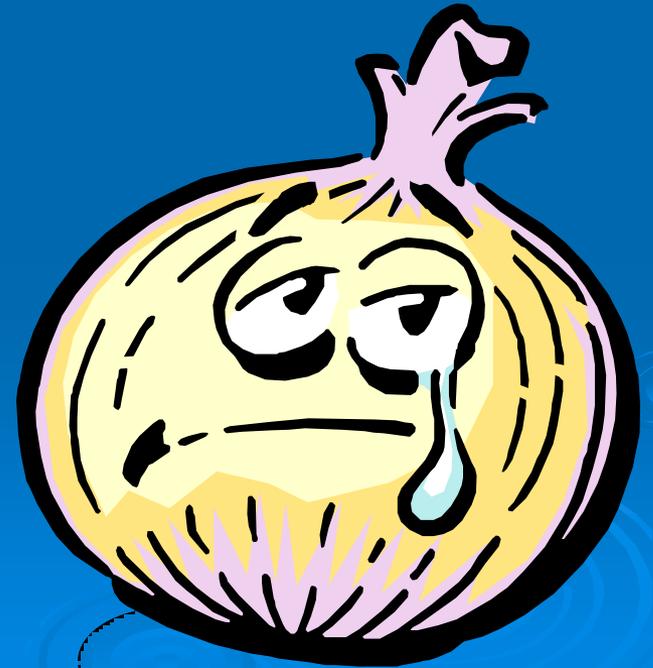


Strategic Habitat Conservation

Peeling the Onion

Bill Knapp
Office of the Science Advisor
US FWS
December 2009



Today's Purpose

- Get on the same page with regard to SHC:
 - Understanding it
 - Appreciating it
 - Recognizing the world in which SHC is used
 - Using it & not using



Talk About

1. What SHC is
2. Its history & evolution
3. Things we need to recognize about SHC
4. Things that SHC requires
5. Your questions & interests

What SHC is

- An approach that:
 - focuses on conserving populations at landscape scales using the fundamental principles of adaptive (resource) management.
 - brings partners together to develop shared objectives, plans, conservation delivery strategies, and science strategies.



What SHC is

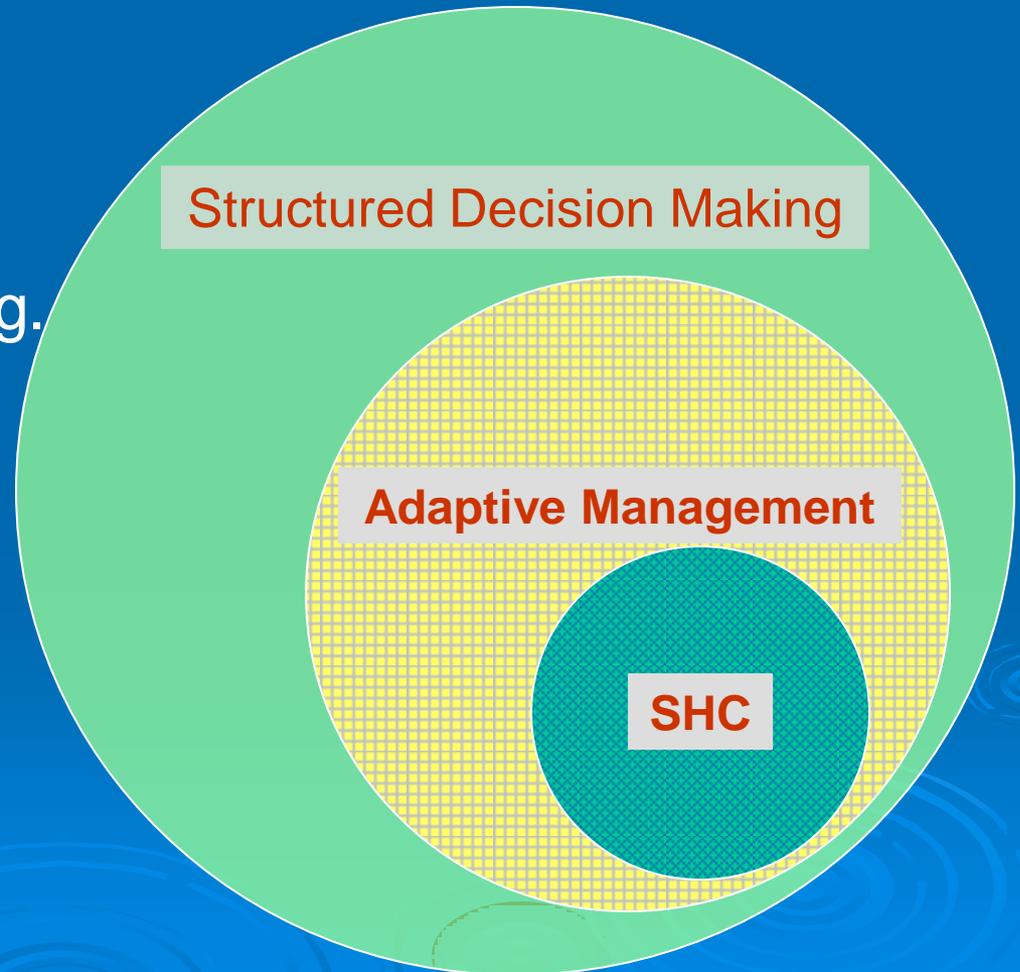
- An approach that:
 - was originally applied to populations that responded well to management interventions that focused on a population's habitat needs.
 - can be adapted to work for populations that are not habitat-limited and require other management treatments to achieve population objectives.



What SHC is

AM & SHC are types of structured decision making.

Not all structured decision making is AM or SHC



What SHC is



What SHC is

Populations
Limiting Factors
Explicit Objectives
Measurable Objectives
Models
Testable Assumptions

Focusing on outcomes
No “shot-gunning”
Solid protocols
Solid designs
Evaluation
Feedback
Learning
Adapting



Management Treatments
Management Options
Making Choices
Decision Support Tools

Testing Assumptions
Solid protocols
Solid designs
Evaluation
Feedback
Learning
Adapting

Practicality
Feasibility
Sharing Responsibility
Everyone Pitching In
Doing What Works
Careful Records

What SHC isn't



- Not a process
- Not an initiative
- Not a series of steps
- Not a circle
- Not a panacea
- Not quick
- Not easy
- Not a one-night stand
- Not for the weak at heart

History and evolution of SHC

- Late 1990s & early 2000s – core concepts get traction in migratory bird joint ventures.
- 2004 & 2005 – Refined & and packaged by “NEAT-niks”.
- June 2006 -- NEAT report produced & adopted.
- 2007-2008 - - Awareness & use increased modestly.
- 2009 – Traction increased big time as concern for climate change grows and funding arrives.

The Scent of Money

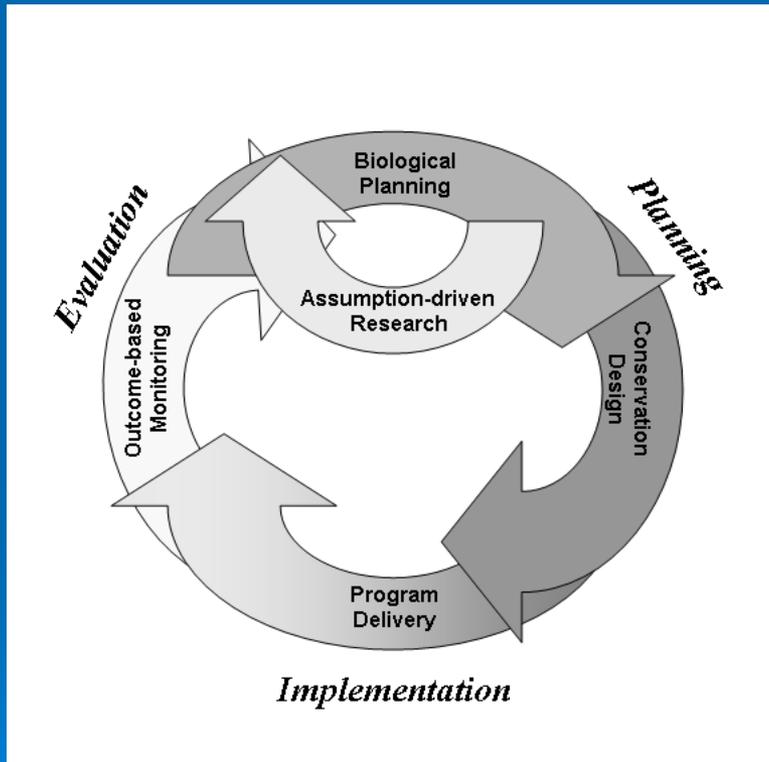


Things we need to recognize

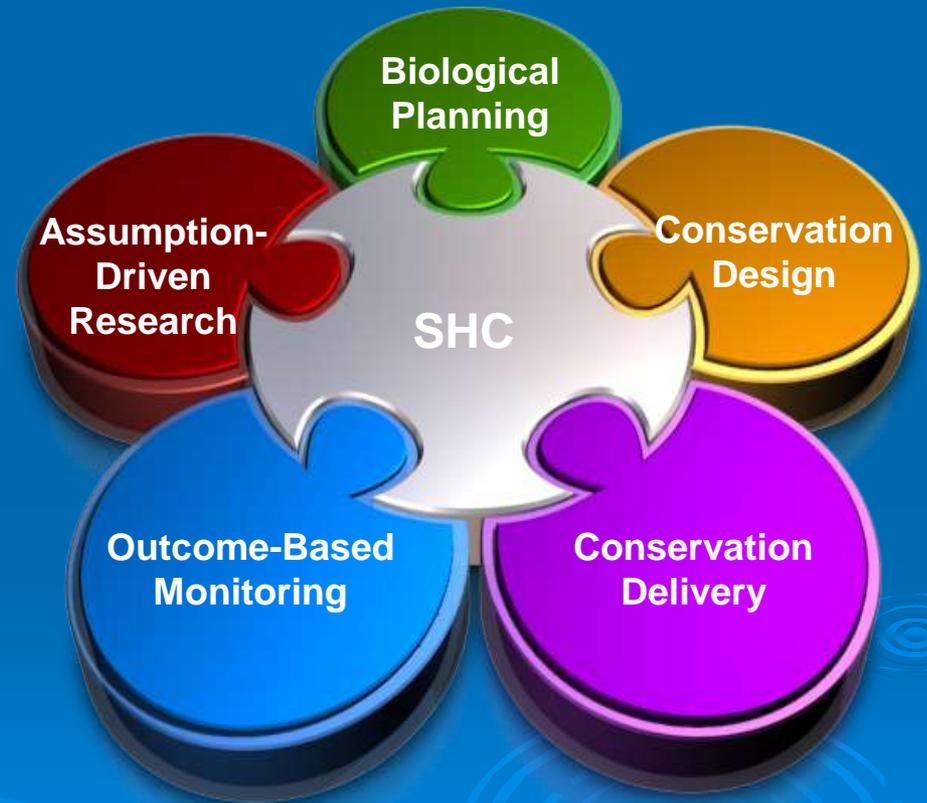
- It's five components or elements
- Realities of SHC
 - I -- Documentation
 - II – Demanding, but not complex
 - III – Not a simple circle
 - IV – Clear requirements
 - Rigor
 - Choices
- Realities of applying SHC



SHC's **Five** Components



Model A



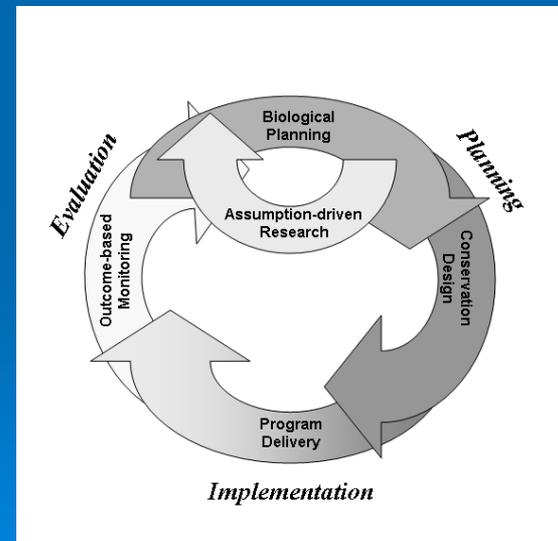
Model B

Realities - I

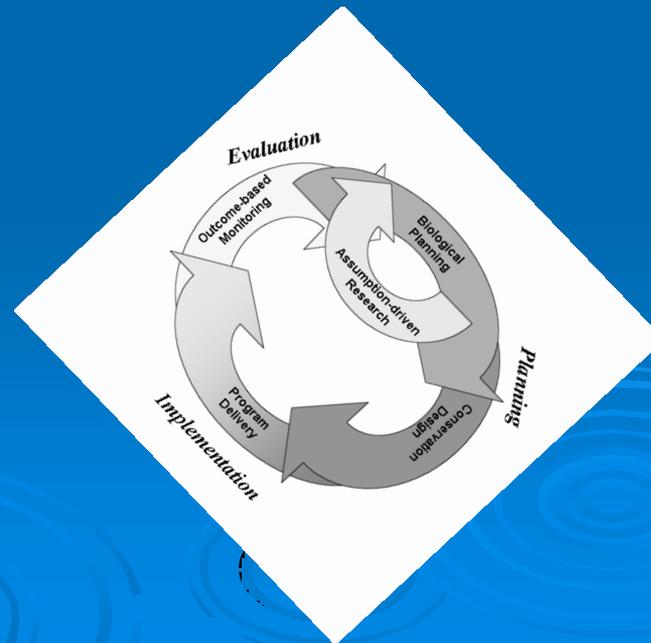
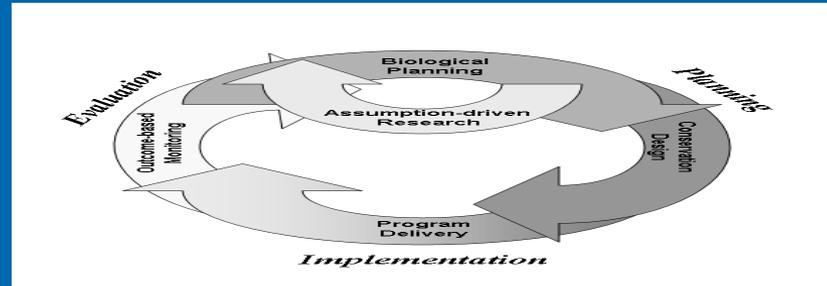
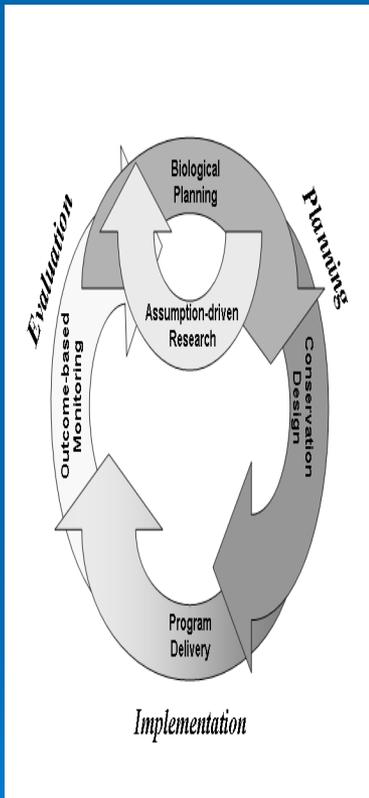
- SHC is neither described nor documented sufficiently.
- SHC is not the subject of sufficient training or education.
- AM is amply described & documented.
- AM is the subject of ample education & training.

Realities - II

- SHC is difficult & demanding, but not complex or complicated.
- SHC demands key things.
 - Rigor
 - Flexibility
 - Transparency
 - Learning
 - Choices



Realities - III



Realities - IV

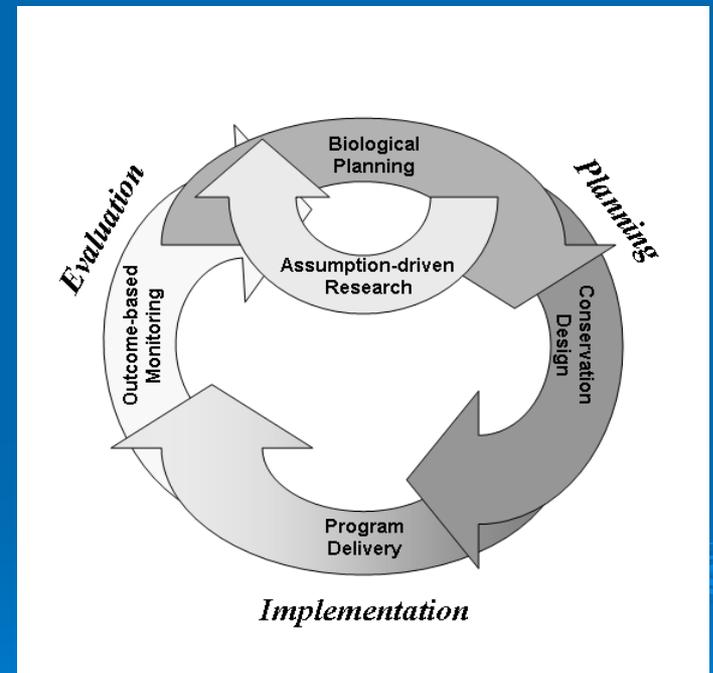
It Requires:

- **Rigor**
- Competence
- **Choices**
- Confidence without arrogance
- Comfort with:
 - transparency
 - accountability
 - not being the big dog
 - sharing & partnering
 - modeling & prediction
 - uncertainty
 - mathematics
- **Firm grip on reality**



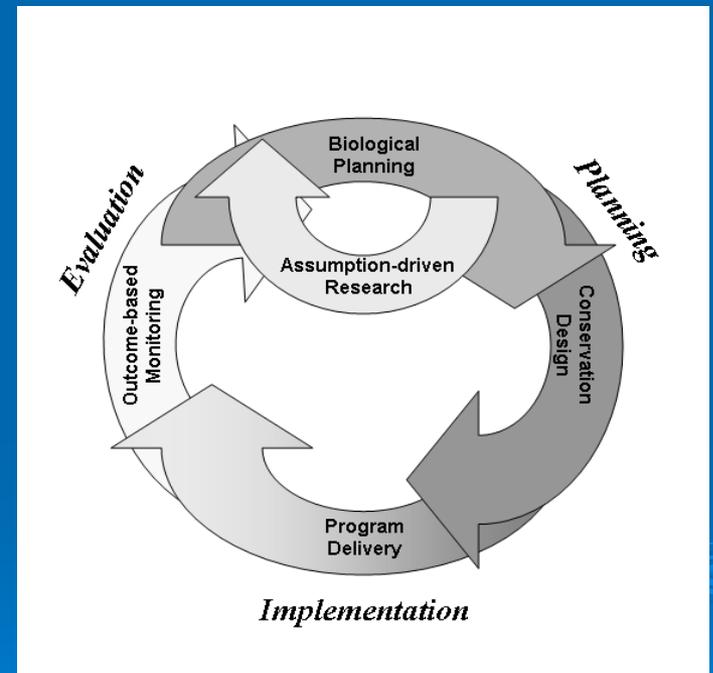
Rigor - I

- Five steps – AM
- Explicit objectives
- Measurable objectives
- Planning-intensive
- Scientifically-defensible actions
- Scientifically-defensible methods



Rigor - II

- Scientifically defensible assumptions
- Societally-defensible activities
- Planning-intensive
- Model “heavy”
- Intelligent learning, not trial-and-error



Choices

- Many people make the mistake of looking at SHC through a single lens - - **Science**.

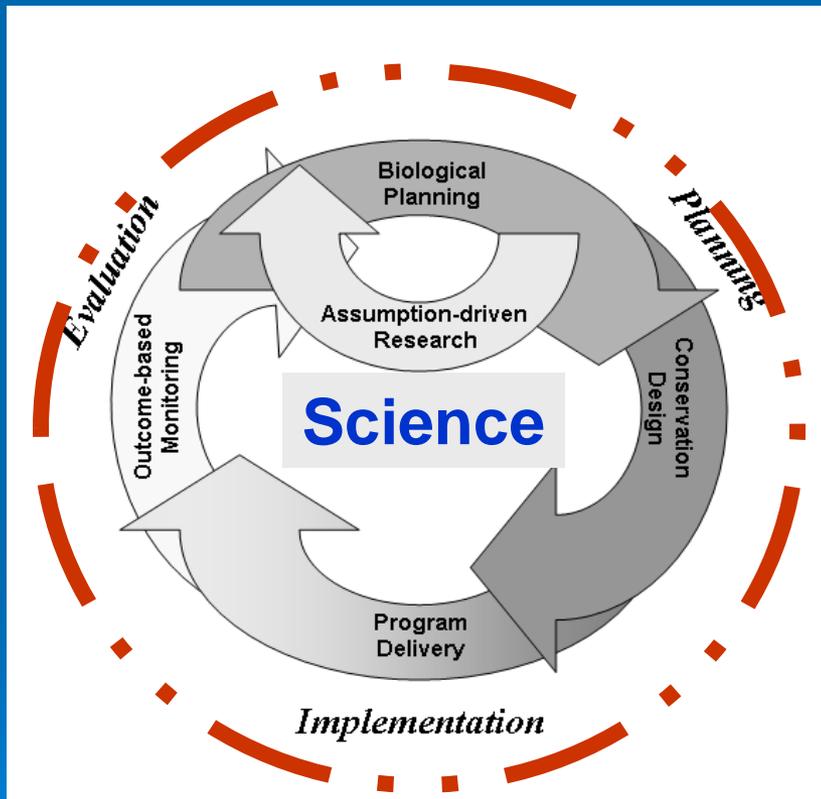


Realities of applying SHC

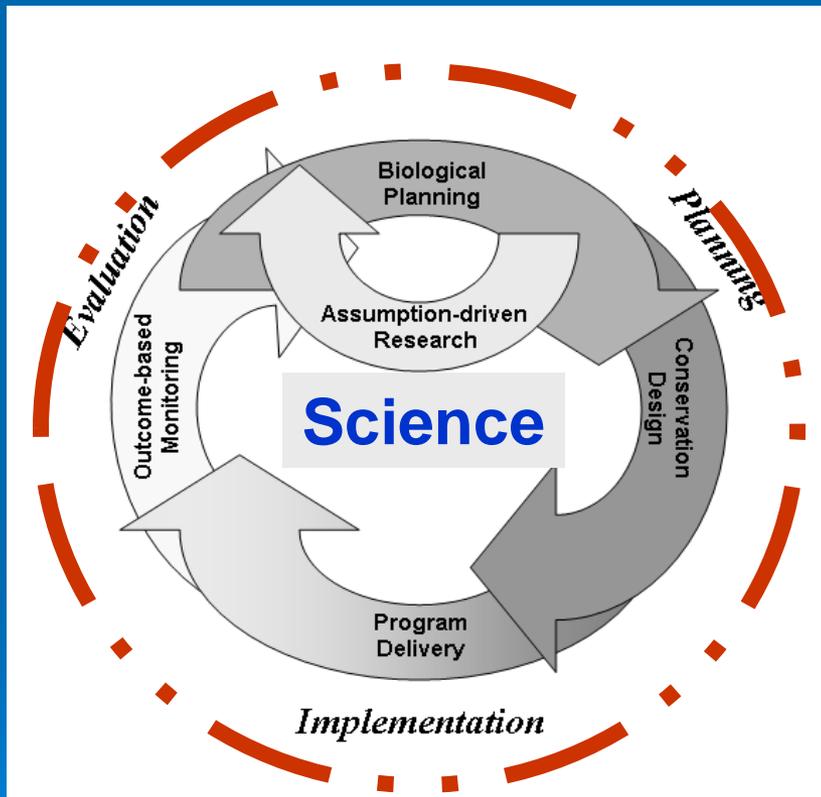
- Four kinds of realities and choices:
 - Science
 - Resource management
 - Resource administration
 - Human (“you”)



Resource management realities



Resource management realities

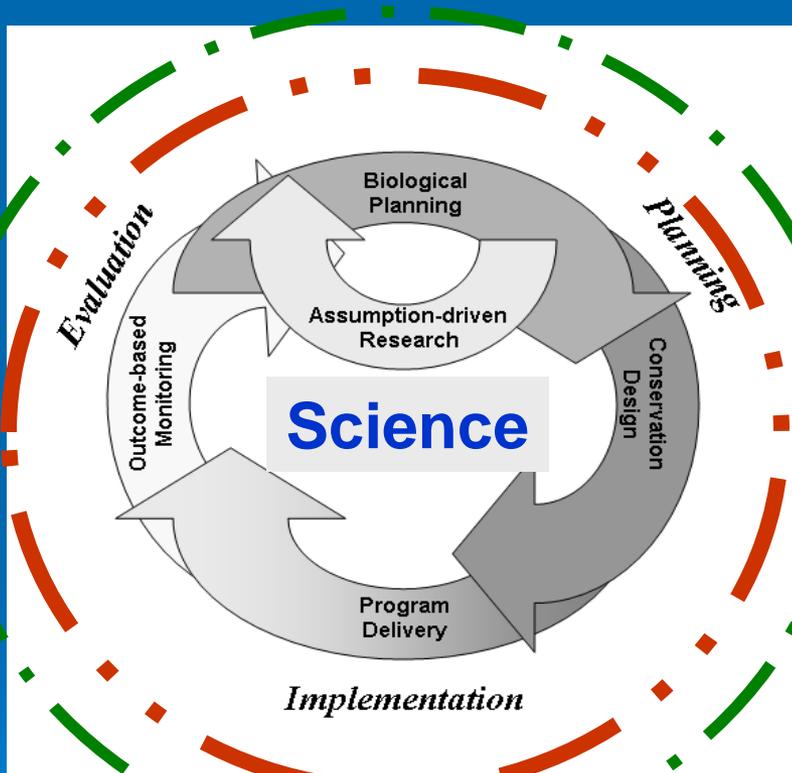


Resource Management Realities

- Different management objectives
- Different management tools
- Different scientific training
- Different science experiences
- Different traditions
- Different science competencies
- Lots of management options
- Staff size limitations

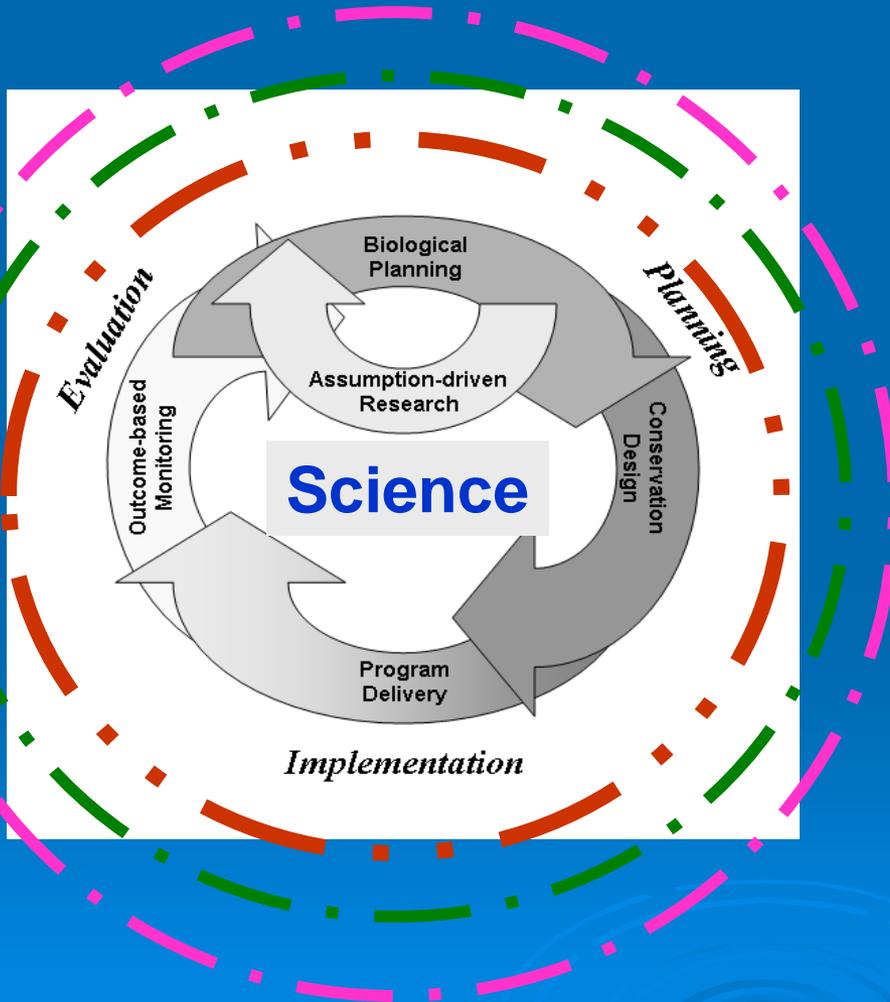
Resource administration realities

Resource Administration Realities



- Multiple jurisdictions
- Different missions
- Different authorities
- Different organizational politics
- Different traditions
- Different constituencies
- Staffing limitations
- Budget limitations
- Different economic influences
- Different political influences
- Different social-cultural influences

Resource administration realities



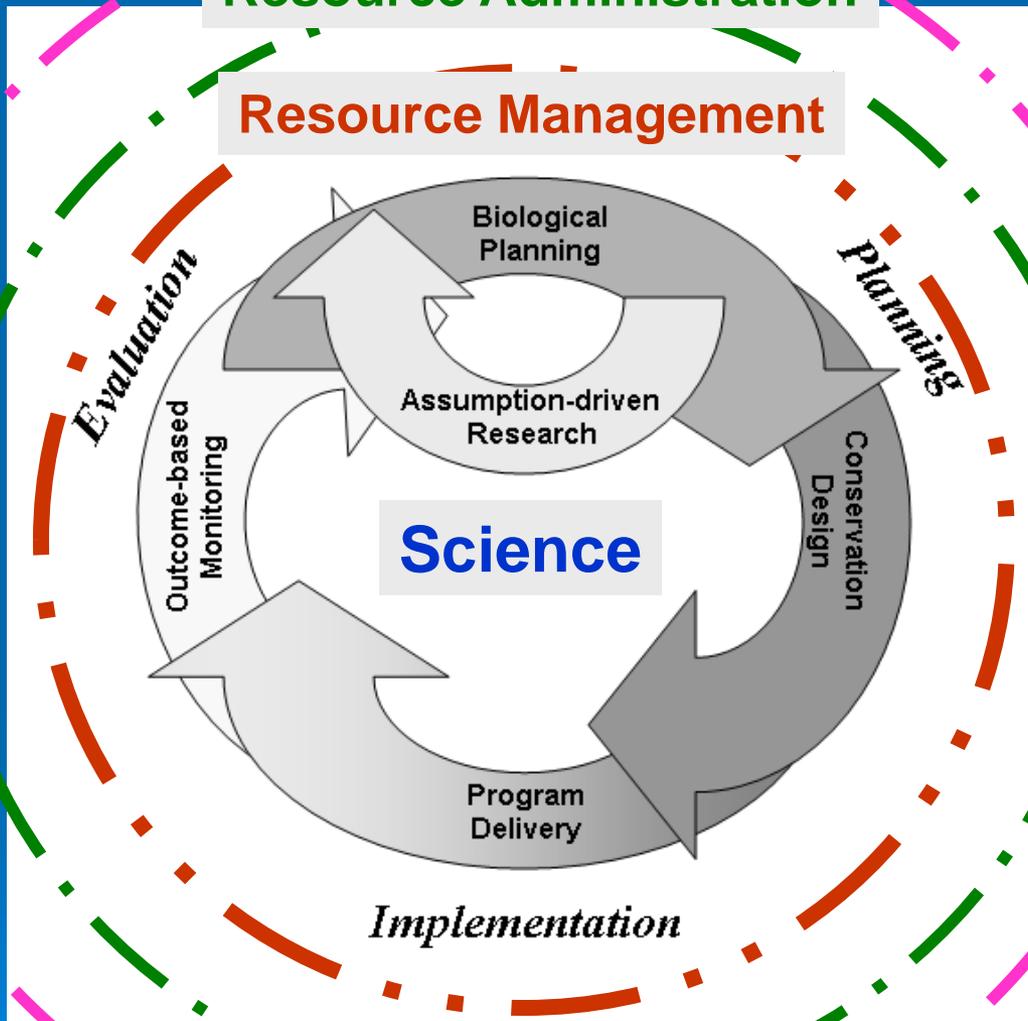
“You” Realities

Rigor
Competence
Choices
Confidence without arrogance
Comfort with:
transparency
accountability
not being the big dog
sharing & partnering
modeling & prediction
uncertainty
mathematics
Firm grip on reality

You

Resource Administration

Resource Management



Thank You

➤ Stay positive

- It was the best of times
- It was the age of wisdom
- It was the epoch of belief
- It was the season of Light
- It was the spring of hope
- We had everything before us

A Tale of Two Cities
Charles Dickens

