



Gulf Coast Joint Venture: A Bird Habitat Conservation Partnership

Southwest Region All-Employee Meeting

July 8, 2014

Barry Wilson, GCJV Coordinator

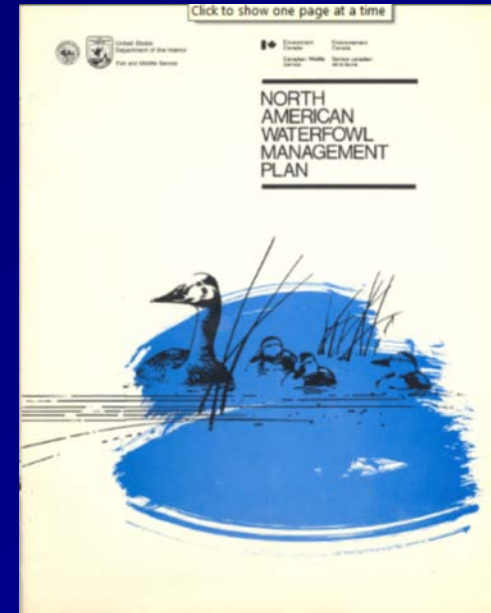
What are Migratory Bird Joint Ventures?

Originated in 1986 NAWMMP

“Joint ventures should be encouraged as a means for governments and private organizations to cooperate in the planning, funding and implementation of projects to preserve or enhance waterfowl habitat.”

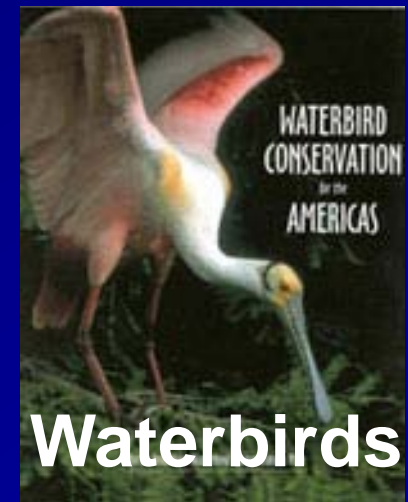
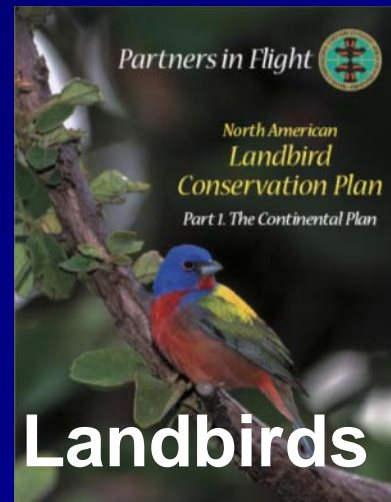
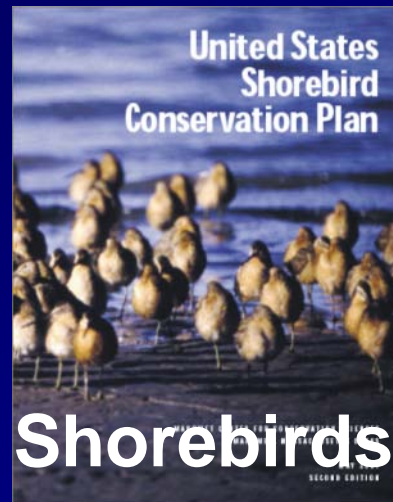
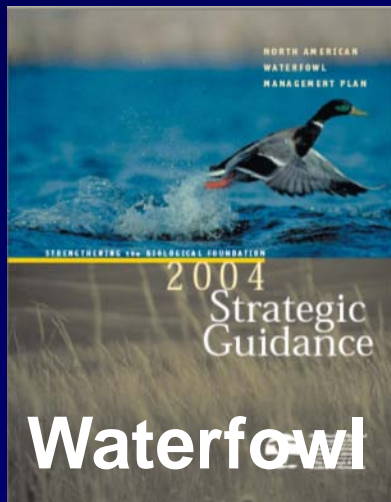
Defined in USFWS Manual (721 FW6)

“Self-directed partnerships of agencies, organizations, corporations, tribes, or individuals that have formally accepted the responsibility of implementing national or international bird conservation plans within a specific geographic area or for a specific taxonomic group”



What are Migratory Bird Habitat Joint Ventures?

Regional partnerships to deliver national or international bird conservation plans



FWS JV Program vs JV Partnerships

- The role of the Service's JV Program is to facilitate and empower JV Partnerships to collaboratively ...
 - determine how much habitat (and when and where) is needed to support desired populations of birds,
 - find resources to deliver habitat toward objectives, and
 - track progress and refine objectives through focused applied science.

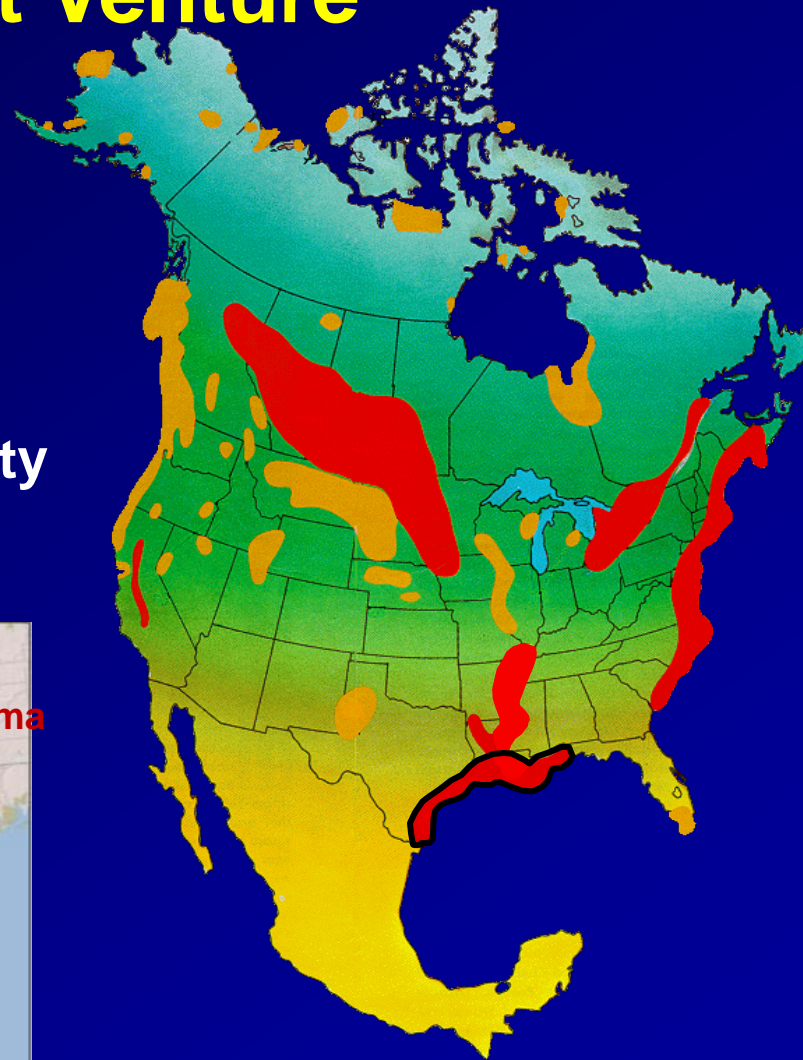
Gulf Coast Joint Venture

The GCJV is the regionally based, biologically driven, landscape oriented, volunteer partnership of private, state, and federal conservation organizations dedicated to delivery of habitat conservation important to priority bird species within the joint venture region.

Gulf Coast JV Boundary

Texas Louisiana Mississippi Alabama

5 Initiative Areas



1986 NAWMP:
Waterfowl habitat areas
of major concern in
Canada and the U.S.

Who owns the largest total acreage of private lands within the United States?

- a) Ted Turner
- b) The Conservation Fund
- c) ConocoPhillips**
- d) The Nature Conservancy

Gulf Coast Joint Venture



Management Board

State Agencies

Texas Parks & Wildlife Department

Louisiana Department of Wildlife & Fisheries

Louisiana Department of Natural Resources

Mississippi Department of Wildlife, Fisheries, & Parks

Alabama Department of Conservation & Natural Resources

Federal Agencies

U.S. Fish & Wildlife Service (Regions 2 & 4)

U.S.D.A. – N.R.C.S. (liaison)

U.S. Army Corps of Engineers

U.S. Geological Survey

NOAA-Fisheries (vacant)

Non-governmental

The Nature Conservancy

Ducks Unlimited, Inc.

Gulf Coast Bird Observatory

Other

ConocoPhillips

Staff

Coordinator

Barry Wilson (FWS)

GIS/Remote Sensing Analysts

Mark Parr (FWS)

Nicholas Enwright (USGS)

Bird Conservation Specialist

Bill Vermillion (FWS)

Monitoring Coordinator

Steve DeMaso (FWS)

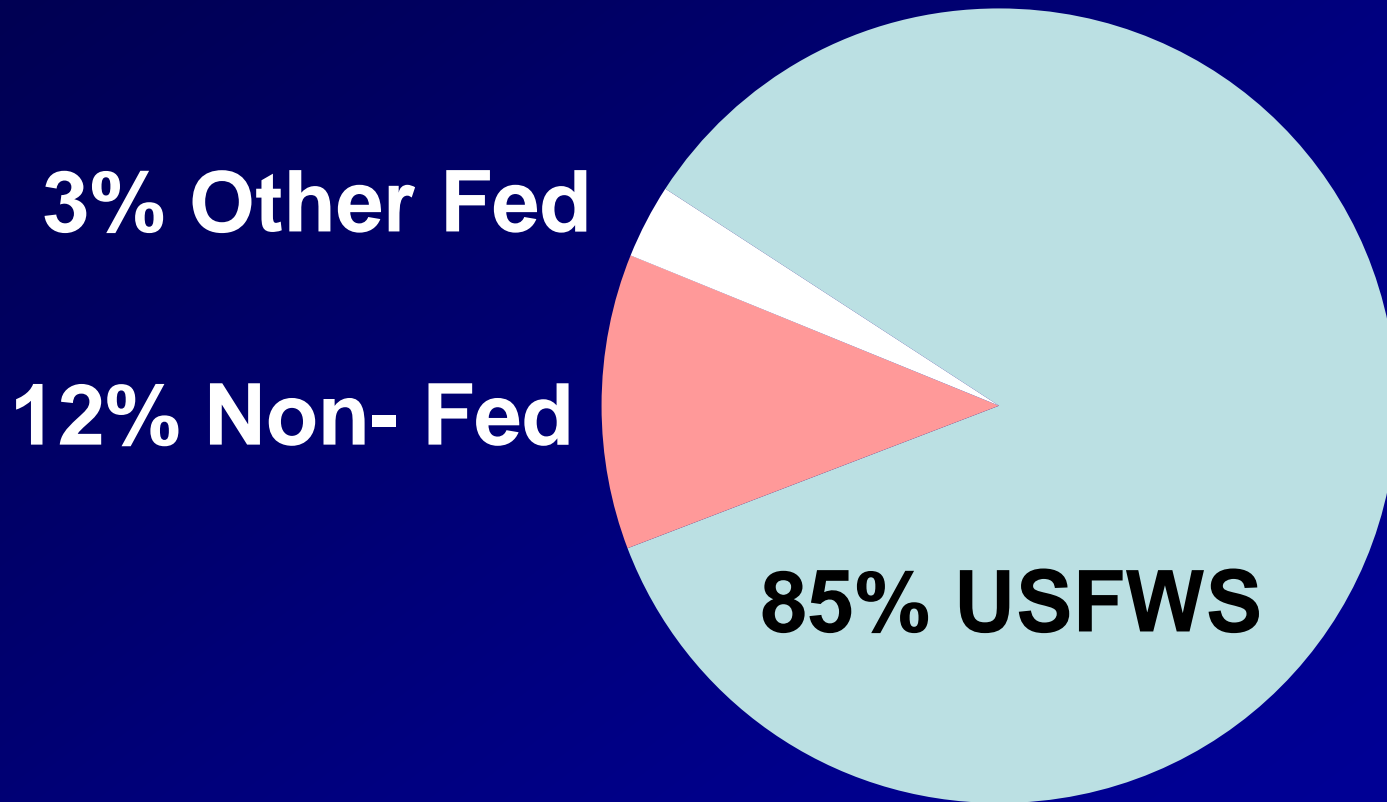
Biological Team Leader

Michael Brasher (DU)

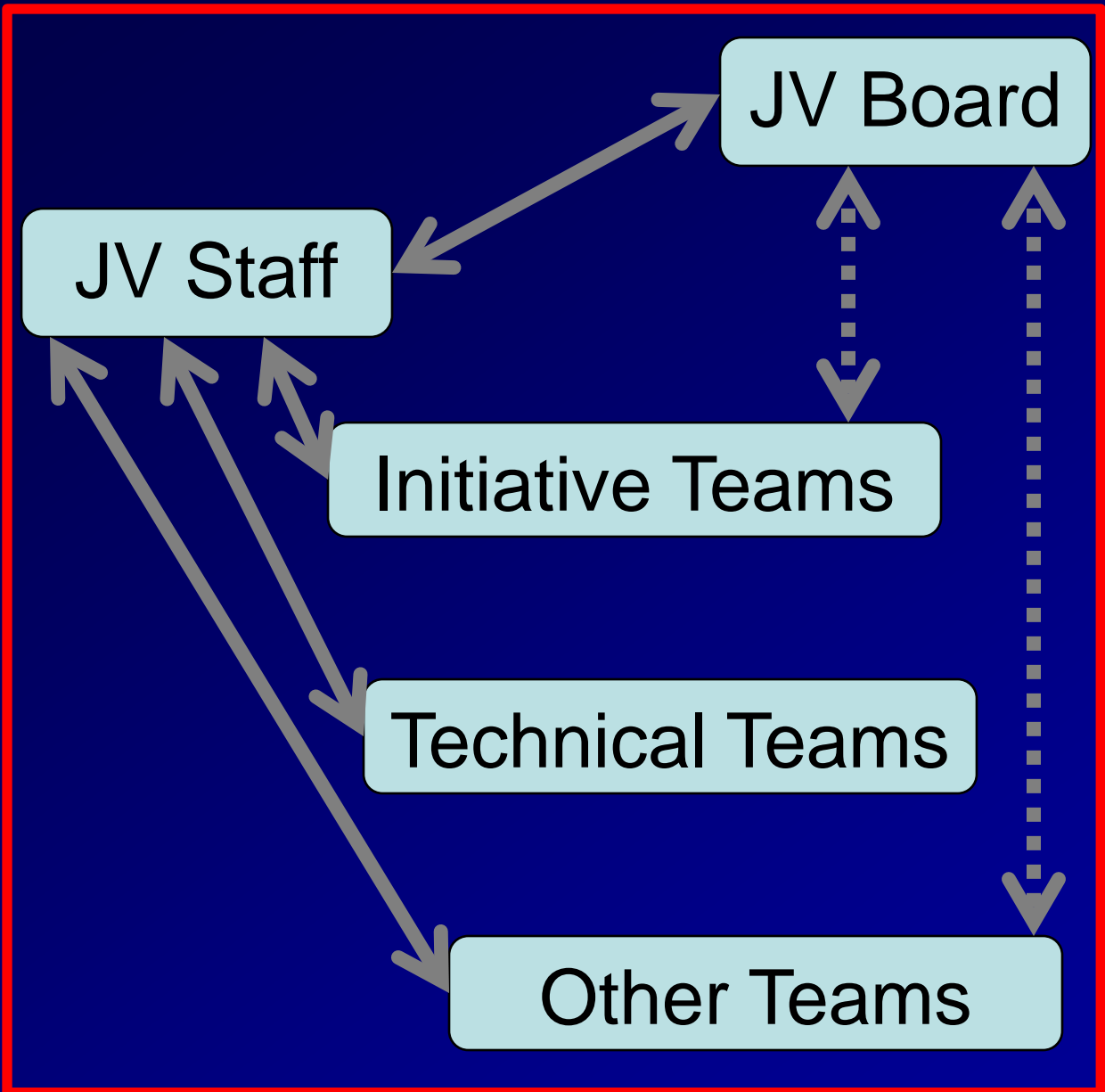
Habitat Delivery Specialist

Jon Hayes (TxPWD/ABC)

GCJV Administrative Funds FYs 2012/2013



Gulf Coast Joint Venture Partnership



Initiative Areas

Tech Teams

- GIS
- Waterfowl
- Shorebird
- Landbird
- Waterbird



GCJV Mission:

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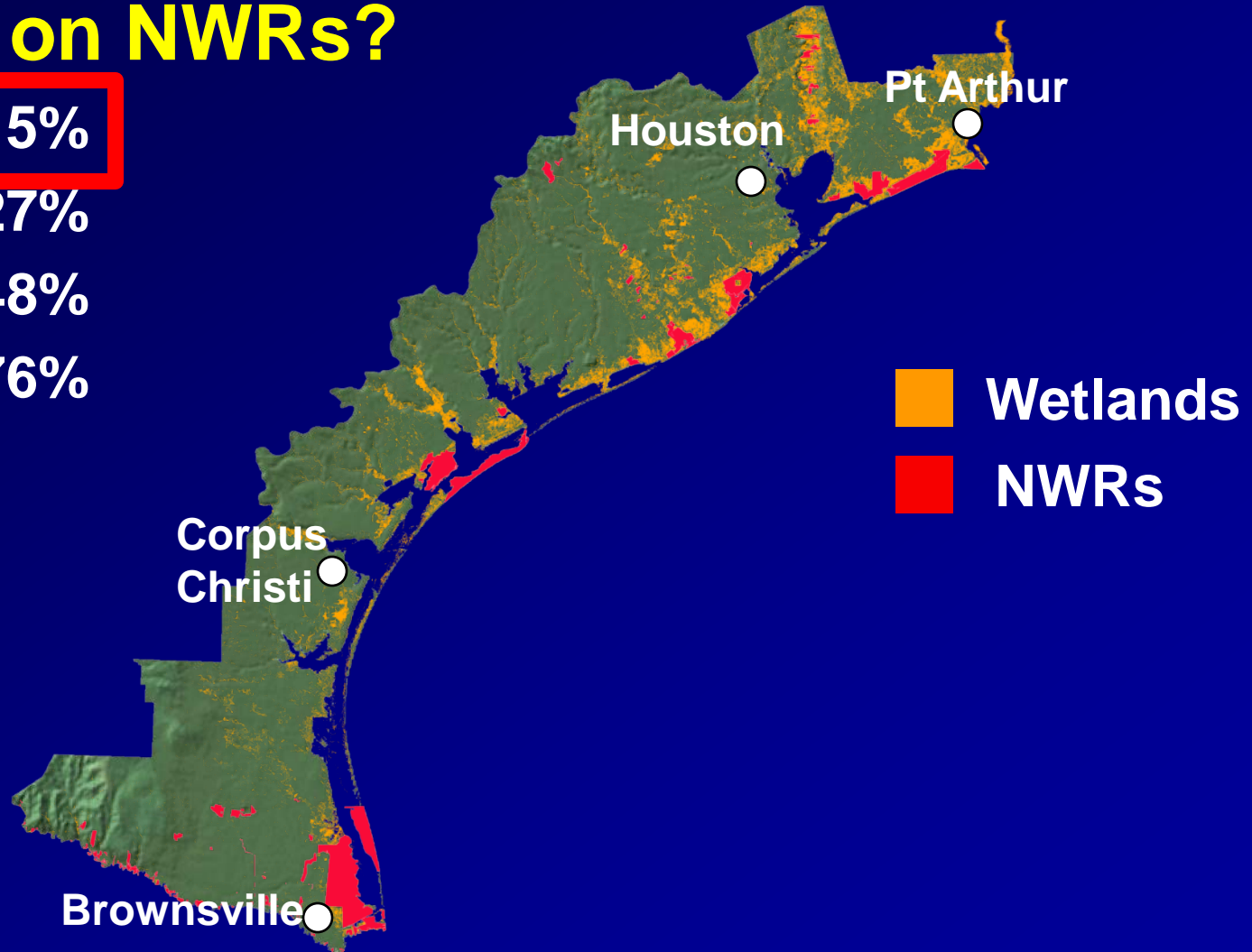
What proportion of wetlands within the Region 2/Texas portion of the GCJV occur on NWRs?

a) 15%

b) 27%

c) 48%

d) 76%



Source: 2005 C-CAP/NLCD Landcover

Managed Lands Geodatabase

- Inventory of ...
 - bird habitats
 - management objectives
 - management capabilities... on all public lands
- Web-enabled questionnaire to populate database

Delta Conservation Authority

Home Partners Conservation Projects Data About Us

Phase 1 Management Area Selection

Data Layer Selection

Water Control Structures

Bird Nesting Colonies

Management Units

Logout

DELTA NWR MAP

WATER CONTROL STRUCTURES

Please click on the water control structure for which you wish to enter attribute information.

Referring to the image at left, please select the water control structure for which you wish to enter data.

Delta NWR Water Control Structure 1

Submit

Delta NWR Water Control Structure 1
Delta NWR Water Control Structure 2
Delta NWR Water Control Structure 3
Delta NWR Water Control Structure 4

BIRD NESTING COLONIES

Please click on the nesting colony for which you wish to enter attribute information.

Referring to the image at left, please select the nesting colony for which you wish to enter data.

Delta NWR Bird Nesting Colony 1

Submit

Delta NWR Bird Nesting Colony 1
Delta NWR Bird Nesting Colony 2
Delta NWR Bird Nesting Colony 3
Delta NWR Bird Nesting Colony 4

MANAGEMENT UNITS

Please click on the management unit for which you wish to enter attribute information.

Referring to the image at left, please select the management unit for which you wish to enter data.

Delta NWR Management Unit 1

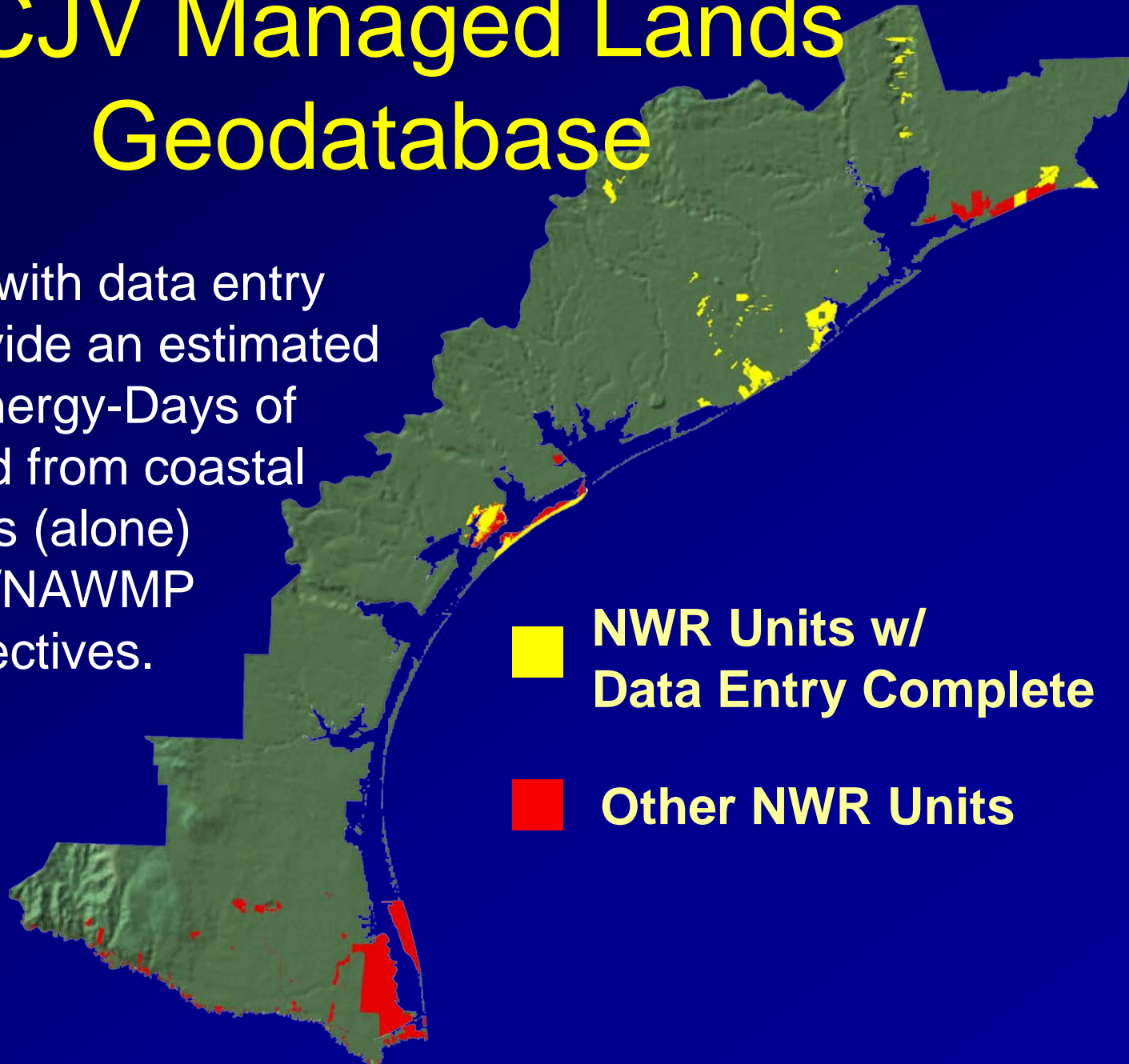
Submit

Delta NWR Management Unit 1
Delta NWR Management Unit 2
Delta NWR Management Unit 3
Delta NWR Management Unit 4

Delta Conservation Authority
P.O. Box 1000, Delta, LA 70348
Phone: 504.233.5555 Fax: 504.233.5555
Website: www.dca.org

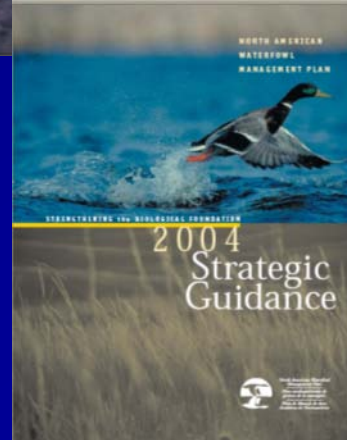
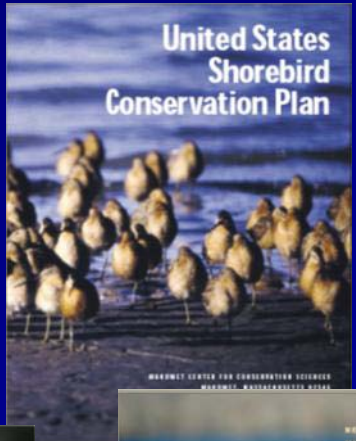
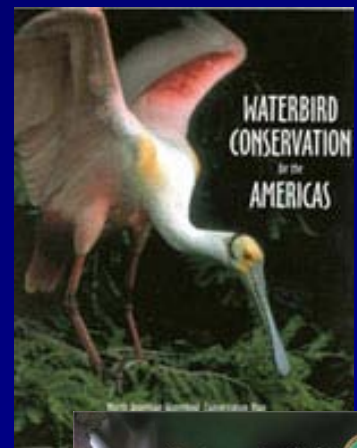
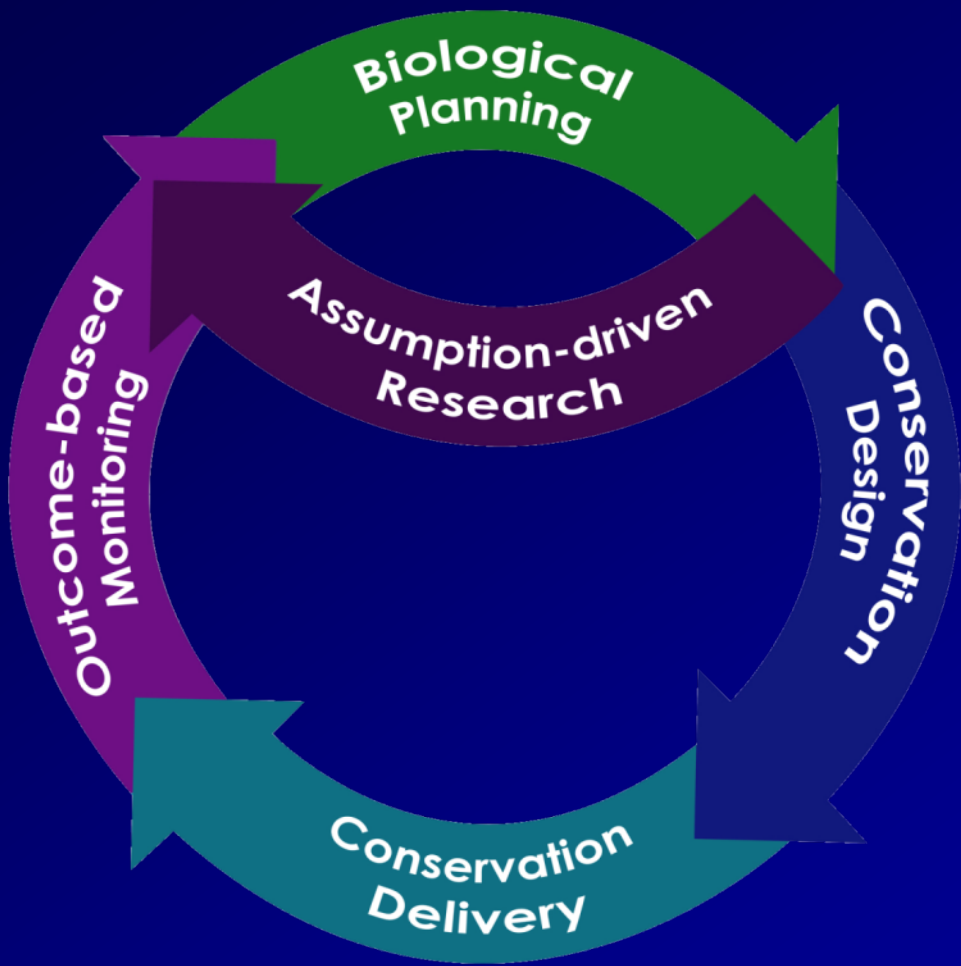
GCJV Managed Lands Geodatabase

Texas NWRs with data entry complete provide an estimated 1.5M Duck-Energy-Days of waterfowl food from coastal marsh habitats (alone) toward GCJV/NAWMP waterfowl objectives.

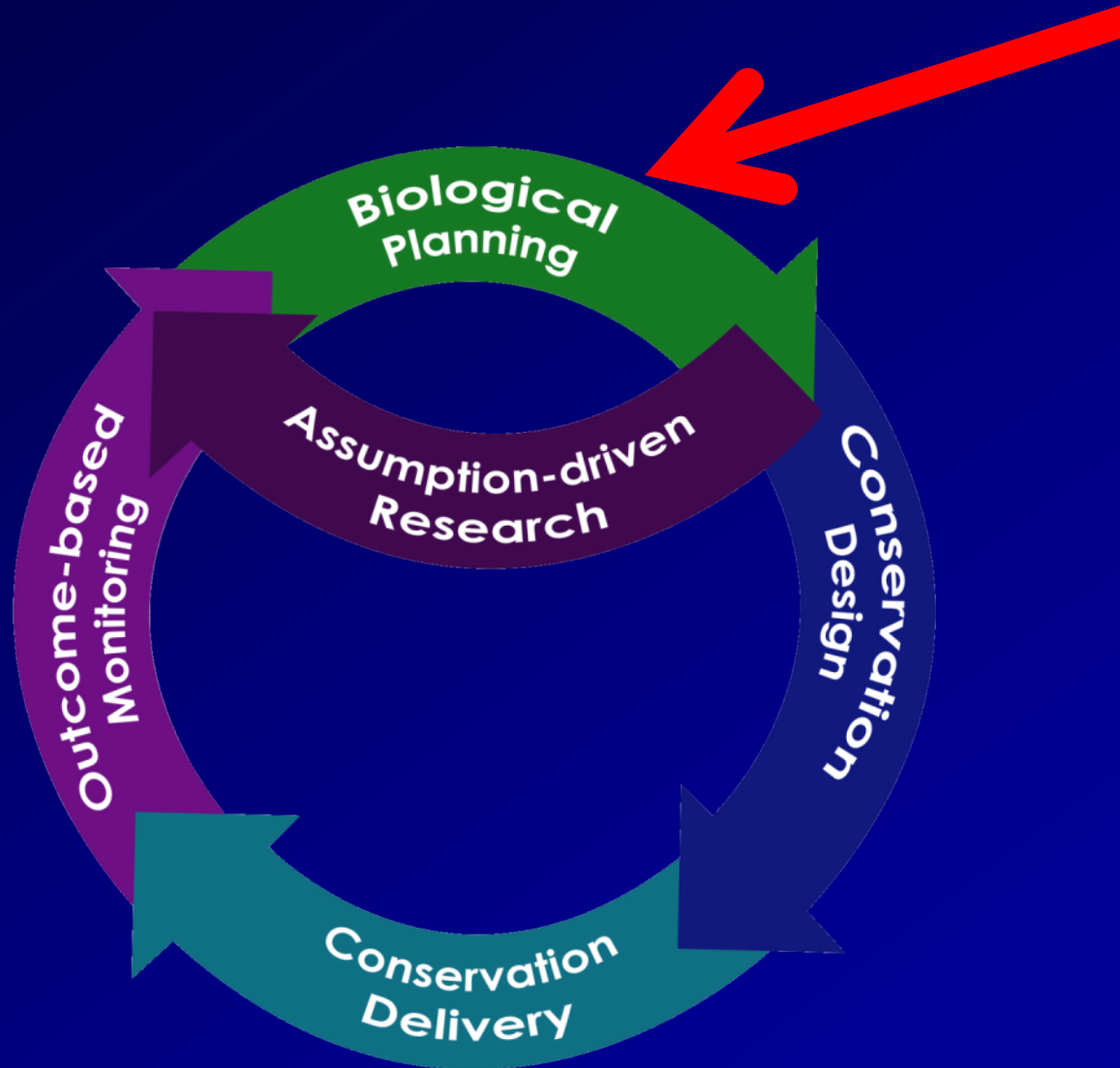


- NWR Units w/
Data Entry Complete
- Other NWR Units

Strategic Habitat Conservation for Birds



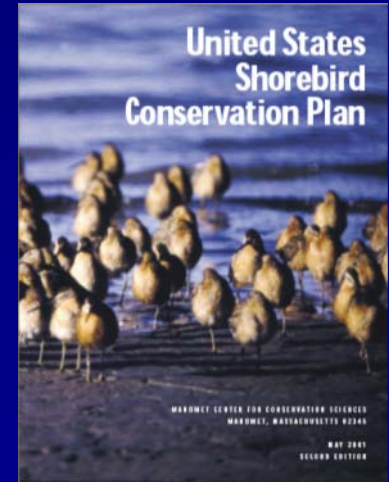
GCJV Shorebird Conservation



GCJV Shorebird Conservation Biological Planning

Continental Guidance

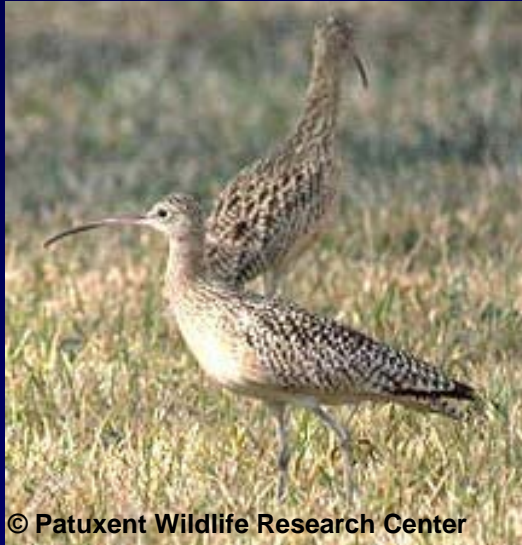
- Objective ~32 million shorebirds
- Gulf Coast is “... one of the most important regions in the U.S...”
- Priority species



GCJV Shorebird Conservation: Biological Planning

Priority Species Using Inland/Managed Habitat

Long-billed Curlew



Short-billed Dowitcher



Buff-breasted Sandpiper



Stilt Sandpiper



Western Sandpiper



GCJV Shorebird Conservation: Biological Planning

Limiting Factors & Habitat-Population Models



- Gulf Coast Population Target = 13.6 million shorebirds
- 8.7 million use inland/managed habitats

• Species-specific habitat use

• Shorebird energetic requirement (EMR) = $912(\text{shorebird body mass})^{0.704}$

• Net energy content of invertebrate prey = $23.8\text{kJ g}^{-1} (0.73) = 17.374\text{ kJ/g}$

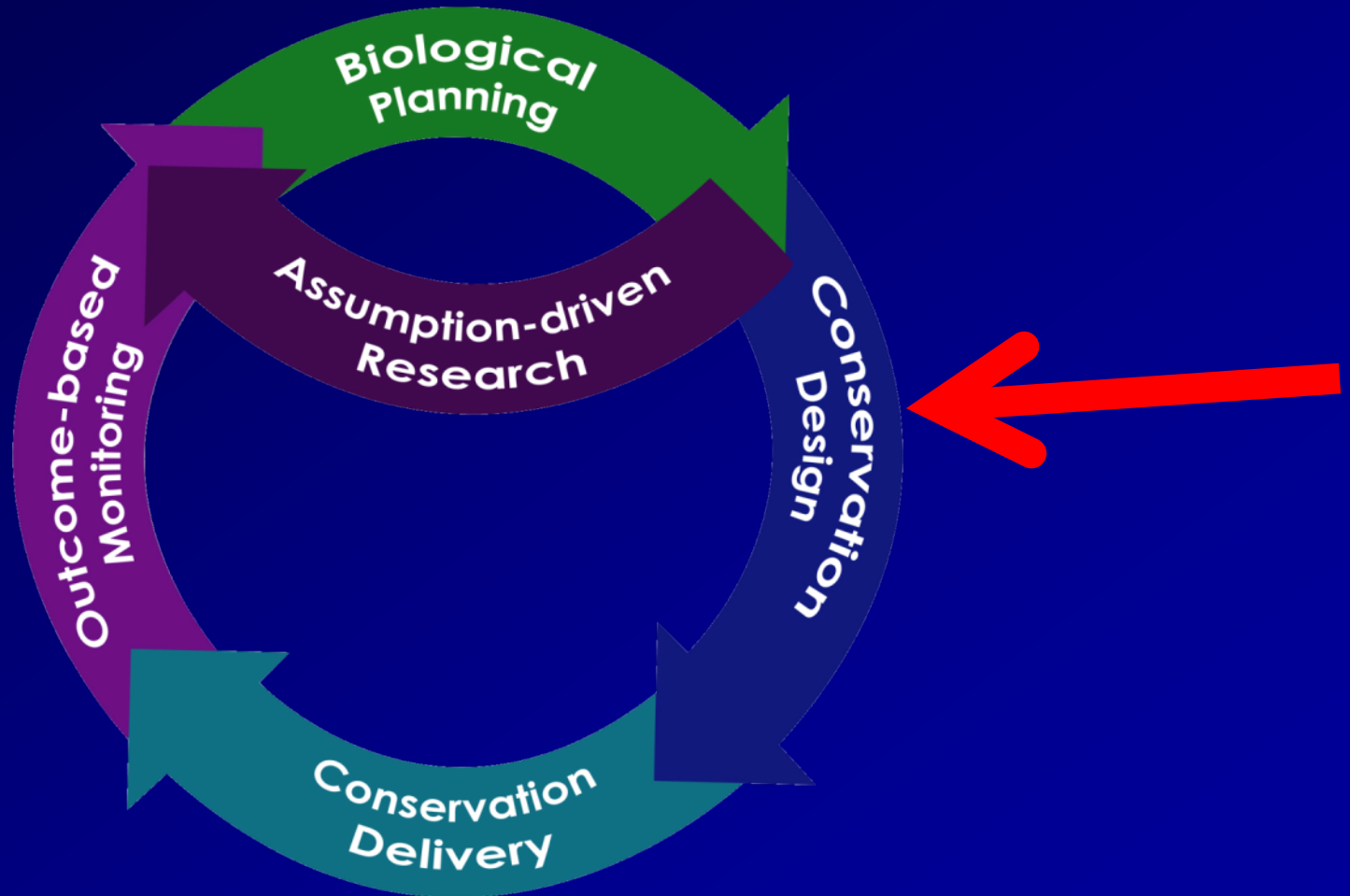
• Daily invert requirement
 $\text{EMR} = (\text{EMR})/d/(17.374\text{ kJ/g})+2g$

• Invertebrate density = 2.4 g/sq m

• Turnover time for transient shorebirds = 10 d

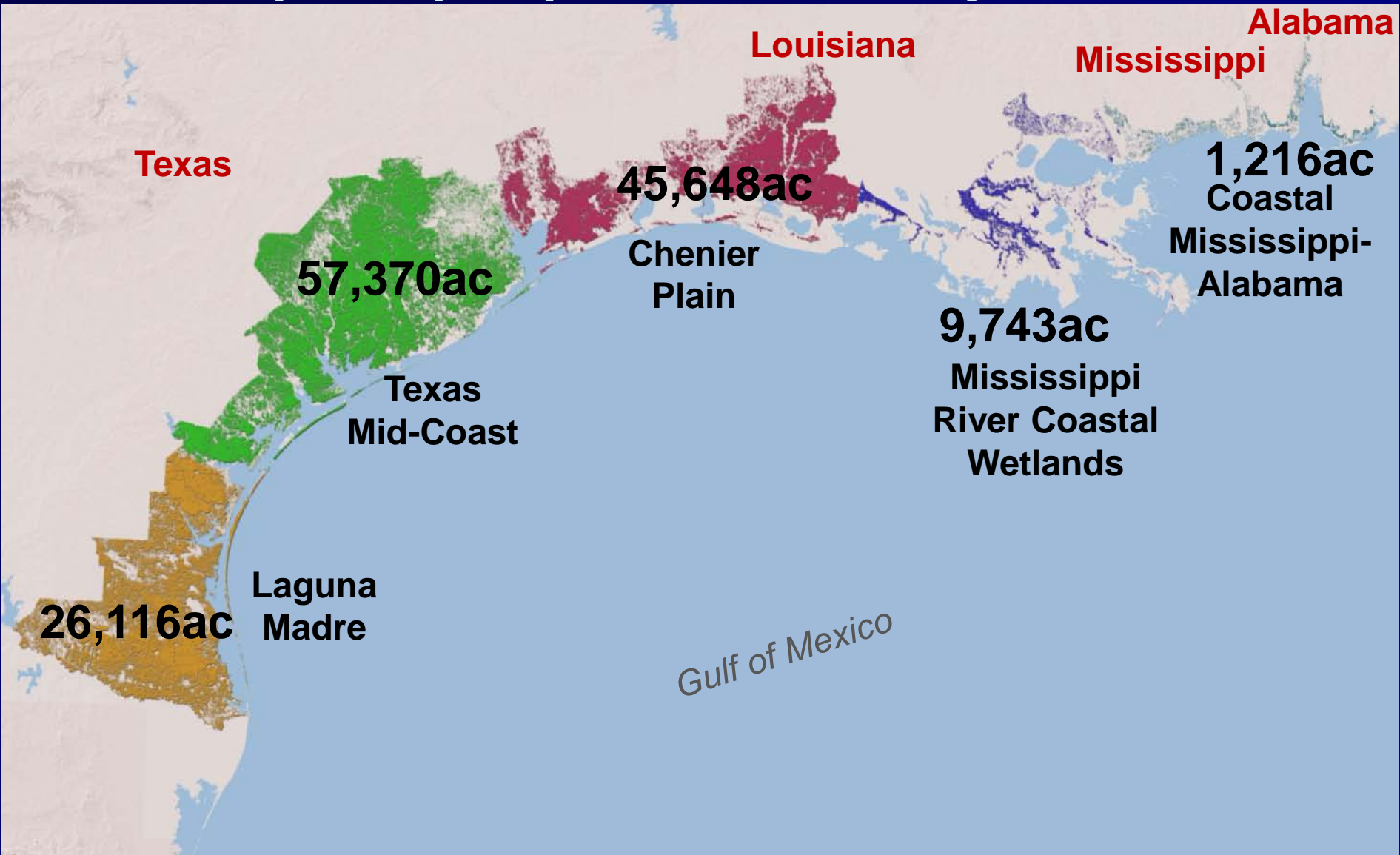
- **Habitat Objective = ~140,000ac**
July-Nov Saturated or Shallow Flooded
Ricefields (Active or Idle) or Moist Soil

GCJV Shorebird Conservation

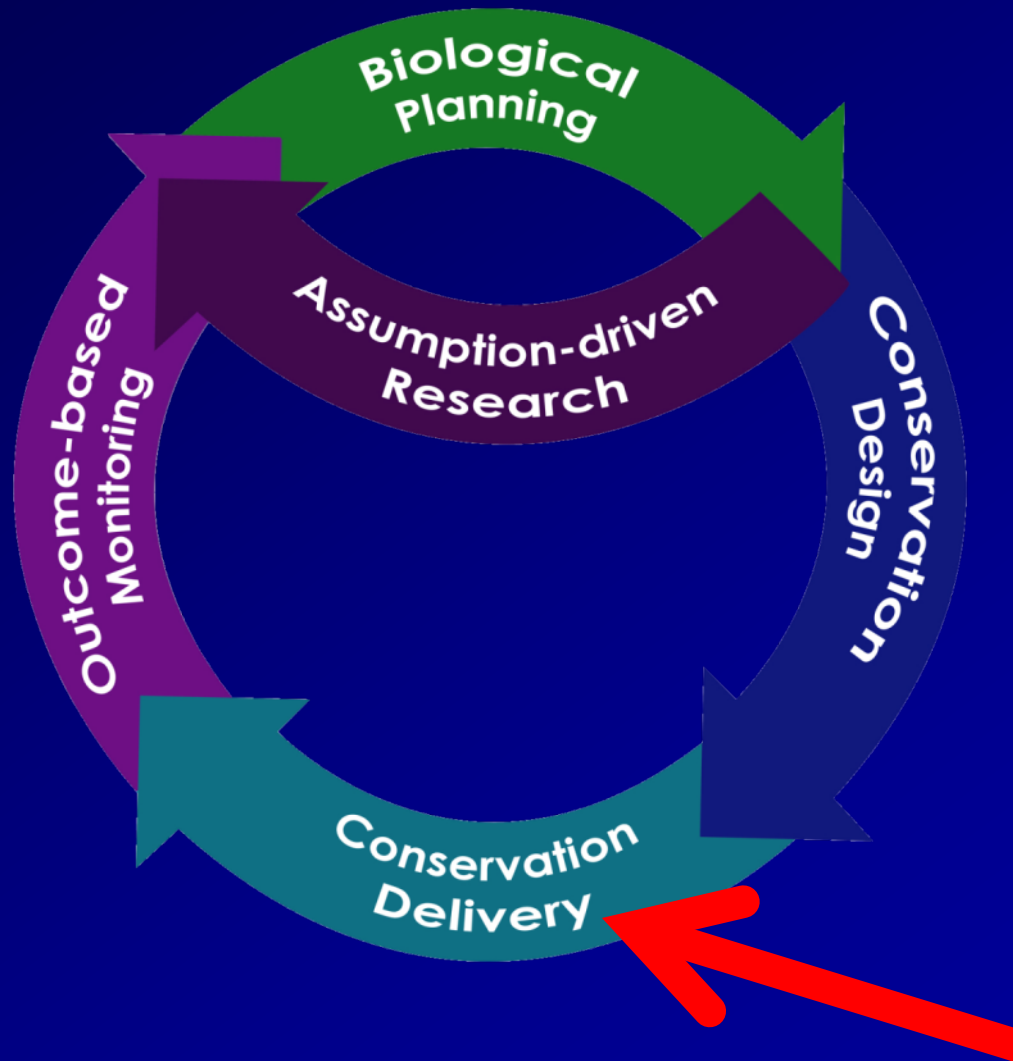


GCJV Shorebird Conservation: Conservation Design

Spatially-explicit Habitat Objectives



GCJV Shorebird Conservation



What proportion of the GCJV budget is typically spent on direct habitat delivery (e.g., acquisition, restoration, or enhancement of habitats)?

- ~~a) 5%~~
- ~~b) 15%~~
- ~~c) 35%~~
- ~~d) 75%~~

GCJV Shorebird Conservation Habitat Delivery

USDA Farm Bill

2007 State Acre For wildlife Enhancement

2010 Migratory Bird Habitat Initiative (WHIP/EQIP)

2011 Conservation Reserve Enhancement Program

2012 Migratory Bird Habitat Initiative (EQIP-LA)

Initiative Teams

North American Wetlands Conservation Act

USFWS Coastal Program

Private Land Partnership Programs

Texas Prairie Wetlands Project

Waterfowl Rest Area Program

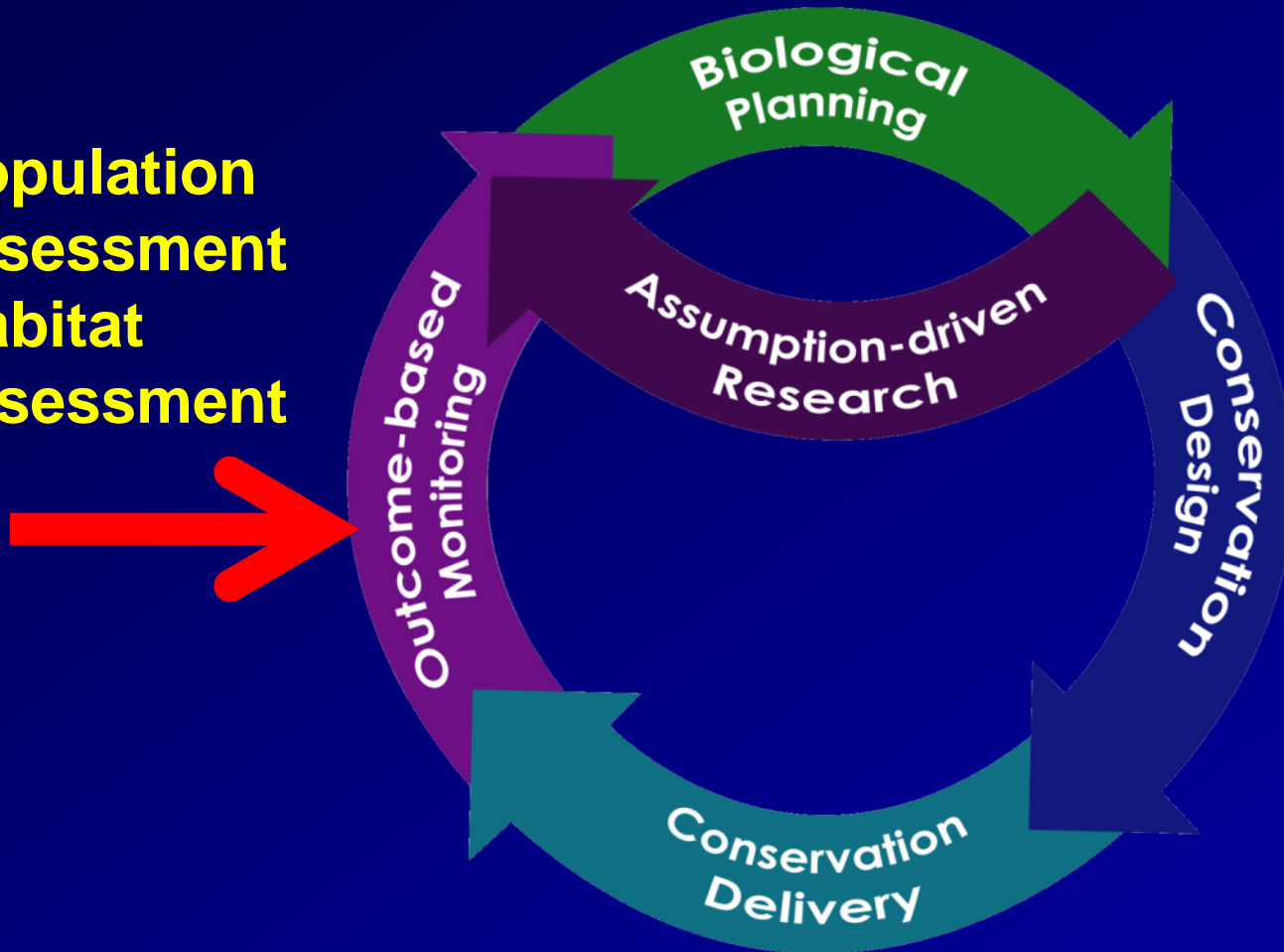
Public Lands

NWRS (e.g., via Comprehensive Conservation Plans)

WMAs

GCJV Shorebird Conservation

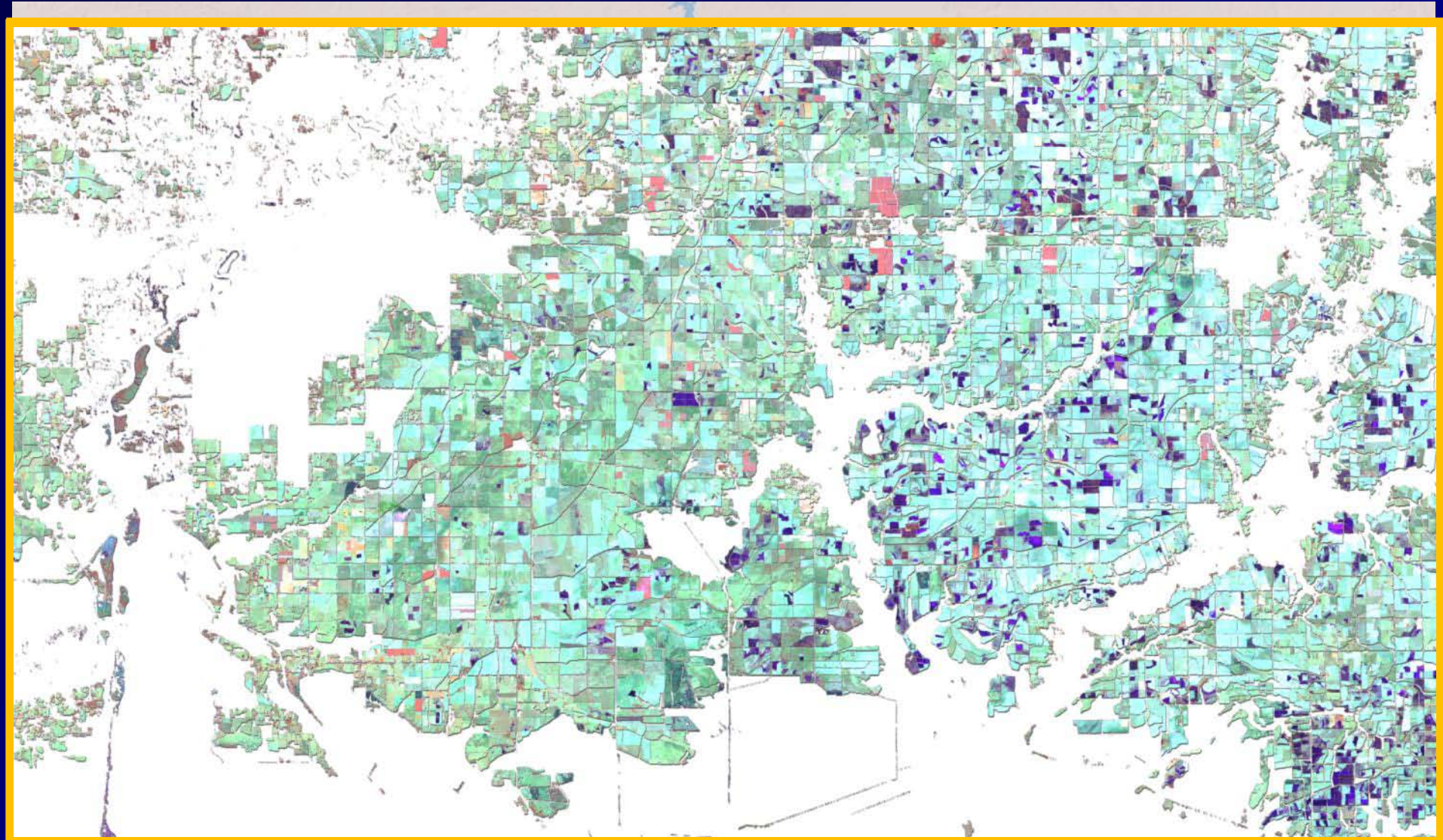
- Population assessment
- Habitat assessment



GCJV Shorebird Conservation Habitat Assessment

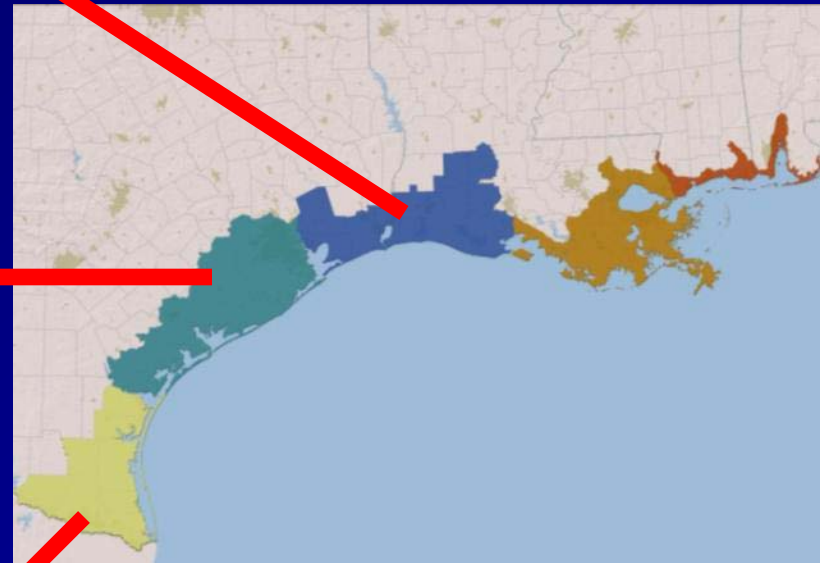
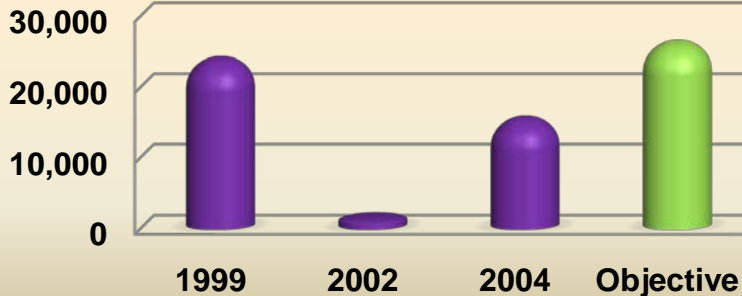
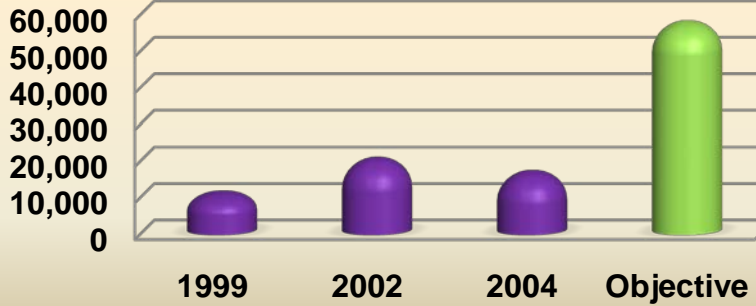
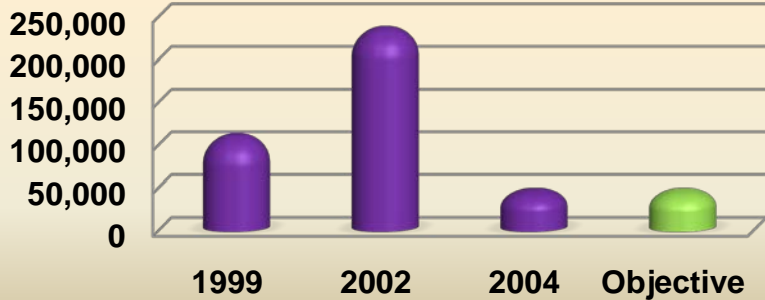


GCJV Shorebird Conservation Habitat Assessment



GCJV Shorebird Conservation Habitat Assessment

Acres of Shorebird Habitat



GCJV Shorebird Conservation



Fall Migrating Shorebirds



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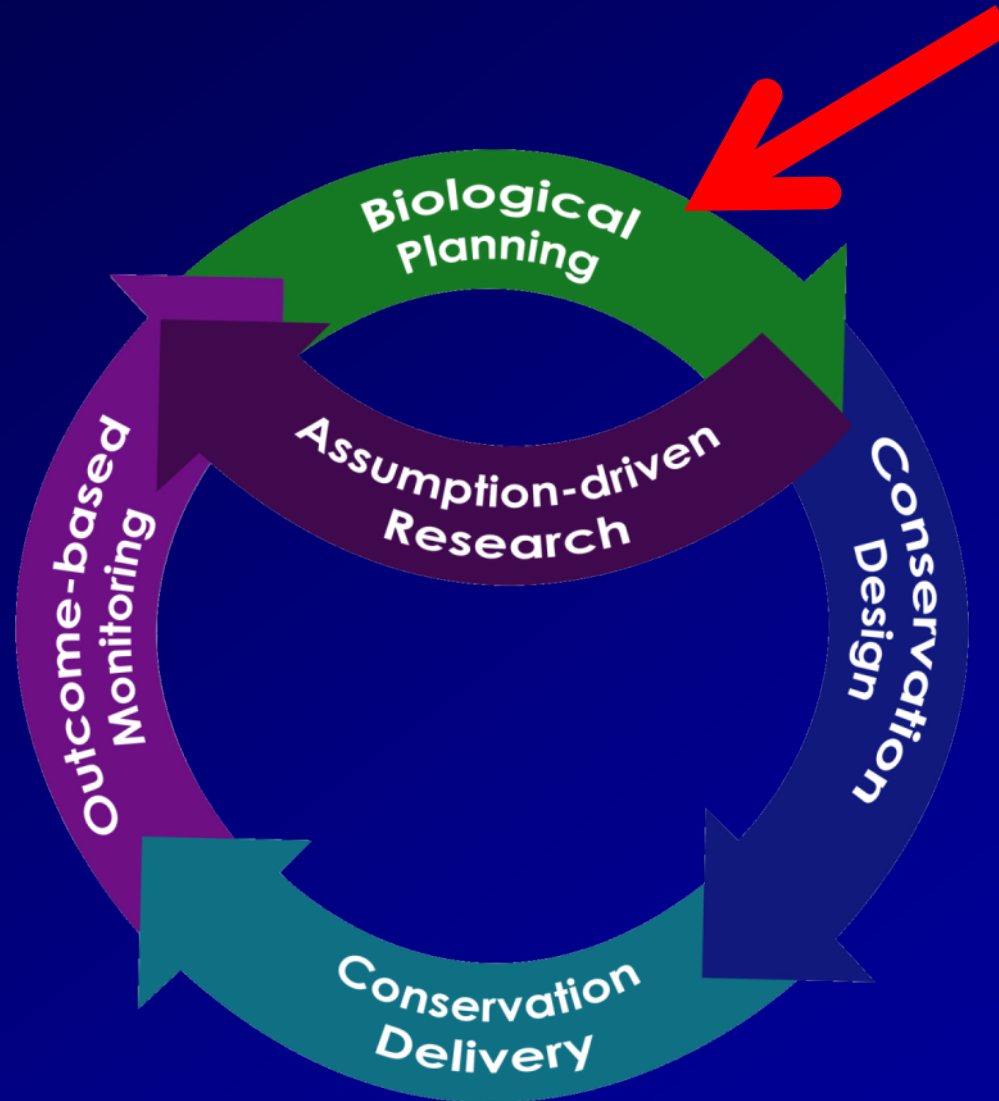
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Invertebrate density = 2.4 g/sq m



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GCJV Shorebird Conservation



Questions?

www.gcjv.org

www.mbjv.org