USA
- Land-grant mission for teaching, research, outreach

## Complex Fisheries Issues Requiring an Integrative Approach



- Understanding stock dynamics in context of fishing pressure, toxic algae, and other stochastic events
- Establishing Minimum Flows and Levels in the context of freshwater and estuarine fisheries
- Predicting impacts of climate cycles on fisheries
- Quantifying impacts of nutrient runoff from watersheds on downstream fisheries

## Major Outputs of the Center



- Practical and innovative SOLUTIONS to current problems and emerging challenges of sustainable fisheries
- GRADUATES with skills and knowledge necessary to be highly competent practitioners of integrative fisheries science
- Integrative fisheries RESEARCH in Florida with national and global relevance

## Examples of Some Specific Outputs



- Enhanced collaboration with agencies to develop new tools for fisheries management
- Workshops to define state-of-the-science and research needs in specified focus areas
- Educational opportunities (courses, degrees) for agency scientists
- Collaboratively funded research grants with agency partners

## Major Action Items



- Development of a specialized graduate curriculum
- Filling gaps in faculty expertise, technical support, technology and infrastructure
- Holding state-of-science workshops
- Developing expanded program of continuing education and outreach
- Developing integrated research programs

# Potential Sources of Funding



- Congressional Appropriation
- State Legislature Appropriation
- Foundations and Private Donors
- Competitive Research, Teaching and Extension Grants

## Q/A and Discussion



- Do our goals and objectives align with your needs?
- Have we clearly identified what we will do?
- Have we made it clear that our over-arching premise is cooperation with agencies?