

A SOLitude Approach to Fisheries Management

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SÖLITUDE
LAKE MANAGEMENT

Restoring Balance. Enhancing Beauty.

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What is Fisheries Management?

- Process of planning and taking actions to manipulate fish populations, fish habitat, and people to achieve specific human objectives
- Habitat
- Stocking
- Regulations

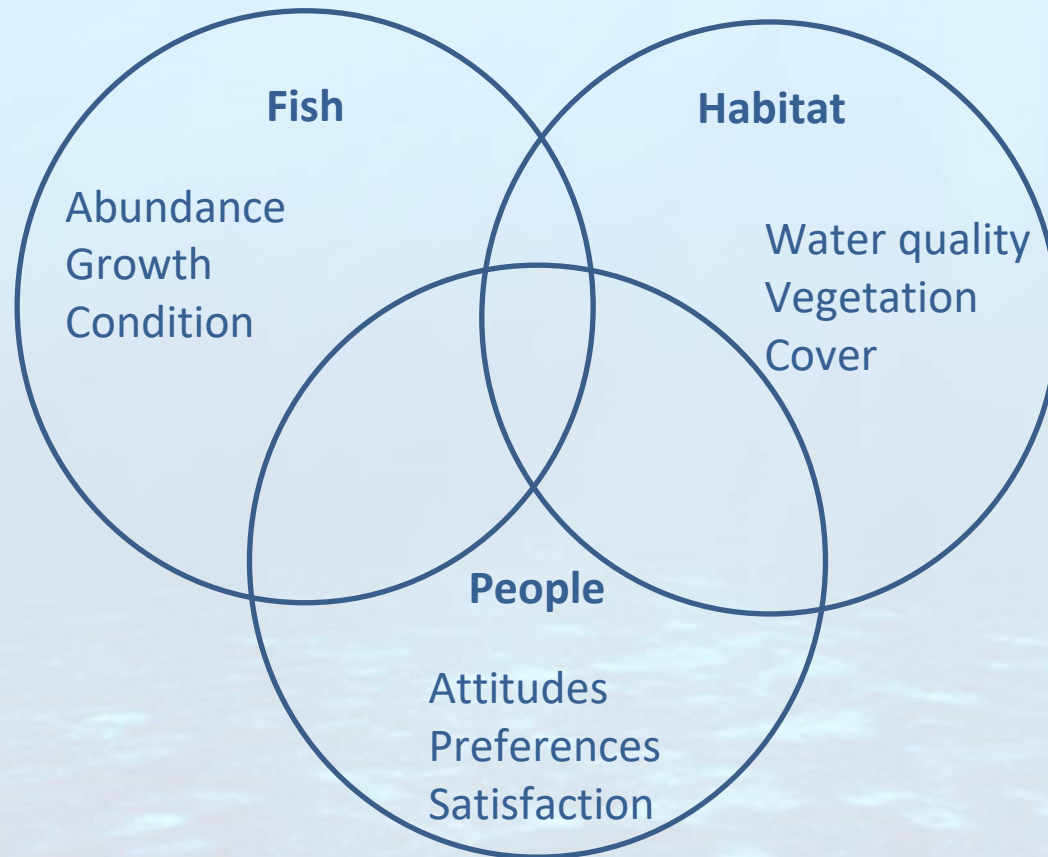


SOLitude Fisheries Management

- Client goal oriented management
 - Priorities, Timeline, Budget
- Comprehensive ecosystem analysis
- Data collection
- Tailored fish management plans
- Implementation
- Monitoring & adjustments



Fisheries Management



Fisheries Management Goals

- Number of fish caught
- Size of fish caught
- Harvest opportunities



Stakeholder Management

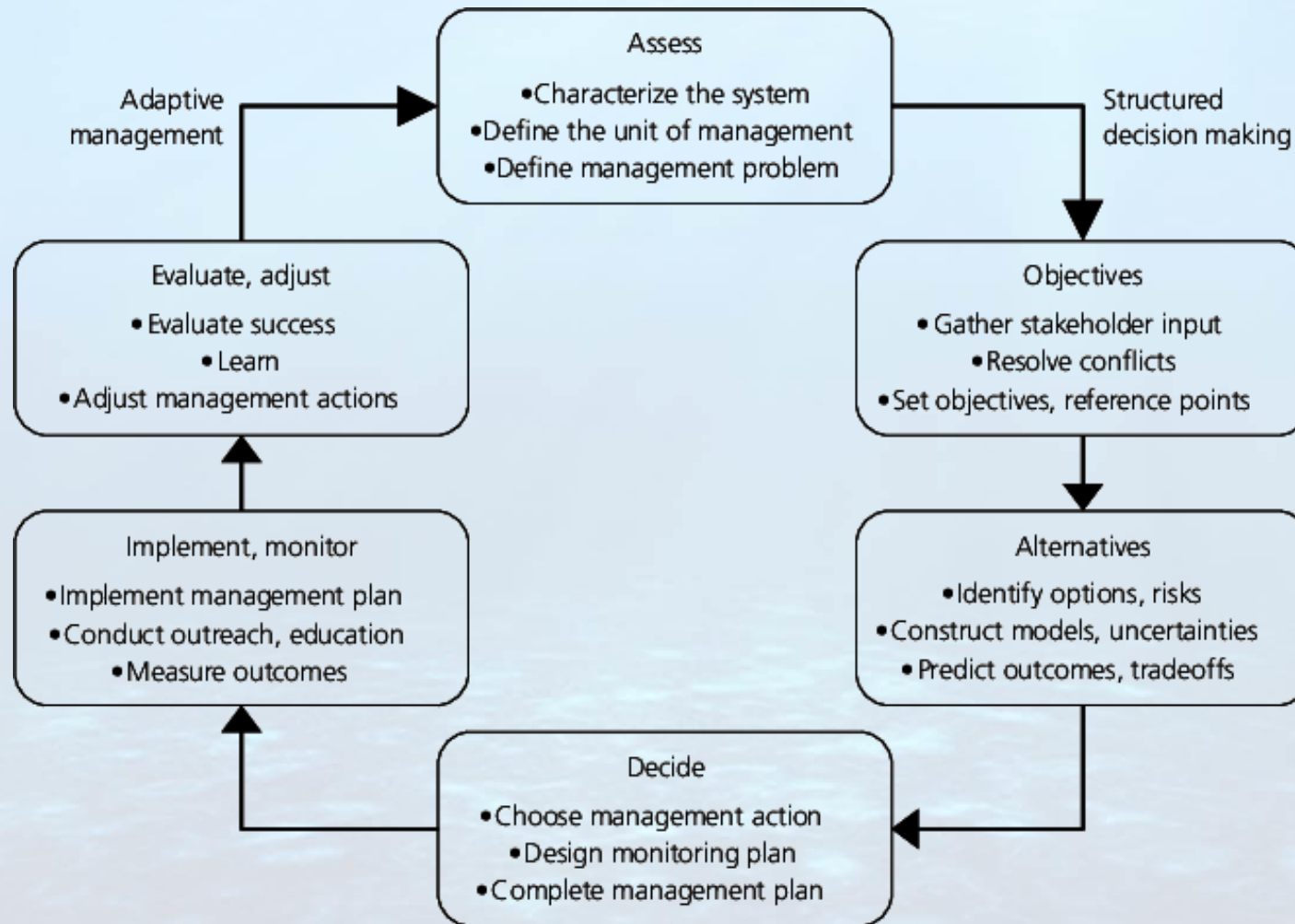
- Generally complex, multiple goals
 - High catch rates vs. quality size fish
- Public presentations
 - Inform group and decision makers
- Advisory committees and task force
- Value choices and technical choices

Factors Affecting Strategies

- Population dynamics
- Habitat
- Goals



Adaptive Management



Site and Fish Assessment

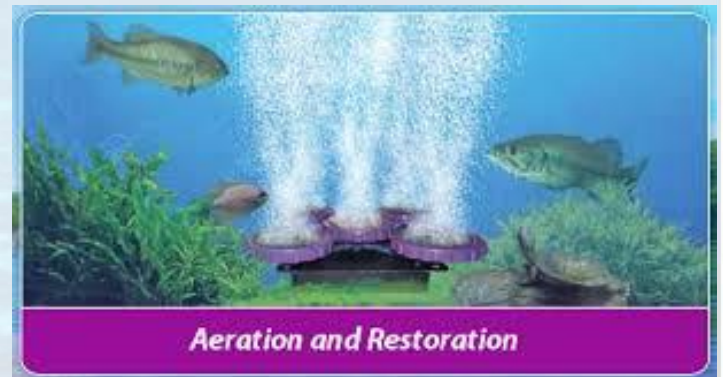
- Physical cover & structure
 - Large & small cover
 - Aquatic vegetation & algae
 - Bathymetry
- Fish population size and health
 - Electrofishing
 - Predator: Prey ratios
- Chemical and biological characteristics
 - Water quality
 - Nutrients, DO, Temp, Alkalinity, etc.



Fisheries Management Strategies



Before



Aeration and Restoration

Improve Water Quality

Increase alkalinity with limestone



Install aeration to prevent stratification



Improve Small Cover

- Natural
 - Plant beneficial shallow vegetation
 - Add boulders & rip-wrap
 - Brush
- Artificial
 - Shallow fish attractors
 - Create nursery reefs



Shallow water nursery



Shallow hedgerow



Add Large Cover



Open water hedgerow



Support the Forage Base

Create spawning beds with gravel



Install fish feeders for bluegill
2:1 conversion ratio



Stock Fish

- Establish populations
- Enhance the forage base
 - Improve Predator – Prey Ratios
 - Adult Bluegill and Redear now available
- Supplement a population with poor reproductive success
- Create a “put-and-take” fishery
- Introduce an alternative species
- Introduce genetic diversity
 - Titan Largemouth Bass
- Control undesirable species with a biological solution



Specklebelly Sunfish grow to 2+ lbs.

Add redear sunfish to control parasites



Please Share Your Takeaways

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