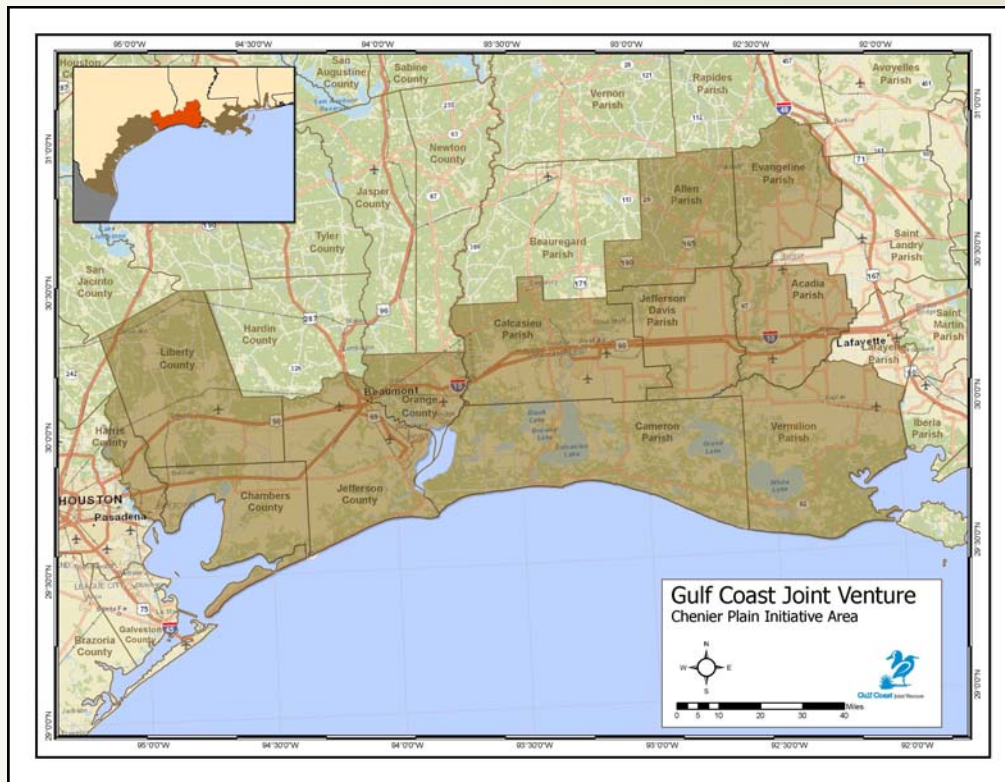


# Gulf Coast Joint Venture Chenier Plain Initiative Area

## Introduction

The **Gulf Coast Joint Venture** (GCJV) is a bird habitat conservation partnership that spans the coastal portions of Alabama, Mississippi, Louisiana, and Texas. The GCJV mission is to advance conservation of important bird habitats through biological planning, implementation of habitat conservation activities, and evaluating the planning and implementation process through monitoring and research. GCJV conservation activities focus on waterfowl, landbirds, shorebirds, and waterbirds. The GCJV promotes habitat delivery, research, and monitoring activities that address the priorities identified by the partnership.

For conservationists seeking to address GCJV priorities for the Chenier Plain, which includes portions of Louisiana and Texas, this document summarizes priority bird conservation actions for the area. Detailed descriptions and derivations are available at [www.gcjv.org/documents.php](http://www.gcjv.org/documents.php).



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# Waterfowl

## Migrating and Wintering Waterfowl

Species addressed in GCJV planning: Mallard, Northern Pintail, Gadwall, American Wigeon, Green-winged Teal, Blue-winged Teal, Northern Shoveler, Mottled Duck, Canvasback, Redhead, Ring-necked Duck, Greater & Lesser Scaup, Lesser Snow Goose, Greater White-fronted Goose, and Canada Goose

Population Objectives: 5,768,567 ducks and 452,353 geese; refer to Table 1 in the **Chenier Plain Initiative Area Plan** for objectives by species and state

Habitat Objectives: Table 1. Migrating/wintering waterfowl habitat objectives for the Chenier Plain IA.

Habitat Type	Aug-Oct Flooded Acres		Nov-Mar Flooded Acres	
	Louisiana	Texas	Louisiana	Texas
Harvested Rice 1st Crop	25,451	8,000		
Harvested Rice 2nd Crop			20,145	2,202
Unharvested Rice 2nd Crop			20,145	2,202
Moist-soil	4,242	16,000	8,604	59,915
<b>Total (Rice and Moist-soil)</b>	29,693	24,000	48,894	64,319
Coastal Marsh	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>

<sup>1</sup>Not yet available.

Biological Foundation: Bio-energetic models yield acreage of foraging habitats necessary to meet dietary demands of population objectives

### Conservation Activities:

- Reduce erosion of coastal marsh through shoreline and bank stabilization
- Minimize saltwater intrusion and enhance productivity of coastal marsh through hydrologic restoration
- Maintain or improve levees and water-control structures on managed marshes
- Provide water and vegetation management on harvested and idle croplands (i.e., rice) and coastal prairie wetlands

### Research Priorities:

- Estimate waterfowl foraging values of coastal marsh types
- Determine the importance of distributed sanctuary in habitat conservation for wintering waterfowl and its implications for food limitation
- Describe likely effects of water resource allocation and changing cultivation practices on rice agriculture and associated waterfowl habitats

## Breeding Waterfowl

Priority Species: **Mottled Duck**

Population Objective: Western Gulf Coast (i.e., GCJV-wide) population index of 105,816 individuals, including at least 35,322 in Texas and 70,132 in Louisiana, as measured from Mid-winter Surveys in coastal areas of these states.

Habitat Objective: Not yet available

Biological Foundation: Factors limiting recruitment are primary constraints to population growth

### Conservation Activities:

- Create and restore large blocks of nesting habitat in agricultural lands and coastal marsh
- Restore wetlands and ensure reliable water to provide brood-rearing habitat from mid-April through July in agricultural landscapes
- Use hydrologic restoration to maintain low salinity (<6–8 ppt) and enhance the quality of brood-rearing habitats in coastal marsh
- Remove predators in targeted locations

### Research Priorities:

- Measure the effectiveness of habitat conservation actions to benefit Mottled Duck breeding productivity, including breeding propensity, nest success, and brood survival



# Landbirds



Priority Landbird Species: BCR 37; BCR 25, 26, 27

## Northern Bobwhite

Population Objective: BCR 37, U.S. portion - 625,896 birds; 8,404 coveys in LA and 43,754 coveys in TX; BCR 25 and 26, Chenier Plain IA - 67,804 birds; 5,641 coveys in LA and 8 coveys in TX

### Habitat Objective:

- BCR 37, U.S. portion - 17,365,400 total improvable acres. Improve 4,538,400 acres in LA (3,250,800 cropland acres; 609,300 pasture/hay acres; and 678,300 pine forest acres; Improve 12,827,000 acres in TX (5,009,900 cropland acres; 2,125,900 pasture/hay acres; 5,670,300 rangeland acres; and 20,900 CRP grassland acres)
- BCR 25 and 26, Chenier Plain Initiative Area - 490,848 total improvable acres. Improve 488,010 acres in LA (29,629 cropland acres, 96,474 pasture/hay acres; 142,480 rangeland acres; 216,004 pine forest acres; 77 hardwood forest acres; and 3,346 mixed pine-hardwood forest acres); Improve 2,838 acres in TX (1 cropland acre; 738 pasture/hay acres; 1,385 rangeland acres; 711 pine forest acres; and 3 hardwood forest acres)

Biological Foundation: Acreage of improved cropland, pasture/hay, rangeland, forest, or CRP grassland required to produce a covey

Conservation Activities: Control but don't remove brush; convert exotic grass to native grass; thin and burn pine stands to remove litter and create herbaceous ground cover

## Loggerhead Shrike

Population Objective: 451,254 birds; 378,412 birds during winter (302,164 Resident, 76,248 Migratory) in LA portion of Chenier Plain IA; 72,842 birds during winter (55,498 Resident, 17,644 Migratory) in TX portion of Chenier Plain IA

Habitat Objective: 880,928 acres; (239,288 acres in LA portion of Chenier Plain IA; 641,640 acres in TX portion of Chenier Plain IA)

Biological Foundation: Territory size(s) dictates acreage needed to support population objectives

Conservation Activities: Preserve native prairie areas; maintain low, thick shrubs in fields (3-10 shrubs or small trees per acre)

## Le Conte's Sparrow

Population Objective: 132,938 birds during winter; (76,674 birds in LA portion of Chenier Plain IA; 56,264 birds in TX portion of Chenier Plain IA)

Habitat Objective: 132,938 acres; (76,674 acres in LA portion of Chenier Plain IA; 56,264 acres in TX portion of Chenier Plain IA)

Biological Foundation: Winter density estimates dictate acreage needed to support population objectives

Conservation Activities: Manage ≥500 acre blocks of native grassland with burned and unburned areas; prescribed burns should occur on a 3-year rotation

## Seaside Sparrow

Population Objective: 65,000 birds in U.S. BCR 37 and GCJV portion of BCR 26

Habitat Objective: 650,000 acres in U.S. BCR 37 and GCJV portion of BCR 26

Biological Foundation: Breeding territory size dictates acreage needed to support population objectives

### Conservation Activities:

- Create and/or restore marsh habitat, in blocks ≥10,000 acres, containing areas of medium height smooth cordgrass, interspersed with ponds, tidal creeks, and bare ground areas
- Plug selected ditches in marshes that have been ditched
- Create marsh-elevation islands, with shallow water bodies and scattered woody shrubs, using dredged material

## Cerulean Warbler, Golden-winged Warbler, and Swainson's Warbler (migratory suite)

Population Objectives: Not yet available

Habitat Priorities: Large forest patches (≥10,000 acres) close to the Gulf of Mexico

Biological Foundation: Theoretical bio-energetic foraging needs of migrating warblers

Conservation Activities: Maintain, restore, or create large forest patches (≥10,000 acres) along the Texas and Louisiana coasts

### Landbird Research Priorities:

- Test assumptions and refine parameter estimates used in population-habitat models
- Determine suitable grassland patch size, species composition, structure, and landscape habitat matrix needed to support wintering Le Conte's Sparrows
- Identify habitat components of ideal migration stopover habitat
- Assess effectiveness of GCJV priority landbird species planning and management in addressing the needs of other bird species of conservation concern



# Shorebirds and Waterbirds



## Shorebirds

Population Objectives: Table 2. Fall (Jul 15–Nov 5) migrating shorebird objectives for inland-managed habitat in the Chenier Plain IA.

Priority Species	Population Objective	Shallowly Flooded and/or Mudflat Acres
Long-billed Curlew	997	823
Western Sandpiper	349,328	17,047
Stilt Sandpiper	476,655	12,066
Buff-breasted Sandpiper	27,341	9,668
Short-billed Dowitcher	6,754	6,044
<b>Total</b>	<b>861,075</b>	<b>45,648</b>

Biological Foundation: Bio-energetic models yield acreage of foraging habitats necessary to meet the demand of population objective

Other Shorebirds of Concern: Snowy Plover, Wilson’s Plover, Hudsonian Godwit

Population Objective: Not yet available

Habitat Objective: Not yet available

Biological Foundation: Not yet available

Conservation Activities: Provide habitat ranging from shallow, flooded fields to mudflats

Research Priorities:

- Evaluate assumptions used to derive inland/managed habitat objectives in GCJV shorebird plan
- Improve accuracy and precision of population estimates

## Waterbirds

Priority species: Reddish Egret, Little Blue Heron, Wood Stork, King Rail, Black Rail, Gull-billed Tern, and Black Skimmer

Population Objectives:

- Reddish Egret: 2,000 breeding pairs in TX portion of the GCJV, 100 breeding pairs in LA, MS, and AL portion of the GCJV
- Little Blue Heron: 15, 779 breeding pairs, 8,562 in TX portion of Chenier Plain IA and 7,217 in LA portion of Chenier Plain IA
- Wood Stork, King Rail, Black Rail, Gull-billed Tern, Black Skimmer: Not yet available

Biological Foundation:

- Reddish Egret: Estimation of breeding population impacts of specific management treatments applied to specific colonies
- Little Blue Heron: Population is limited by availability of suitable foraging habitat proximal to suitable nesting habitat

Habitat Objectives:

- Little Blue Heron: See Little Blue Heron Conservation Plan ([http://www.gcjv.org/docs/GCJV\\_LBHE\\_Conservation\\_Plan.i](http://www.gcjv.org/docs/GCJV_LBHE_Conservation_Plan.i) )
- Not yet available for Reddish Egret, Wood Stork, King Rail, Black Rail, Gull-billed Tern, and Black Skimmer

Conservation Activities:

Reddish Egret

- Apply colony-specific management actions
- Create/improve alternate colony sites
- Improve foraging habitat within 10 km of existing colonies

Little Blue Heron

- Apply specific management actions to colonies, or clusters of colonies, and associated foraging habitat

Research Priorities:

- Reddish Egret: Test breeding population response assumptions for each management action
- Little Blue Heron: (1) Test breeding population response to management actions, (2) Develop standard, repeatable methodology, incorporating detection probabilities, to assess population status and distribution